# CATARACT SURGERY:

# IMPACT ON ACTIVITIES, TIME USE,

# AND GENDER AND POWER RELATIONS

# IN RURAL ANDHRA PRADESH, INDIA

**by**

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## ABSTRACT

Social customs and the patriarchal structure of Indian society determine women's intra-household status. Vision loss due to cataracts and post-surgery recovery of vision may contribute to changes in the manner in which women experience societal norms and practices, and may have an impact on gender and power relations and socio-economic status within the household.

No studies which take into account socio-cultural factors and economic status have examined the impact of cataract surgery (i) on activities and (ii) time use, and (iii) on gender and power relations in rural households in Andhra Pradesh, India. This project determines what changes if any occur in gender and power relations in families in rural households in Andra Pradesh after a member has undergone cataract surgery.

Qualitative analyses were performed to explore participants' perspectives and understand the extent to which gender and power relations may change after cataract surgery. The narrative analysis showed that the profiles of the women and men in the younger and older age groups were quite different, yet there were also similarities. Certain patterns emerged following cataract surgery. While decision-making patterns did not change substantially, all participants stated that

their mobility had improved after surgery and this led to a corresponding improvement in their quality of life. In addition, the quality of relationships improved for two of the women and two of the men. In addition to the narrative analysis, qualitative data from the participants assisted with understanding the complex issues related to gender and power relationships through a thematic analysis.

For the most part, family composition and living arrangements did not change much as a result of cataract surgery. These matters were largely determined by customs and norms. Indeed, many of the participants described how they were able to perform various tasks, once again due to improvement in their vision. Both men and women spoke about their ability to engage in household work after the surgery. However, as women performed most of this work, cataract surgery had a greater impact on this aspect of life for women. Cataract surgery and improved vision did not have a substantial impact on gender and power relations within the context of intra-household matters as broader gender roles were more influential in this domain.

Cataract sufferers were more satisfied with their lives and the benefits from surgery. Improvements in quality of life and in the activities of the participants are supported by my research findings.

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# CHAPTER 1

# INTRODUCTION

## 1.1. IMPORTANCE OF THE ISSUES

This study focuses on the impact of cataract surgery on gender and power relations among Indian men and women in rural households in Andhra Pradesh, India by examining their activities and time-use in the context of the socio-cultural and socio-economic status of the household. Social customs and the patriarchal structure of Indian society determine women's intra-household status. In general, women in rural Indian society are highly marginalized and their place in the household reflects their marginalized status. Vision loss due to cataracts and post-surgery recovery of vision may contribute to changes in the manner in which they experience societal norms and practices; loss and recovery of vision may also have an impact on gender, power relations and socio-economic status within the household. It is important to identify and examine any changes in the nature of pre- and post-surgery gender and power relations in order to determine whether the physical benefits of cataract surgery also contribute to post surgery changes in gender and power relations and time-use for individuals who have undergone cataract surgery.

Despite access to free cataract surgery in villages surrounding Kakinada in Andhra Pradesh, cataracts remain the greatest cause of blindness. Cataract prevalence increases with age. The life

expectancy increase in India has consequently resulted in a corresponding increase in the population of people suffering from vision loss due to the occurrence of cataracts (Brilliant et al., 1991).

Brilliant et al. (1991) discussed why cataract patients are not actively seeking and undergoing cataract surgery. Table 1-1 lists the reasons identified by these authors; the findings suggest that there are gender differences in reasons given.

**Table 1-1. Reasons given for not undertaking cataract surgery**

| Reason given | Both genders, % | Male, % | Female, % |
|---|---|---|---|
| Unilateral cataract ( n = 786) | | | |
| No need or desire for surgery | 24.3 | 20.9 | 26.8 |
| No time to attend the surgery | 17.9 | 22.4 | 14.5 |
| No one to bring me to surgery | 17.3 | 13.3 | 20.2 |
| Afraid of surgery | 13.2 | 10.1 | 15.4 |
| Unable to afford surgery | 13.0 | 15.3 | 11.3 |
| Able to see adequately | 12.0 | 11.4 | 12.4 |
| Do not know where to go | 5.0 | 3.9 | 5.8 |
| Cataract not mature enough | 1.0 | 1.2 | 0.9 |

Source: Brilliant et al., 1991.

This social dynamic has a direct impact on my research study. I expect variance on gender and power relations and the patterns in the villages surrounding Kakinada may reflect the pattern found by Brilliant et al. (1991). In the study by Brilliant et al., even though women had more time than men to attend a medical facility to obtain the surgery, there was no one to bring them to the surgery. This reflects gender inequality and the disparity in power relations within the household for women with cataracts. The authors of this study further showed that the removal

of the disability enhanced personal power and autonomy since participants were able to manage most of the daily activities by themselves. The ability to see is a physical capacity that can influence social dynamics; various social dynamics therefore influence a woman's ability to participate in the decision making process within a household. I developed measurable indicators to understand the social dynamics behind this issue within the context of gender and power relations, and time use and activity.

### 1.2. RESEARCH PURPOSES AND QUESTIONS

Dr. Chandrasekhar Sankurathri established the Manjari Sankurathri Memorial Foundation (MSMF) in Canada, in 1989 in memory of his wife Manjari, his son Srikiran (6 years) and daughter Sarada (3 years), who were killed in the Air India disaster on June 23, 1985. The Foundation, a registered charity, has taken the mandate to promote rural community development through education and health care. Sarada school was started in 1992 and consists of a primary school (grades 1-5), high school (grades 6-10), and a vocational school for students with grade 10 or higher education. The school provides programs to eliminate illiteracy and child labour by educating children and their parents in rural areas.

The Manjari Sankurathri Memorial Foundation also operates the Srikiran Institute of Ophthalmology (SIO). It has been operating for 20 years and has performed over 180,000 free cataract surgeries to poor people as of 2011. It provides world class eye care in the region with fewer than average post-operative complications. The institute has well trained medical doctors and medical and support staff to manage day-to-day operations. The institute caters to a population of over 20 million in six surrounding districts. Its facilities are spread over 50,000

square feet and consist of four operating theatres and 136 beds. It provides 24 hour emergency service. Its vocational training institute also provides technical training for mature students. The current research is also important to the Srikiran Institute of Ophthalmology by allowing it to evaluate, and thus improve, the economic and social benefits of its programs. This study aims to understand how cataract surgery affects gender and power relations in rural households. Furthermore, I seek to understand how the social and cultural aspects of time use and activities change after participation in cataract surgeries. This study addresses two major research questions:

1. What is the impact of cataract surgery on activities and time use, given the socio-cultural context and the economic status of patients in rural households in Andhra Pradesh, India?
2. What is the impact of cataract surgery on gender and power relations in rural households in Andhra Pradesh, India given the socio-cultural context and economic status of patients?

Social dynamics highly influence activities in rural households. Understanding the socio-cultural and economic consequences of SIO's program to reduce cataract blindness is an important element in determining this vital aspect of its effectiveness. India is a fast developing country and the living conditions of the rural poor are improving. Their life expectancy is increasing and their villages also are undergoing economic changes. Social programs, affordable healthcare, and post-surgery follow-ups therefore need to be re-evaluated in order to provide better services for the people. This study opens a new avenue to identify remaining unanswered questions and to develop social programs and activities for the rural poor that can enhance their living standards.

### 1.3. SIGNIFICANCE OF THE STUDY

Gender and power relations in households are a social construct and understanding change in those relations is as an aspect of socio-economic change. It is a great challenge to reduce poverty and to empower women from poor rural households. Social structures in rural India are changing and but these changes cannot have a significant effect within the household if power relations in the household are not re-balanced.

Social and cultural values are deeply embedded in rural communities in India. Men and women in rural villages are making critical decisions whether to receive medical treatment for their cataract blindness, but their decisions are highly influenced by social, religious, and spiritual notions. In general, men and women seek medical treatment for cataracts as a last resort. Ethno medicine and cultural notions continue to play a significant role in their decisions (Dandona et. al, 1997). Wives bring income into the household by working in the fields of other people and by contributing cash to the household economy. This however does not necessarily empower them in decision making within the family. Families benefit from the income of the wives and, in some cases, from the wives as breadwinners. Regardless, the husband can still maintain his dominance in the family by not allowing his wife to participate in the decision making process. Given this scenario, the impact of vision loss due to cataracts in males and females; and the consequences of cure by surgery, the nature of changes to domestic authority as a result of cataracts and cataract surgery, and changes in female labour participation as a consequence of cataracts and cataract surgery need to be investigated further.

In addition, after cataract surgery, men and women will generally have vision with refractive error. This is corrected by providing eye glasses and this aspect has a further effect on authority and gender and power relations since individuals who recover their vision regain the ability to perform regular activities in the household. It is important to understand, in this situation, how men and women lose and gain authority or power and how they exercise it within their household as a result of cataract blindness and cataract surgery. Time use and activities after cataract surgery, and gender and power relations in the household have a strong connectivity. It is necessary to consider the correlation of time use to activities as a way to better understand gender and power relations within the social structures in rural India, and how their correlation is affected by cataracts and by cataract surgery.

### 1.4. STRUCTURE OF THE STUDY

This study is presented in 5 chapters. Chapter 1 addresses (i) the importance of the issues, (ii) the research purpose and questions, (iii) the significance of the study, and (iv) the structure of the study.

Chapter 2 undertakes a review of the literature and examines gender and power relations in the household in its social and cultural context. The literature review provides the theoretical foundation for a systematic approach to the development of indicators that measure changes in gender and power relations in rural households after cataract surgery. It also provides the basis for the development of indicators for changes in activities and time use before and after surgery. I considered previous research findings, from their design stage to their conclusions, and adopted various aspects and dimensions in my study.

Chapter 3 focuses on the methodology and describes the design and implementation of the research project. A mixed methods strategy was used for the research design. The research procedure, sample size, sampling, and instruments are discussed. It was determined that a *convergent parallel mixed methods strategy* (Creswell, 2014) was the best approach for the research project. Data were collected quantitatively and qualitatively through closed and open ended questions. Measurable indicators were also developed to explore changes in gender and power relations before and after cataract surgery. Changes in activities and time use were measured quantitatively.

Chapter 4 sets out the results of the analysis and the justification for the findings. Quantitative data were analysed using SPSS 19 software. The findings from inferential statistics tests, such as ANOVA and paired *t* test, were examined and supported by descriptive analyses (cross-tabulations) and narrative statements of the participants. Quantitative results were further explored through comparison with qualitative findings, which provides a form of triangulation (Rothe, 2000). The results were then integrated for interpretation. The open ended answers were categorised according to indicators and statements related to the quantitative results were identified. These statements were grouped into themes. Participants were given pseudonyms, a convention in qualitative research which humanizes participants and also ensures confidentiality. Multiple statements were identified for each theme and integrated with the quantitative findings. Finally, the results were interpreted.

In chapter 5, I develop some general and final concluding remarks about the research findings. This chapter also reviews some unanswered questions related to gender and power relation in rural households in India and in relation to other studies examining social aspects of cataract

surgery in the similar countries. The Srikiran Institute of Ophthalmology appears to have managed to overcome socio-economic and gender barriers to benefiting from cataract surgery. In the present socio-economic context, cataract surgery does not transform gender and power relations but does allow its recipients to improve their quality of life.

# CHAPTER 2

# DEVELOPMENT AND INTEGRATED FRAME WORK: LITERATURE REVIEW

## 2.1. APPROACH

In this chapter I review the literature pertaining to gender and power relations in rural India. I also examine various aspects of the quantitative and qualitative components of the research questions in their social and cultural context. I reviewed the literature keeping in mind that I was required to develop measurable indicators for changes in gender and power relations in rural households once formerly blind persons had undergone cataract surgery. Finally, in this chapter I discuss the various factors that contribute to gender and power relations in their social and cultural context.

Understanding gender and power relations in an Indian context is complex since they are highly interconnected with cultural and social norms. The social, cultural and economic aspects of cataract blindness and the implications for gender inequality are examined. An in-depth appreciation of the socio-economic status of Indian women is critical to understanding how their activities linked to power relations are circumscribed. Male domestic authority (power) and labour force participation in rural India are closely related and they are reflected in cultural aspects of rural Indian society. Various methodologies, such as mathematical modeling, have been employed to identify and measure gender and power relations (Strauss and Thomas, 1995).

Indicators such as literacy level (education) for men and women and school enrolment rates provide elements to measure gender and power relations. Differences in wages also can be considered as indicators for measuring gender inequality. Determining who has financial responsibility (authority) in the household or the extent of their financial authority, also help to understand how gender and power relations operate in a family setting in rural India.

In addition, I examine the development of the measurable indicators utilized in the quantitative and qualitative components of the research. Changes in time use and activities are major components of the quantitative component. This component is based on the World Bank Living Standard Measurement Survey which was developed to measure activities and time use. Measuring time use can be determined by various tools such as a stylized activity list and open interval time techniques. Time use data can be employed to measure activities, household income and intra household allocation. This data can be further developed to measure social changes and life patterns including leisure time activities. It may also be used to evaluate gender and power relations, as will be discussed in chapter 3 which describes the methodology for this study. A labour market analysis allows for an examination of the relationship between disability and activities. The empirical evidence already established (Duraisamy and Duraisamy, 1996) shows a significant employment gap between people with disabilities and those without. However, the current research focuses more precisely on the effect of cataract blindness and cataract surgery on time use and activities, and gender and power relations in rural households in India.

## 2.2. THE CONTEXT FOR THE STUDY IN INDIA

### 2.2.1. Prevalence of vision loss due to cataracts

Cataracts affect more than 20 million people in the world at any given time (Tien and Hyman, 2008) and it is a leading cause of blindness in the developing world (West, 2007). The World Health Organization [WHO] (2004) estimates that more than 82% of those in the blind population are 50 years of age or older; unfortunately 87% of visually impaired people are living in developing countries. Cataracts are closely related to life expectancy and aging. Ultra violet (UV) light exposure, diabetes, and smoking also increase the already high risk of developing cataracts. However, there is no medical evidence indicating that preventing exposure to UV light or cessation of smoking reduces the formation of cataracts (West, 2007). While it has also been medically shown that heredity is responsible for cataractogenesis, the genes responsible have not been identified (Hammond, Snieder, Spector, and Gilbert, 2000). It is necessary to develop prevention strategies and early biomarkers to identify cataract development. Epidemiology plays a significant key role in differentiating different types of cataracts. Work must also be done to identify cataract development in different populations and factors associated with it (Tien and Leslie, 2008). These factors may have a significant influence on social and cultural issues. From a medical point of view, further investigation of aging associated with biological pathways is required to identify the relationship between cataracts and aging in different populations (Zubenko, Zubenko, Maher and Wolf, 2007).

#### *2.2.1.1. Prevalence of cataract blindness within the Indian context*

Ophthalmic diseases are a widespread problem in India (Subramanian, 2008) and its principal causes are cataracts (both immature and mature), glaucoma, and refractive error. Trachoma was previously a leading cause of blindness (Mohan, 1992). Human vision is also compromised through natural aging.

Blind people in India are invisible and silent but according to population statistics there is a large number present in the country. A study by Dandona et al. (2001) estimated that 18.7 million Indians are blind and the majority of them, approximately 14.7 million, are living in rural areas. The total estimated blind population across the globe is 37 million and according to the Census of India (2001), India is home for the largest number of blind people. Dandona et al. (2001) also estimated that half of the blindness is due to cataract related issues and further stated that women are four times more likely to develop ophthalmic diseases than men. According to Fletcher (1999), men are twice as likely as women to obtain free eye care. This is a reflection of social inequality and also indicates that men are the dominant individuals in this society. However, improvements in socio-economic conditions have led to increased longevity which has had a direct impact on social consequences: old age security and cataract blindness in India.

Murthy et al. (2005) also studied blindness in India. A nationwide survey was undertaken in 1999-2001 to understand the magnitude and major causes of blindness as well as trends over the past three decades. This study also aimed to evaluate the impact of the World Bank supported cataract eradication program. India is divided into 29 states and seven union territories. The survey by Murthy et al. was conducted in the fifteen largest states which accounted for 88% of

India's population. The sample size was 72,044 and more than half (52.7%) were men. Only individuals 50 years of age and over were selected for the study. The sample was grouped according to age: 50-59 years (46.9%), 60-69 years (33.8%) and 70 years and above (19.3%). In this total sample, 71% were illiterate and 84.6% were living in rural areas.

The World Health Organization measures the prevalence of blindness as Visual acuity[1]; V/A ≤ 3/60. But traditionally in the Indian context it is measured as V/A ≤ 6/60. Murthy et al. (2005) utilized the World Health Organization baseline to measure and estimate cataract blindness in India. The prevalence of blindness was 5.34 %. Their results are summarized in Table 2.1, as follows.

**Table 2-1. Prevalence of blindness and low vision**

| Visual Acuity baseline | Prevalence of blindness and low vision (95% CI) | |
|---|---|---|
| | Presenting vision % | Range % |
| <6/60 as better eye (Indian) | 8.5 (8.1 to 8.9) | 4.2 – 13.7 |
| <3/60 as better eye (World Bank) | 5.34 (5.06 to 5.62) | 2.1 - 8.9 |
| <6/18 – 6/60 | 23.85 (22.97 – to 24.72) | 12.2 – 37.8 |

Source: Murthy et al., 2005.

[1] When checking visual acuity, one eye at a time is covered and the vision of each eye is recorded separately, then both eyes together are examined. In the VA x/y, the first number (x) represents the test distance in feet. The second number (y) represents the distance over which the average eye can see the letters on a certain line of the eye chart. So, 6/24 means that the eye being tested can read a certain size letter when it is 6 feet away and a normal person is able to read the same letter size when 24 feet away from it.

### *2.2.1.2. Socio-demographic correlates of prevalence of blindness*

Murthy et al. (2005) showed that the prevalence of blindness was associated with sex, age, location and working status. There also was a close relationship between the prevalence of blindness and cataracts. Females and people living in rural areas face a higher risk that is statistically significant. In general, those more than 70 years of age had five times greater risk of developing cataract-induced blindness when compared to those aged 50 to 59 years. Illiterate people were at four times higher risk when compared to those who studied beyond grade 10. Those who are not engaging in active work have a higher risk (double) compared to those actively working. The details from the study by Murthy et al., (2005) are summarized in Table 2.2.

**Table 2-2. Socio-demographic correlates of blindness**

| **Demographic characteristics** | **Prevalence of blindness (presenting vision, 6/60) (95% CI)** | **Adjusted OR (95% CI)** | **Test of significance** | **Trend of odds for category** |
|---|---|---|---|---|
| **Age groups**<br>50–59 (29,851)<br>60–69 (21,445)<br>70+ (12,041) | 3.37% (3.09 to 3.65)<br>9.02% (8.4 to 9.64)<br>20.31(19.25 to 21.37) | 1.0<br>2.4 (2.2 to 2.6)<br>5.0 (4.6 to 5.5) | x2, 453.48<br>x2, 1409.41 | x2,1541.8<br>p,0.00001 |
| **Gender**<br>Male (29,980)<br>Female (33,357) | 6.98% (6.56 to 7.40)<br>9.87% (9.34 to 10.40 | 1.0<br>1.2 (1.2 to 1.3) | x2, 36.46 | x2, 36.46<br>p,0.00001 |

| Demographic characteristics | Prevalence of blindness (presenting vision, 6/60) (95% CI) | Adjusted OR (95% CI) | Test of significance | Trend of odds for category |
|---|---|---|---|---|
| **Literacy**<br>Educated beyond grade 10 (1,982)<br>Educated to grade 6 –10 (5,304)<br>Educated to grade 5 (11,036)<br>Illiterate (44,837) | 1.87% (1.30 to 2.44)<br>2.24% (1.83 to 2.65)<br>4.82% (3.69 to 5.33)<br>10.44% (9.96 to 10.92) | 1.0<br>1.1 (0.7 to 1.6)<br>1.9 (1.4 to 2.7)<br>3.7 (2.7 to 5.2) | x2, 0.11<br>x2, 14.1<br>x2, 69.39 | x2,360.95<br>p,0.00001 |
| **Place of residence**<br>Urban (9,691)<br>Rural (53,646) | 6.48% (5.66 to 7.3)<br>8.87% (8.4 to 9.33) | 1.0<br>1.2 (1.1 to 1.4) | x2, 20.38 | x2, 20.38<br>p,0.00001 |
| **Working status**<br>Actively working (27,107)<br>Engaged in household work (24,626)<br>Not doing any work (11,485) | 5.20% (4.81 to 5.59)<br>7.04% (6.55 to 7.53)<br>19.25% (18.1 to 20.4) | 1.0<br>1.1 (1.0 to 1.2)<br>2.0 (1.8 to 2.2) | x2, 4.09<br>x2, 257 | x2,320.33<br>p,0.00001 |

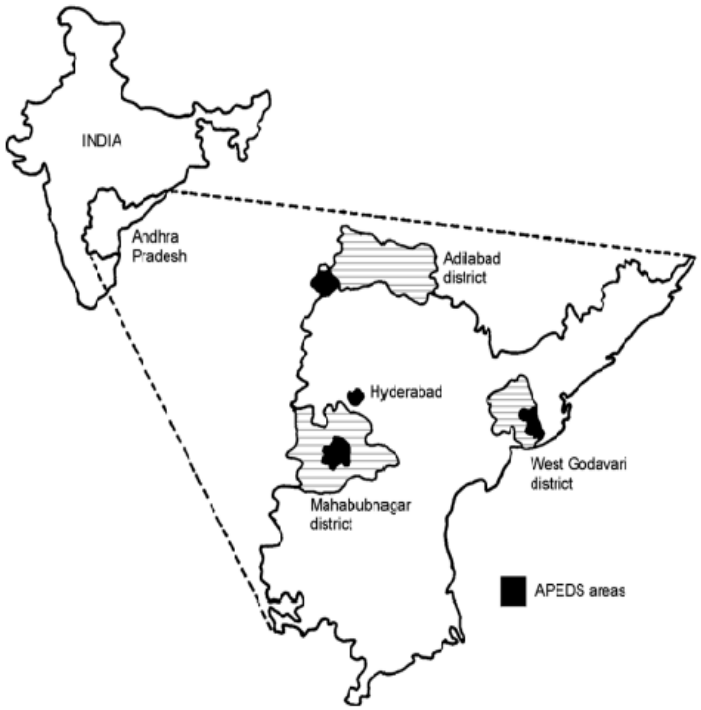
Source: Murthy et al., 2005

#### *2.2.1.3. Prevalence of cataract blindness in the Indian state of Andhra Pradesh*

Andhra Pradesh is a state in the south-eastern part of India (see Figure 2-1) with a population of 76 million in 2000. The prevalence of blindness in Andhra Pradesh was reported as 1.5% in 1986-1989 (Mohan, 1992). Dandona et al. (2001) conducted the population-based Andhra Pradesh Eye Disease Study (APEDS) in an urban and three rural areas. The regions included

Hydrabad (urban), West Godavari district (wealthy rural), and Adilabad and Mahabubnagar districts (poor rural).

**Figure 2-1: Andhra Pradesh Eye Disease Study (APEDS) areas**




Source: Dandona et al., 2001

For the study, two thousand five hundred people were randomly selected from each area. Results for this study are summarized in Table 2-3; the prevalence of blindness was measured by a Visual Acuity of $\leq 6/60$.

**Table 2-3. Prevalence of cataract blindness**

| Cause of blindness | Hyderabad (urban) | West Godavari (wealthy rural) | Adilabad (poor rural) | Mahabubnagar (poor rural) | Urban rural combined | % of total blindness |
|---|---|---|---|---|---|---|
| Cataracts % | 0.45 | 1.30 | 1.10 | 0.46 | 0.81 | 44.0 |

Source: Dandona et al., 2001.

West Godavari (wealthy rural) has a higher number of cataract patients when compared to Adilabad (poor rural) and Mahabubnagar (poor rural). The reasons for these differences in the prevalence blindness are not clear, but may be due to a longer life expectancy. Donadona at al. (2001) also investigated the effects of age, sex, socioeconomic status of urban dwellers on the prevalence of blindness (see Table 2.4). The prevalence of cataract blindness in the age group 50-59 is significantly greater than the age group 40-49. These results suggest that there is a relation between cataracts and aging. Females were also found to be more susceptible to cataracts. From the socio-economic point of view, lower income groups are more vulnerable to cataracts than the upper classes. Lower income rural poor are mainly involved in agricultural work in fields and their exposure to UV radiation is much higher. This may have an impact on cataract formation. However, poor rural and urban dwellers have different dietary habits and their foods also differ. This may also contribute to the forming of cataracts but there is no clear evidence to support this argument.

**Table 2-4. Effect of age, sex, socioeconomic status, and setting of residence on the prevalence of blindness**

| | Total in Group | No. of Blind* | Chances for blindness with multiple logistic regression† |
|---|---|---|---|
| **Age (years)‡** | | | |
| ≤15 | 2859 | 5 (0.17) | 1.00 |
| 16–29 | 1847 | 6 (0.32) | 1.93 (0.59–6.32) |
| 30-39 | 1862 | 18 (0.97) | 5.80 (2.16–15.6) |
| 40-49 | 1425 | 21 (1.47) | 9.58 (3.62–25.4) |
| 50-59 | 1047 | 53 (5.06) | 32.5 (13.0–81.5) |
| 60-69 | 900 | 100 (11.11) | 73.9 (30.1–182) |
| ≥70 | 353 | 72 (20.40) | 176 (70.3–439) |
| **Sex§** | | | |
| Male | 4855 | 117 (2.41) | 1.00 |
| Female | 5438 | 158 (2.91) | 1.37 (1.05–1.77) |
| **Socioeconomic status‡** | | | |
| Upper | 362 | 2 (0.55) | 1.00 |
| Middle | 3172 | 59 (1.86) | 2.85 (0.68–11.9) |
| Lower | 5212 | 149 (2.86) | 5.07 (1.22–21.0) |
| Extreme lower | 1354 | 61 (4.51) | 9.72 (2.30–41.0) |
| **Residence¶** | | | |
| Urban | 2522 | 49 (1.94) | 1.00 |
| Rural | 7771 | 226 (2.91) | 1.27 (0.91–1.77) |

Source: Dandona et al., 2001.

* Blindness: presenting distance Visual Acuity ≤ 6/60. Values in parentheses are percentages.
† Values in parentheses are 95% CIs.
‡ *P* , 0.0001 with univariate x2 test for trend.
§ *P* 5 0.12 with univariate x2 test.
Upper socioeconomic status is defined as a monthly per capita income of 2000 Indian Rupees (US$ 45.5 at the exchange rate in early 2000); middle, 501–2000 Indian Rupees; lower, 201–500 Indian Rupees; and extreme lower, ≤ 200 Indian Rupees. Socioeconomic status information is not available for 4 blind subjects and 169 subjects without blindness.
¶ *P* 5 0.009 with univariate x2 test.

A survey conducted between 1986 and 1989 reported that 80% of the 1.5% prevalence of blindness in Andhra Pradesh was due to cataracts (Mohan, 1992). Donadona et al. (1997) did not

agree with the results since detailed eye examinations were not carried out in the survey and this may result in the misclassification of blindness due to glaucoma, optic atrophy and retinal causes of cataract blindness. They estimated that actual blindness due to cataracts would have been 55%. This study suggested that the current prevalence of cataract related blindness in Andhra Pradesh is 0.94% .

From 1991 to 2001, the population in Andhra Pradesh increased by 11 million and life expectancy by 4 years, which has contributed to a significantly larger number of cataract patients. India received a World Bank loan of $135 million to fight cataract blindness in various states including Andhra Pradesh. In addition to that, the annual number of cataract surgeries performed in India has increased but more than half of the surgeries are completed without intraocular lens implantation (Bachani, 2001). Dandona et al. (1999) revealed that 21% of cataract surgery patients were still blind due to post surgery complications. In West Godavari, Adilabad and Mahabubnagar, blindness after cataract surgery was 36.4%, 34%, and 43% respectively. These results are discouraging and may prevent many people suffering from cataracts from seeking medical treatment. It is necessary to focus on post-surgery eye care and advanced surgical training to avoid such situations.

In 2003 India launched a national program to control blindness which found that the prevalence of blindness averages 1.24% in all states. The Ministry of Social Justice and Empowerment introduced legislative measures to protect people with disabilities and to counter the effects of disabilities in the population. A few of these measures are reflected in (i) the *Persons with Disability (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995;* (ii) the *National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and*

*Multiple Disabilities Act, 1999;* and (iii) the *Rehabilitation Council of India Act, 1992*. Compared to all other countries, the highest numbers of blind people are living in India. Improvements in health care and provisions for greater accessibility to health care by the rural population, preventive initiatives, better nutrition programs and an increase in general awareness on the causes of cataracts and possible remedies resulted in downward trends in cataract blindness in some states including Andhra Pradesh. According to the fifty-eighth National Sample Survey (NSS) conducted from July to December 2002, the prevalence of blindness in Andhra Pradesh is 190 in every 100,000. In addition to that, the prevalence of low vision in Andhra Pradesh is 96 in every 100,000. This study confirmed that the prevalence of blindness and low vision in rural areas is much higher than in urban areas. The prevalence of blindness is also higher among females and twice as high among illiterate people when basic reading and writing are taken as a baseline. According to the NSS, 67% of people with low vision consulted a doctor but 25% of them did not follow any course of treatment.

### 2.2.2. Social and cultural aspects of cataract blindness

In India there are social and cultural aspects to cataract blindness. Many rural Indians are reluctant to obtain eye care, even if it is performed free of charge by many institutions, since they believe that it is a complex medical procedure which will further complicate their blindness. This reluctance can be explained as fear of surgery (Fletcher, 1999). Fletcher also reported that religious beliefs and cultural expectations towards blindness are major contributing influences. Believing blindness to be “God’s will”, 13.9% of the rural population did not seek medical care or delayed treatment (Fletcher, 1999).

Moreover, Indian adults and their family members do not perceive that it is useful to have clear vision at an older age. As a consequence, it is common to find that many elderly Indians do not seek eye treatment (Dandona, Dandona, and Rao, 2001; Vatuk, 1995).

Ethno-medicine is a cultural, religious belief and spiritual attitude with regard to treatments for diseases, but it is not a product of modern medicine (Rubel & Hass, 1990). Rubel and Hass (1990) defined ethno-medicine as "those beliefs and practices relating to disease which are the products of indigenous cultural development and are not explicitly derived from the conceptual framework of modern medicine". Ethno-medicine is popular among indigenous people in rural communities who rely on traditional practices to cure diseases. Religious and cultural beliefs are embedded in ethno-medicine and they are the basis for many methods used to cure eye diseases, including cataracts. However ethno-medicine techniques or practices have no basis in scientific explanations. Basu (1990) explored how rural communities use ethno-medicine to cure diseases. She reported that some rural villagers are willing to use western medicine as well as ethno-medicine and their preference is to use both approaches at the same time.

Basu (1990) also explored traditional Indian beliefs about diseases such as smallpox, chicken pox and measles. Rural Indian Tamils believe these diseases are caused by the Hindu goddess Mariamma. The acts of this goddess are commonly described as Amman Volayadukiral, which means "god is playing" or "god's wish." Rural Tamils are afraid to take medicine or seek treatment for these diseases as they wish to avoid the fury of the goddess (Basu, 1990). The findings of Subramanian (2008) support these conclusions, although she further categorized and described the results. She found that 10% of the rural population is not seeking any medical treatment but rather is seeking solutions from their god or from religious notions. However 26%

preferred to use medical treatments for eye diseases. Her research further revealed that about 18% of rural Indians sacrificed their livestock, goats and cows, to the god, and in some cases their body parts such as hair, seeking a cure for eye diseases. They also believed that the in-household god should allow them to pursue medical treatments. They considered it to be god's wish.

In general, cultural, spiritual and religious beliefs and practices were quietly and dangerously affecting ophthalmic health in rural communities (Subramanian, 2008). According to Subramanian (2008), women in developing countries, and specifically rural Indians, still depend on non-medical healing practices and frequently do not rely on western medical treatments. For example, Thatte-Bhat (2003) noted that women in India who depend on non-medical practices to treat breast cancer will ultimately die as a result. Dandona, Dandona, & Rao (2001) found that the rate of blindness among women was 24% higher than men. Fletcher (1999) noted that, despite that high rate of blindness among women, women were still unlikely to obtain medical treatment. Das Gupta and Chen (1995) described the close relationship between gender and medical treatments, specifically in developing countries. As previously stated, non-medical healing practices are common in rural India. Since rural Indian women are not afforded the same societal status, in most cases, they therefore seek non-medical healing for cataract blindness. The current research however, is not focused on non-medical practices used to cure cataract blindness. Nonetheless, it is useful to understand the social and cultural context in which this project was conducted.

My research project is focused on changes in gender and power relations, if any, after cataract surgery in rural India. Women are marginalized and their status is reflected in the rural

household categorizations of men and women which manifest themselves through the biological differences of gender. Gender is acquired through socialization. Gender roles are mainly encompassed by attitudes, behaviours and activities assigned to each sex. This may lead to gender inequality. Gender roles are basically institutionalized and they are also socially constructed (Craig, 1992). Demographic, social and economic factors influence subordination. Many activists believe that women and men are equal, that they should be valued equally, and that they should have equal rights (Murray, Linden and Kendal, 2011). Feminist perspectives assume that the majority of women are subordinated to men. Feminist theories suggest that women experience systemic discrimination. However postmodernist feminists have deconstructed the traditional understanding of feminism and suggest that while biological differences are real, the discrimination is constructed. Gender differences between women and men are socially constructed, and specific cultural and historical perspectives greatly influence this construction (Murray, Linden and Kendal, 2011). In other words, gender roles are indirectly influenced by a particular society's understanding and interpretation of what biological gender difference means, based on their cultural and historical background.

In my research study, specific questions were developed and administered pre- and post-surgery to both men and women. Changes, if any, are measured using qualitative and quantitative techniques. Those changes are also examined from a feminist perspective. As I discussed earlier, women in rural populations in India are highly marginalized and their marginalized status is reflected in household relations. Correction of visual acuity through cataract surgery for women may not change their marginalized status or power relations in the household. However it is reasonable to suggest that improvements occur in their life styles and in their independence after cataract surgery. This type of surgery may benefit elderly women with the opportunity to enjoy

life in many ways, such as looking after their grandchildren and being involved in social activities. Their restored vision will provide opportunities to engage effectively in domestic labour, such as purchasing household goods, laundering and repairing clothes, preparing and serving foods, socializing with children and grandchildren, providing care and emotional support for household members and maintaining community ties. In the current study, major changes in gender and power relations in the household are not expected, but improvements in the status of a formerly visually impaired woman in the family after cataract surgery may be found.

#### *2.2.2.1. Gender differences in treatment for vision loss including cataracts in rural India*

Various organizations are promoting eye care in rural India. Eye camps[2] are raising awareness among rural populations about the prevalence of cataract blindness and, as a result, many rural poor people are seeking western treatment for cataract blindness. Interestingly, while rural Indians wait between 5 and 14 months for medical treatment for their eye diseases, their urban counterparts are waiting between 12 and 26 months (Subramanian, 2008). This disparity can be explained as follows: rural Indians have the opportunity to participate in eye camps organized by local hospitals as part of their out-reach programs, while urban patients need to go to the hospital by themselves. Be that as it may, medical treatment for eye diseases still remains a last resort for both urban and rural Indians.

[2] Eye camps are outdoor surgical services for the blind that bring the benefit of ophthalmic care to remote areas without a medical facility. An eye camp consist of a team of about 10 members with ophthalmologists and medical assistants. They travel to areas without hospitals and borrow buildings such as a school to establish provisional examination rooms, operation rooms, and wards, and provide outpatient services.

The prevalence of vision issues increases with age and it is much higher in women than in men. However, men and women aged 60 and older share the same vision problems in the same ratio (Dandona, Dandona, & Rao, 2001). Fletcher's (1999) work focused on gender preferences in eye care and noted that men are twice as likely as women to participate in eye camps. Higher attendance rates of men at eye camps reflect their superior social standing. Men are the decision makers and breadwinners of their families (Fletcher, 1999). In general, rural Indian women are not afforded the same societal status compared to their male counterparts. They are marginalized in all aspects of life, including health care. This gender disparity is a cultural manifestation of attitudes towards women. This can be changed although it takes time. Social boundaries are expanding slowly, and while this process is slow, economic changes are also affecting social structures.

#### *2.2.2.2. Gender in relation to disability and social constraints*

Naila (2006) stated that gender based discrimination and economic deprivation directly affect women in poor households. Priority is given to meeting the needs of men rather than the needs of women. Disabled women then will be in a much worse situation. Many disadvantages exist in rural villages compared to urban areas, such as the extent of accessibility to government services due to remoteness. Social and economic disadvantages found in rural villages have a direct impact on women residing there (Beall, 2002). *Dalits* (untouchable caste), *adivasis* (tribal groups) and religious groups are especially marginalized. *Dalits* constitute approximately 20% and *adivasis* 11% of the rural population, and 38% and 11% respectively are living in extreme poverty. This greater poverty is a directly linked to fewer opportunities for education and access to health care.

Meenakshi and Ranjan (2002) conducted research on poverty in female-headed households in Andhra Pradesh, India. They found that female-headed households are the poorest group in the state. They used as their baseline the official poverty line (OPL). Meenakshi and Ranjan (2002) also compared consumption patterns of households with household size. They suggested that household consumption and household size do not necessarily have a linear relationship. Smaller families (i.e smaller number of children in the household) have less labour force participation and less productivity in their field; due to a lack of money, the head of the household is not able to hire labour to complete work such as preparing the family's fields for sowing or for harvest.

Examples from Nepal illustrate a similar situation. Poverty was higher among indigenous groups in rural areas when compared to their urban counterparts. Women in these groups were the most disadvantaged (Gardner and Subrahmanian, 2005). Households headed by women are not common in India. Sender (2003) analysed this situation and found that there was a consistent correlation between extreme poverty and female headed households. Women who are widowed, deserted or divorced, or in a relationship with an adult male who is incapacitated face greater economic hardships. Sender and Pincus (2001) conducted research in rural Indonesia and used as criteria adults who had no education and were over 20 years of age in a household. He found that they had few assets and consumer durables, and that 57% of them did not have enough food to meet their daily needs. The situation in rural India is not much different from Nepal. Higher levels of poverty can be observed among socially excluded groups and this can translate into poorer levels of human development in both health and education. Cataract blindness leads to economic hardship in the family and to an increase in the school drop-out rate of the children in the household. The cycle of poverty continues if a disability such as cataract blindness is not properly addressed.

The social protection of poor and disadvantaged people in rural areas is necessary. Any form of disability including cataract blindness may lead to greater social inequality. Therefore it is necessary to re-think social protection programs. Removing possible risks associated with poverty among the rural poor is a form of social protection. Disability caused by blindness has been identified as a major pathway leading to poverty and inequality. Increasing accessibility and mobility of disabled persons by performing cataract surgery is important in rural areas. This will have a direct and positive impact on the availability of agricultural labour. This will also eliminate obstacles caused by blindness, thus allowing the disabled person to engage in productive labour in their fields.

According to the standard economic model, a combination of consumption and hours of work maximizes the effectiveness of labour but individuals are subject to constraints in wage and time availability to engage in work. An individual's health is also a contributing factor in the standard model (Ettner, 2000). It is common to find that disabled people have lower wages and lower participation in the labour force. A low employment rate also results in low market wages offered to disabled individuals due either to lower productivity or to employer discrimination (Kruse and Schur, 2003). Moreover the disabled person may have a number of health issues and this reduces his/her engagement with employment.

Many studies related to poverty consider per capita income (Dubey and Gangopadhyay, 1998). However novel methodologies in approaching poverty are broader since they define how households work as one unit. Rural household members co-operate with each other to generate income for the household, especially if they are involved in agricultural activities. When

household members are cooperating with each other on specific tasks, active labour reaches its highest level.

The opportunity to move into the labour force will change gender and power relations in the household. Measurable indicators described by Dubey and Gangopadhyay (1998), Gardner and Subrahmanian (2005), and Meenakshi and Ranjan (2002) were developed and incorporated into the questionnaire for the current study. Physical labour was one of the main things examined in order to determine changes in gender and power relations in the household.

### 2.2.3. Women in rural settings

#### *2.2.3.1. Literacy*

While parents are willing to invest in the education of their children, gender biased decisions are common in rural India. Hill and King (1995) observed that gender based discrimination and income levels are related. In households with low income levels, parents invest more in the education of their boys than that of their girls because the parents place more value on boys' well-being. The specialization of labour also enhances gender discrimination (Becker 1981). A woman has a biological advantage in caring for children in the family. Men tend to concentrate their activities to support child caring by other means such as bringing additional income and doing work in the household (Alderman and King, 1998). As mentioned earlier, in rural India, many parents do not have sufficient income to provide an education to all their children. However, powerful social norms will push parents to provide an education to their sons rather than their daughters. Male preferences when making educational decisions have a negative impact in terms of gender discrimination and income inequalities in the household. This cycle

may continue until an appropriate level of income is established in the household. This requires that parents be educated in order to understand the importance of providing education to their daughters. It is rare that rural elderly women have gone to school. However they may encourage their children or grandchildren to go to the school. Child enrolment in school is not related to the local school's infrastructure, government interventions and easy access to schools (Pradhan, 1998). These factors have a limited impact on overall schooling levels. Moreover, while it is necessary to provide better education at all levels in rural India to reduce gender inequality in school enrolments, building additional schools in rural areas may lead to richer households rather than poor ones having greater access to schooling facilities.

In order to eradicate social inequality and to establish better income distribution for the rural poor, parents must provide an education to their children. An obstacle to the enrolment of children in schools is their contribution to family income. Children who are providing substantial support to their parents' agricultural activities on their own land or others' fields are not able to continue pursuing their education in school. Young boys in the family are expected to provide labour for farming activities for the household. Young girls are expected to support their mothers during the harvesting period or to care for domestic animals, such as chickens, cows or pigs, and thus provide additional income for the family. Education and school programs must reach the poor. Education and school enrolment rates are direct indicators of gender inequality and they are measurable.

#### *2.2.3.2. Cultural influences and gender inequality in rural India*

Many definitions are available to explain poverty. Poverty is a lack of access to basic human needs such as food, clothing, clean water, health care, education, and shelter. Interaction between poverty and gender is a complex issue and it is difficult to measure and study. Weak social protection exacerbates poverty in rural India. Better knowledge of how rural poverty relates to gender inequality in rural India is necessary. Many societies have gender differences in education, for example with regard to school enrolment rates, wages, labour force participation, and health outcomes of children and adults. Understanding this interaction should lead to the design of better policies with the aim of reducing poverty and gender based discrimination. Many researchers highlight gender inequities in India as the outcome of household optimization which assigns economic benefits to men rather than women. Household resource optimizations ("sharing rule") determine the functions of each household member and may result in gender inequality (Rahman and Vijayendra, 2004). A woman's status in the household can increase her bargaining power and such an increase becomes clearly visible when she participates in economic activities and considers her role in domestic activities to be less important.

Jeffery (1992) described how government intervention to provide better education and health care reduce gender inequality. Das et al. (2004) argued that state policy regarding gender equality is instrumental in reducing gender inequality. These authors make a strong case for state involvement at the policy level; providing services and ensuring access for women in society is a powerful tool to overcome cultural barriers against gender equality. Consequently, when measuring gender inequality in rural households, it is wise, when possible, to measure the effectiveness of state policy in rural villages and the program capabilities of the state. Even when

there are significant cultural barriers, as in rural India, to gender equality, existing state programs are powerful means to enhance gender equality.

Gender discrimination against women reduces the skills available in the marketplace and has negative economic consequences. The wages of women can be used as an indicator to measure gender inequality. In rural India, many social, religious, and cultural practices do not allow women to participate in economic activities (Berta & Esteve-Volart, 2004). Women's main function can be described as providing reproductive labour. Collier (1994) observed that, in developing countries, discrimination appears mainly in access to wage employment. In general, it is not possible for women from rural areas to find wage employment. Kumar et al. (1999) also identified this as the consequence of culture. Both cultural and economic factors contribute to differences in women's status in rural India. In the current study the questionnaire was designed to capture information about access to wages as an indicator of gender inequality, both before and after surgery to correct visual impairment due to cataracts.

## 2.3. GENDER AND POWER RELATIONS

### 2.3.1. Intra-household matters

#### *2.3.1.1. Power sharing mechanisms*

Food availability for women and securing it in a constant manner is a major part of power sharing theory. Trivers (1972) and Wright (1994) identified how biological differences in energy consuming labour and other related physical activities are influenced by the requirements of parental time in the household. During the early stages of reproduction and during child birth,

women consume far greater energy than men. This disparity in energy consumption continues after birth. This biological disparity is natural and may influence marital conflict. This gender difference also may influence marital decision-making or bargaining power in the household. Child rearing consumes more time and is costly for the women in households. At this stage both husband and wife in a household bargain household resources and decisions. In rural households, marital bargaining power is commonly determined by the relative labour income of the spouses. In some cases women may have higher income but will be unable to exercise sufficient bargaining power in order to control economic resources. This is a consequence of the impact of culture and norms on gender and power relations.

Intra-household bargaining revolves mainly around the supply of women's labour and the work of child rearing. Two major frameworks, the microeconomic model of the household and the "collective" household model, and early- and late-generation marital bargaining models, are helpful in understanding intra household bargaining theory (Becker, 1960). These models explain spouses' sharing rules or their bargaining mechanisms (power). According to these models, the sharing rules or the bargaining power of the two sexes are influenced by external factors such as cultural norms. Basu (2001) suggested that bargaining power mainly depends on actual earning and labour supply. However it is also necessary to evaluate a wide range of microeconomic issues such as the labour supply of women, fertility and the prevalence of child labour in order to understand intra household bargaining models. Various aspects of demographic change and economic development, as described by Becker, Murphy and Tamura (1990), Galor and Weil (1996, 2000), Jones (2001), and Iyigun (2000) are useful for an in-depth analysis of intra household bargaining power. It is also necessary to evaluate the effect of household products, such as gas cookers and metal kettles, on the labour supply of women in the

household. These products are common in most rural areas today when compared to the early 20th century. These household products enhanced women's labour force participation and had a significant impact on intra household power sharing mechanisms.

Trivers (1972) studied the imbalance of time allocations in households between the two sexes on the basis of gender roles and social interactions. The relative imbalance has a significant impact on power sharing in the household. In general, the marital balance of power is determined according to spousal incomes. In addition, it seems that labour supply decisions may clearly influence bargaining processes and household decisions such as leisure and education. Power sharing and bargaining power build their own social structures. But it is better to consider it as a framework for measuring the social power relations of men and women (Gasper, 1993). This framework was replaced by more precise theories such as bargaining theory. Family based bargaining theory explains women’s power sharing within the family and with its members (Agarwal, 1994). However these bargaining theories are not clear about how bargaining affects the socioeconomic status of wives in rural Indian families. Customary social relationships in India provide little opportunity to apply bargaining theory within the family since wives have little or no effective bargaining power even within the family situation (Tisdell, Roy and Regmi, 2001). Gender relations in the household are culturally determined and while very sensitive to socioeconomic changes, social customs play the largest role in determining the status of wives in the household (Cain, 1982).

Customary conventions play a major role in determining the intra-family status of wives. These patriarchal conventions are an obstacle to the empowerment of wives outside their home. Frequent visits from the wives’ parents are strengthened by customs (norms) and do not improve

the economic status of the family. Socioeconomic theories of the family, such as bargaining theories developed in Western society, have limited applicability to the rural Indian cultural context. This is mainly due to the fact that wives have few bargaining possibilities. In some situations wives may not even realize that bargaining possibilities exist. They may be highly influenced by customary-based social pressures and they may also be unable to exercise their bargaining power because of the high social cost of doing so (Sen, 1990).

In my study, questions were developed to understand gender, marital bargaining and how customary conventions influenced bargaining power in rural households. I also attempted to determine what changes, if any, occur after the visually impaired person had undergone cataract surgery.

#### *2.3.1.2. Socio economic status of rural Indian women in family and power relationships*

Household power sharing has a strong relationship with gender and with economic contribution to the family (Basu, 2006). If the husband and wife are not earning the same income, the result may be an unequal distribution of power. However, power sharing is not solely dependent on the economic status of the household as determined by income. According to the household model, power sharing is the result of the decisions that are made within the family. It is the shared power or authority to make decisions regarding household matters. In general, the overall functions of the household are based on numerous decisions taken by the husband and wife. Power sharing within the household can pertain to decision making about the children, day-to-day activities, as well as leisure and social activities. Decision making power may also depend on labour supply and may generate a new equilibrium in household dynamics. Changes in the labour supply of

women will generate a new equilibrium such that a reduction in the children's or the husband's labour supply may lead to an increase in the wife's power (Basu, 2006).

Furthermore, the household is an ideal example of a unitary model of power distribution. No one in the household can be separated from its activities. In this context, authority or power among genders becomes difficult to measure, but it then becomes possible to look at different aspects of gender and power relations. There are many theoretical explanations, empirical investigations and anthropological insights explaining power sharing matters in the household. A wife's overall contribution to the household will determine her power or authority in the household (Manser and Brown, 1980). Her reproductive labour will definitely contribute additional power into her decision making even if her overall contribution does not have a direct economic impact (Haller and Hans, 2000). In any welfare program, money given to the head of the household[3] produces different results when the same money is given to the women in the household (Kanbur and Haddad, 1994). A woman's bargaining power in her household will increase if her wage increases. However, her wage increases are not the only factor in her increase in bargaining power since other cultural and social norms heavily influence it. We can expect such a scenario to develop in rural India. Basu (2006) argued that it is reasonable to assume that women's empowerment is not an immediate event. In North America and Europe, women participate in large numbers in the labour market. But in the Middle East and rural Southeast Asia there are limited labour markets for women. In those areas, women are mostly involved with domestic work and reproductive labour in the household (Grown et al., 2000).

[3] In general, the head of the household will be a male even if he is not contributing economic support.

There is a very close relationship between the household labour supply of children and bargaining power in the household (Browning, 1992; Basu and Van, 1998). Moehling (1995) has shown that a child who brings more income into the family has more bargaining power in the household. A woman will attain more bargaining power if her income is increased. However, Browning et al. (1994) argue that children have very limited bargaining power within the household. In general in this century, both the wife and husband are not as prepared as previously to send their children to work. However, when the children do work, the parents have different conceptions on how they themselves can spend the income brought in by their children (Basu, 2006).

In general, bargaining power within the household and its balance is dependent on choices made by the husband and wife. Children providing labour for household income also have an impact on the power sharing model in the household. However, as mentioned earlier, children have no authority or very little authority to demand power based on the income they generate for the household. Household decisions are mainly governed by the husband and wife, not the children. Guyer (1988) and Duflo and Udry (2003) observed that the wife has a reasonable amount of power to select children's clothes and food. There may be no limitation on her expenses. But in some cases her husband may enforce restrictions on her expenditures for children's clothes and food. It is necessary to understand gender and power relations in the household in order to address social issues such as child labour, unemployment, women's rights and poverty eradication programs.

The socio economic status of rural Indian women in family and power relationships in the household will be examined in the context of a disability and cataract blindness. I will investigate

changes in household gender and power relations when a blind person has undergone cataract surgery. Economic contribution, reproductive labour, decision making in household activities and about the children will be investigated and measured via specific questions.

#### *2.3.1.3. Intra household power relations*

Intra household bargaining can be explained as negotiations among the members in the household in order for a household to function as one unit. Decision making functions not only depend on monetary value but also determine the effect that decision making will have on other family members (Agarwal, 1997). The household is a residential unit which also brings together various activities such as economic production, consumption, child rearing and systematically organized shelter. Those activities and how they are organized around each other, depend on the availability of resources. In other terms, the household is a unit dependent on the function of each individual. Gender relations in the household constitute practices and ideologies connected with other social structures like class, caste and race. As described earlier, gender relations are largely socially constructed. The stability of a household ensures that it can play its role as a unit of economic production. Intra-household bargaining can be characterized as composed of elements of both cooperation and conflict. Many cooperative activities and levels of participation determine who does what, who gets what, and how each member is treated. The outcomes of cooperative activities are a relative benefit for both the parties in the household. But on some occasions both parties may not equally benefit. This will reflect the relative bargaining power of each member in the household. McElroy (1990) argued that extra household parameters, such as parental wealth, non-wage income, the legal structure governing marriage or divorce, were important factors of significant weight in the distribution of bargaining power in the household.

Intra-household bargaining power also depends on individual economic assets—mainly arable land and social norms. Women who participate in the decision-making of agricultural production or of cash expenditures in the household may have greater bargaining strength than those excluded from such decision-making.

Several issues related to the determination of intra-household bargaining power are beyond the scope of the current study. These issues pertain to the following questions: what is the role of social norms in determining bargaining power; how are bargaining processes and outcomes affected by differences in individual perceptions (about needs, contributions, etc.) and by pursuit of self-interest, in particular; do women not perceive their true self-interest or are they more altruistic than men; what are the links between intra-household bargaining and bargaining outside the household; and what determines extra-household bargaining power? These questions are critical components of bargaining theory. Yet those questions are not specifically examined in my study. The questionnaire was designed keeping the above factors in mind in order to identify changes in gender and power relations with regards to the visual rehabilitation of men and women in the household.

Gender has effects at many levels such as in structuring social identities, interactions and cultural norms. Gender expectations differ from culture to culture and are determined by social norms. The household earnings of the husband or the wife will determine their power relations. Earnings have an impact on who has to do more physical work in the household. Social exchange theory explains earnings relative to the allocation of household work (Michael et al., 2003). Blumberg (1991) observed that women in developing countries spend their income largely on family needs rather than personal needs. Bargaining theory helps to understand gender dynamics in intra

household work allocation in a qualitative manner. However, a limited quantitative explanation is possible, as explained earlier, by the modelling of the power sharing formula for the wife in the household. In general, women are less motivated than men by self-interest (Michael et al., 2003). This may also have an impact on bargaining power within the household. Most studies do not consider bargaining power in relation to intra-household status and extra-household status.

Gender relations and intra-household bargaining power are complex phenomena to study. This complexity arises from various considerations, such as social norms and cultural influences. It is necessary to differentiate these influences in order to measure gender and power relations in rural India. Women and men are guided by traditional divisions of labour and behavioural patterns (Agarval, 1997). This makes any analysis of gender and power relation more complex. Social hierarchy such as class, race, caste and different ideologies also influence gender and power relations and add further complexity to the issue. However, gender related power sharing arrangements in a household are socially, rather than biologically, constructed. Modern world conceptions also influence rural households. There is considerable variation among the non-biological factors influencing gender relations (Agarval, 1997).

Women and men in rural households have unequal resource positions. Women may have less economic self-interest in households when compared to men (Agarval, 1997). Guided by social norms, men and women have different preferences and abilities. Gender differences in the household are highly influenced by cultural norms. Beckers' (1981) unitary model treats the household as a single unit for both consumption and production. This theory assumes that all household resources are collective resources and distributed by the head of the household. This enhances utilization of household resources and allows members in the household to share

resources. According to this theory, all members in a household cooperate when resource sharing. However, socially recognized gender roles interfere with bargaining power.

When considering bargaining power for intra-household status, a few main factors need to be considered. These factors can be categorized as follows: (a) the social role in determining bargaining power, (b) the effect of individual perceptions, and (c) links between intra-household and extra-household bargaining (Agarval, 1997). Determining intra-household bargaining power is complex because it depends on personal economic assets and external support systems such as social norms, perceptions and needs. Bargaining power and resource ownership also have a strong relationship. Land owning women have greater bargaining power when compared to landless women (Sen, 1990). Women participating in the decision making process for agricultural production and cash expenditures in a household will be able to exercise some control over intra-household bargaining. The legitimacy of female land ownership and property settlements favouring widows or divorcees will strengthen women's bargaining power. This is clearly visible in western culture. For example, reforms in family law have recognized that even spouses who remain at home have an interest in whatever property is acquired during the marriage.

Welfare programs associated with state and non-governmental organizations also have a significant influence on women's intra household bargaining power. Agarval (1997) summarized eight factors affecting bargaining power and needs in the rural family. These are (1) ownership and control over assets, specifically arable land; (2) access to income or employment; (3) access to village community services; (4) access to traditional social support systems; (5) support from nongovernmental organizations (NGOs); (6) support from the government's welfare programs;

(7) social perceptions about needs and contributions; and (8) social norms. Inequalities among family members indicate that its disadvantaged members have weaker bargaining power. Gender inequalities are a major contributing factor to weaker bargaining power. Women's reproductive labour and family responsibilities also weaken their bargaining power. Their reproductive responsibilities vary across cultures and societies.

In most cases, a woman has no autonomy to make decisions about how many children she can have (Agarval, 1997). Specifically in rural India, frequent pregnancies and the resultant care required to be provided to large numbers of children in the family are a major factor in weakening bargaining power. Yet Cain (1988) observed that women's infertility often leads to divorce in rural India. Having sons increases women's bargaining power while having only daughters weakens it. Wives who are working in agricultural fields of other landowners contribute cash income to the family. This gives them bargaining power in discussions about food requirements for children. On many occasions wives play an important role as breadwinners in the family. However, in this scenario, the husband more often excludes his wife when making family decisions in an attempt to retain his dominance over the family and his control over the family's finances. According to Tisdell, Roy and Regmi (2001), the status of the family is largely determined by its cultural and social context. In western societies, wives are more empowered and may bring a large income into the family over which the husband has no or limited control. As a result, wives living in western societies have more influence in decision making within the family. Patriarchal forces and social customs are strong in India and the bargaining power of wives is limited when compared to western societies, even if the wife is able to bring a cash income to the family's finances (Tisdell, Roy & Regmi, 2001).

#### *2.3.1.4. Status of wives in the family*

Tisdell, Roy and Regmi (2001) suggested possible indicators to determine the status of wives in the family. They also discussed independent variables and examined the empirical relationship between the variables. The main indicators of the social status of wives within their family were: (i) whether wives had any control over cash in the family; (ii) whether wives were restricted by their husbands in forming or joining social groups; and (iii) whether wives were involved in family decisions. The socio-economic status of wives in the family was higher if the wife had control over cash, if the husband had not prevented her from joining other social groups, if she was involved in family decisions, and if she participated in decisions about the future of her children. If any indicator was negatively affected, social status changed in the opposite direction (Tisdell, Roy and Regmi, 2001).

Tisdell, Roy and Regmi (2001) also observed the bargaining power of the wife within the family by measuring variables such as (i) her control over cash; (ii) restrictions on her forming group, (iii) her involvement in family decisions; (iv) earning income by working in another's field; (v) whether her husband was pleased to have her working outside for cash income; (vi) whether the family income was enough for two meals per day; (vii) her perceived economic status; (viii) whether the wife's family visited her frequently; and (ix) whether she received support from her family if needed.

Interestingly, the findings of Tisdell, Roy and Regmi (2001) show that earning cash by working in others' fields does not significantly empower women and there is no significant relationship between this variable and her control over cash. In addition to that, wives working outside of the

home faced more social restrictions. However, women who worked outside of the house had more involvement in the decisions concerning their children. It is necessary to note that working for an income does not empower women in rural India.

The above results explain why some indicators are mixed; wives' income obtained from work in the field did not empower women and certainly did not allow them greater control over cash in household matters. Working outside the household also limited their chances to join social groups in the neighbourhood. However wives were likely to be more involved in decisions about the family. At the same time they were less likely to be involved in decisions about their children's future. Rising economic status brought no significant increase in control for women over the cash and it led to considerable reduction in their social interaction. However, where intra family status was concerned, greater control over the cash increased decision making power in family affairs and about the children's future. Involvement of wives in decisions about the future of their children does not correlate to their involvement in general family decisions. Wives belonging to families with perceived economic status tend to have greater involvement in decisions about the future of the children, but the significance of this relationship is weak.

In my research study, measures that were described by Tisdell, Roy and Regmi (2001) were incorporated into the questionnaire in order to determine whether any changes occurred in the status of a formerly blind person pre and post-surgery.

#### *2.3.1.5. Intra-household allocation*

Time use can be a tool in gender analysis and to measure gender inequality. How tasks and resources are allocated to individuals in a household has a direct relation to gender inequalities. Time use can be employed to measure both market and non-market activities in which women and men are involved, whether they are living in a rural village or town. Individuals involved in paid activities outside the household have a significant influence on decisions made by others in the household. The contribution to the household economy by women in the household who are mostly involved with non-market activities cannot be underestimated. This will ultimately reflect on the village economy. Berio (1980) described the utilization of weed control and its effect on the contribution of household labour to agricultural activities. Cultivation and weeding of the cash crops was done by women in the household. Since the introduction of weedicides (weed control chemicals), women's contribution with regard to weeding activities has been dramatically reduced and the time allocation for child care and food production has changed.

### 2.3.2. Employment

#### *2.3.2.1. Proposition behind disability labour market*

The World Health Organization (WHO) (2001) estimated that 7%-10% of the world's population has a disability. Sarbib (2005) estimated that more than 400 million people who live in developing countries have disabilities. According to the Government of India (2003) census report, 21 million people have disabilities, of whom 16.4 million are living in rural areas. Disabled people have a negative market outcome in developing countries and their employment rate and wages are lower than that of non-disabled persons. As a part of a strategy for addressing

this major issue, the Government of India passed the Person with Disabilities Act and three percent of the government sector jobs, poverty alleviation programs, and positions in educational institutions were allocated to disabled persons, one percent of its programs were allocated to persons with vision, locomotor and hearing disabilities, and the balance, two percent, has been allocated to other disabled groups.

Erb and Harriss-White (2001) carried out an interesting study about disabled people in three villages in Tamil Nadu, India during 1993 and 1994. That study sought to understand the impact of a disability in an agrarian context. It looked at differences between men and women who had and did not have a disability. It proposed a novel interpretation of disability. Disability was defined as an inability to find meaningful employment. This study found that disabled persons need to be accepted in their community in order to obtain wages for employment or domestic labour. This acceptance is variable and depends on family behaviour or economic status. Employment given to a disabled person breaks the strong link between disability and poverty. Indian society is male dominated and the income disparity among men and women reflects this social fact. If a man is disabled, this may reduce family income by up to 50% compared to the 33% allocated in the case of a disabled woman. However, women generally have lower incomes, and although statistically a male's disability can reduce family income more than it would for a disabled female, the impact of the decrease in family income will be just as great. Erb and Harriss-White's (2001) study further revealed that the majority of persons with a disability were economically active in either engaging in wage employment or domestic work. According to their research findings, elderly disabled persons provide support to agrarian economic activities in households except in very rare cases. A rural area wage employment rate is generally lower

which has a direct effect on disabled persons. Moreover, disabled persons have a lower wage employment rate since they are perceived to have lower productivity.

A social model considers disability to be a social construct. Disability is not a feature of the individual, rather it is created by the social environment. Disabled people are marginalized and are not provided adequate access to jobs in the work place (Mitra & Sambamoorthi, 2006). It is a difficult task to mobilize disabled people, especially in rural areas, to utilize the existing infrastructure effectively so as to overcome the social construction of their disability. Erb and Harris-White (2001) provided evidence that the loss of earnings due to disability may result in households falling into poverty. Male disability causes three times more economic difficulty in the household compared to female disability (Erb and Harris-White, 2001). In a male dominated society such as India, households face a huge social burden when male individuals suffer loss of vision. Despite this, visually impaired people are still economically active, in most cases by doing domestic work. However, medical professionals consider the economic situation of blind people as a barrier to ophthalmic health due to their lack of earnings and subsequent inability to pay for treatment.

The above literature suggested that the socio economic status of the household has a direct influence on disability. However no research has been carried out in rural settings with regard to the manner in which visual impairment occasioned by cataracts influences poverty in rural households. My research project measures household wealth and income, its distribution and its to response to the needs of the family. In addition the project examines how family members with cataract blindness economically contribute to family activities and how vision loss influences gender and power relations in the household.

#### *2.3.2.2. Wage comparison*

A person with a disability is often willing to accept a lower wage than an able person (Erb and Harriss-White, 2001). When considering labour demand for work in the fields, a disabled person is not able to supply the required labour. This will be a major contributing factor to lower wages for a disabled person in rural India. The agrarian economy in rural India demands heavy physical labour and mobility. According to labour market theory, high wages are almost impossible to attain for disabled persons even if they are able to make a significant contribution to work in the field with their existing abilities. An employed person without a disability is most likely to manage overall aspects of activities in the fields. Discrimination between a person with disabilities and a person without disabilities leads to unequal opportunities for a disabled person (Baldwin and Johnson, 2005).

According to studies carried out in the UK (Kidd, Sloane and Ferko, 2000), Sweden (Skogman, 2004) and the USA (Baldwin and Johnson, 2005), substantial wage differences exist between disabled and non-disabled persons, regardless of their human capital characteristics such as education and work experience. The main reason for the discrimination is a disabled individual's perceived functional capabilities. Erb and Harris-White (2001) show that disability pushes households into poverty. In a male dominated society as in India, if the male head of the household is disabled, the economic situation in the household will deteriorate and the household will fall into poverty. Two other important features in the Indian context, minimum wage laws and collective bargaining power in village labour markets, also influence this situation.

Any disability study must resolve the challenge by the definition to be used. A few definitions of disability are commonly used. First in the medical model, disability is considered a problem of the individual directly related to health issues, such as being blind or deaf. The medical model recognizes medical care as necessary to protect or limit the deterioration of an individuals' condition. Second, the social model explains disability as a social construct. Disability is not an attribute of the individual but is created by the social environment. Social changes are necessary, since most disabled persons have difficulty in finding employment that meets their level of skills, experience and education. This is not due to the disability but mainly to discrimination and inaccessibility in the work place. Thirdly, the World Health Organization (WHO) defines disability based on an International Classification of Functioning (ICF). The ICF integrates medical and social models by explaining disability as impairment, an activity limitation, on a restriction in participating in wage employment (Mitra and Sambamoorthi, 2008).

In my study the measurement of disability was based on the ICF definition which strongly integrates the medical model and the social model. The survey was designed considering the limitations to activities of daily living (ADL) due to cataract visual impairment. However, I did not seek to understand the correlation between the functional limitations due to other disabilities such as walking, speaking, hearing, memory and mental handicap and those due to visual impairment.

#### *2.3.2.3. Employment gap*

According to Mitra and Sambamoorthi (2008) the overall employment gap between men with disabilities and without disabilities in India is 26.8%. This gap is not mainly due to functional

capabilities. Mitra and Sambamoorthi (2008) measured attitudes towards disability and employment in rural Tamil Nadu, India. The attitudes were measured via answers to the question: can people with a disability be successfully employed, if they are locomotor disabled, have low vision or are blind, deaf, mentally ill, or mentally challenged? The results are summarized in Table 2-5.

**Table 2-5. Employment gap between men with disabilities and attitude**

| **People with a disability can be successfully employed, if they are:** | **Respondent** | |
|---|---|---|
| | **Person with disability** | **Head of household** |
| | **Percentage** | |
| Locomotor disabled | 29.50 | 28.35 |
| Low vision or blind | 6.61 | 8.30 |
| Deaf | 49.82 | 53.54 |
| Mentally ill | 4.77 | 0.36 |
| Mentally retarded | 2.69 | 0.28 |

Source: Mitra and Sambamoorthi, 2008.

If a disabled person has a loco-motor disability, and the disabled person and the head of the household share a similar attitude, the disabled person can be employed. But over 70% of both disabled people and heads of the households believe they cannot be employed. Low vision or blind persons and heads of the household also share similar attitudes with a difference of only 1.69%. However, over 90% of them believe that a blind or visually impaired person cannot be

employed. According to Mitra and Sambamoorthi (2008), the actual employment rate among males without disabilities is 79.1% and disabled individuals is 52.3%. There is a substantial employment gap of 26.8% between disabled persons and non-disabled individuals. However, this study did not provide any baseline information about the amount of work a disabled person performed, about the amount of time needed to complete work on time, about the financial costs of getting to work, and about the negative attitudes towards a disabled person's working in society. These negative attitudes contribute to a significant employment gap between disabled and non-disabled persons.

In rural India, disabled male individuals are more likely to be involved in agricultural activities. Duraisamy and Duraisamy (1996) found that disabled and non-disabled wage differences for male agricultural workers are consistent with results from gender based employment discrimination in India.

I expected to find a similar situation for people who are affected by cataract blindness. The questionnaire was designed to keep in mind this wage gap difference between abled and disabled persons and its effect on gender and power relations in households while considering cataract blindness.

Finally bargaining provides basic tools to understand concepts and address the major research question: “what changes, if any, occur in gender and power relations in a family in a rural household in India after a member has undergone cataract surgery?" This major question is surrounded by questions such as how poverty relates to gender inequality, how gender inequality manifests itself in the household, what is the relationship between disability and labour market,

how cataract surgery affects changes in activities, what are the major pathways of disability blindness leading to poverty and inequality, what are the connections, if any, between social customs and the patriarchal structure of Indian society in determining the intra-household status of women.

#### *2.3.2.4. Wage gap difference*

Mitra and Sambamoorthi (2008) developed a descriptive statistical model and analyzed wage differences between employed disabled and non-disabled males in Tamil Nadu, India. They found that the hourly wage for disabled men was Rs. 11.569 and Rs. 10.435 for non-disabled persons. A disabled person has the advantage of a wage difference of Rs. 1.34. This difference is mostly due to low productivity and a fixed hourly wage. In general, the average productivity, a unit produced by a disabled person, has a higher cost when compared to a non-disabled person. This may cause more disabled people to pursue wage employment in rural India. However in some cases, disabled males were found to be more experienced and older than nondisabled males and their productivity was much higher when compared to their non-disabled counterparts. However rural households are not engaged in non-farming activities such as trade, personal services, construction and manufacturing (Lanjouw and Shariff, 2002). The Government of India encourages employment for disabled people with a focus on locomotive disabilities (Mitra and Sambamoorthi, 2008). Visually impaired or disabled people generally do not benefit from these programs. The elimination of cataract blindness thus provides work opportunities for visually impaired people. However cataract surgery by itself is not sufficient; is also necessary to develop policies about disability in order to change the attitudes of people in rural India. Berta (2004) developed a theoretical model to measure gender discrimination in the labour market while

exploring its economic consequences. The first part of the analysis provides labour market equilibrium without discrimination. The second part provides modelling on gender discrimination as an exogenous exclusion of females from the job market. According to this model a discriminatory practice affects (a) the labour market, (b) the equilibrium wage rate, (c) the investment in education by individuals (males and females), and (d) economic growth.

In my study a descriptive model as described by Mitra and Sambamoorthi (2008) and a theoretical model developed by Berta (2004) were incorporated into the survey. In addition, I used the techniques of Ettner, (2000) and Kruse and Schur (2003) to measure changes in the wage gap of formally blind persons who had under gone cataract surgery.

In industrial economies, most people work specific hours for a specific time period, such as weekly or bi-weekly, with a formal contract with an employer. However, poor households in developing countries spend their time working for the needs of their dependents in formal and informal productive activities. This cannot be categorized as a formal contract or a job. In analysing time use, it is necessary to take into account self-employment and production of goods and services in non-market activities whether used in the household or traded in a local market. This adds complexity to a time-use analysis.

### 2.3.3. Material and financial matters

#### *2.3.3.1. Extra household relations*

The bargaining power of women outside the household is mainly determined by gender. Gender based discriminatory hiring and payment practices are common in rural India. In general, south

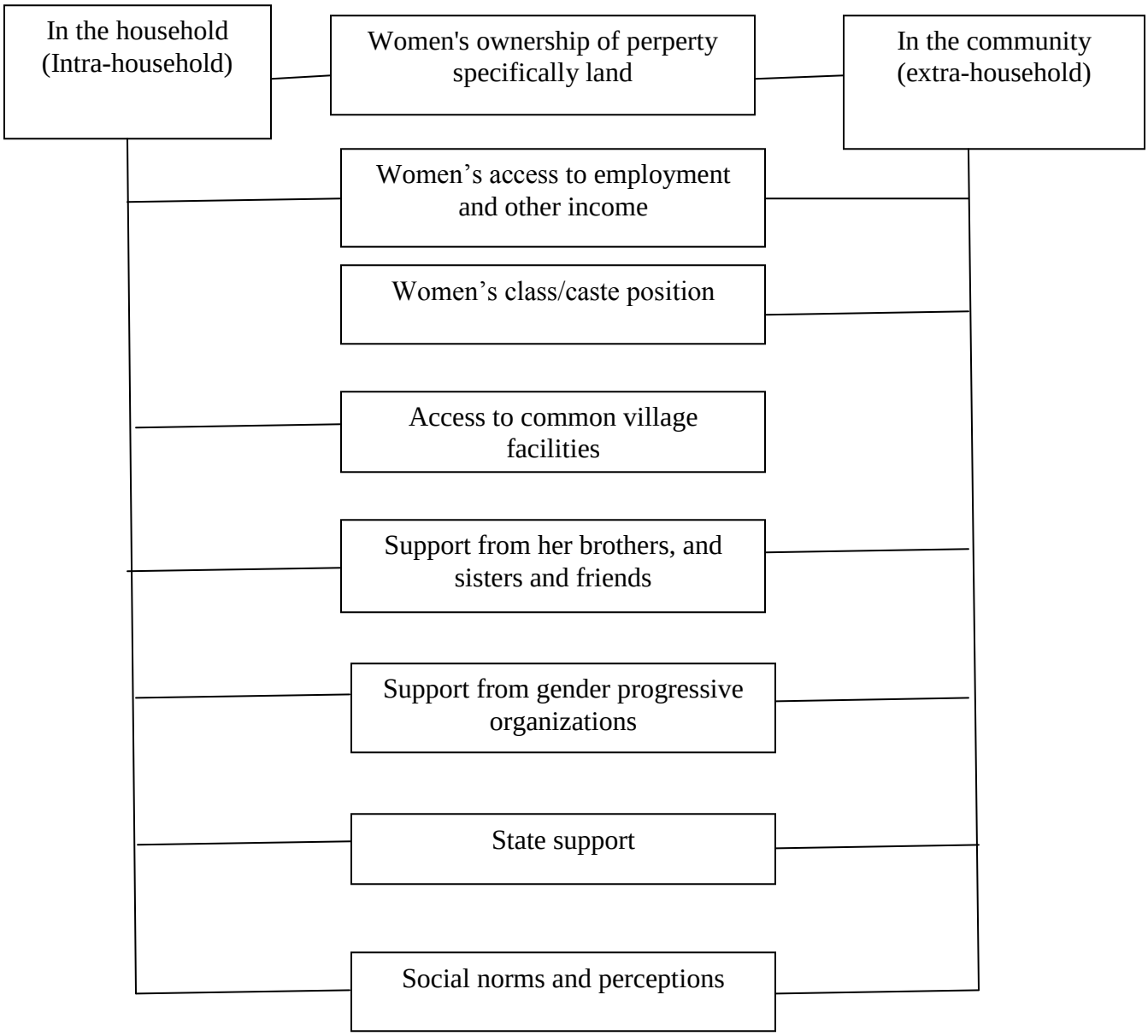
Asian women are paid lower wages even when they perform the same work as men. Perceptions about women, underestimating their needs and under evaluating their labour contribution severely affect their place in the labour market and their right to obtain a fair wage (Agarval, 1997). Age, marital status and social norms are the main contributing factors towards the intra and extra household bargaining power of women. In general, cultural constructions of appropriate behaviour for women severely affect their bargaining power. For example, norms specify that males in the household should eat before females and that they get better quality food. A peasant woman in north India often eats last and least while feeding the best food to her sons and husband (Kabeer, 1991). While it is possible to negotiate allocation criteria for children in the family based on their needs, parity is most often not found between male and female children. The principle governing the distribution of family subsistence is not only controlled by social norms, but also affects public policy, child feeding programs in schools, and child subsidies (Farmer & Teifenthaler, 1995). The economic situation of women affects their bargaining power not only in the household but also outside the household, such as in the market place and in community gatherings. A community is defined as a shared identity based on location and social grouping such as religious, racial, ethnic, or caste (Agarval, 1997). The community can be spread out and cross over several villages. Different communities may practice different forms of gender relations, and bargaining power among women and men may exhibit significant differences in various communities. In general, community members share resources for the benefit of community members and support each other economically, socially and politically. This will make the analysis of women's bargaining power within the household more complex (Agarval, 1997).

Women and those who migrate from one community to another may experience different levels of bargaining power. This is strongly inter-connected with social norms and cultural settings of the old and new communities. In this context, bargaining power also migrates and changes according to the community. However, in rural India the ability of women to bargain within the community to obtain a greater community share of power or greater social freedom is more limited compared to men due to various reasons. In most cases women are excluded from community institutions, such as village councils responsible for public decision making. As explained earlier, women typically have a weaker intra-household bargaining condition and that is a reflection of their weakness in extra-household bargaining. Agarval (1994) argued that women have more bargaining power within the community if they operate as a group rather than individually. However a woman who breaks seclusion norms can be easily penalized by her own caste members. This puts additional negative pressure on her bargaining power. Female bargaining power relies partly on political power and individual economic positioning. Women's ability to survive economically and socially in the community is dependent upon factors such as (a) her personal property position; (b) her skills, including her education and access to other economic resources such as government and non-governmental social assistance programs; (c) economic and social support provided by her family members; and (d) material and social support from outside the community. Women's intra and extra household bargaining power depends upon factors such as these.

These scenarios, internal and external factors influencing bargaining in the household, are further explained by the model in Figure 2.2 below. The questions in my study were designed to measure intra household gender and power relations. In addition, factors affecting extra household bargaining power also have a strong influence in intra household power relations in

rural household. Both extra and intra household relations were considered in the formulation of the questionnaire in light of the eight factors described in Agarval (1997) as seen in figure 2-2. These factors were measured both before and after cataract surgery in order to determine if any changes have occurred in the status of the formerly visually impaired person.

**Figure 2-2: Factors affecting women's bargaining power**



#### *2.3.3.2. Economic status and inequality*

The concept of poverty is often mixed with many other terms such as deprivation, inequality, disadvantage, and marginalization. It is important to understand socio-economic gender inequality and how disability leads to poverty and inequality. Gender inequality can be explained by the difference in earned-income in the household between men and women. Women have made progress in many areas of activity such as the labour market, access to resources and education, financial autonomy, and greater representation in political and civic life (Lourdes and Permanyer, 2010). There is a growing interest in understanding gender inequality issues across countries and cultures. One of the major challenges in measuring gender inequality is quantifying changes, creating measurable indicators and conducting a precise comparison between them. Composite indicators are easy to develop. However they provide a crude and limited understanding of gender inequality, specifically complexities of gender relations in households. Seguino (2007) and Charmes and Wieringa (2003) explored tools available for women's empowerment. The United Nations Development Program (UNDP) has published human development reports. However, UNDP's Gender related Development Index (GDI) and Gender Empowerment Measure (GEM) are not measuring gender equality (Dijkstra, 2006). GDI can be corrected by including data regarding (a) a long and healthy life as measured by life expectancy; (b) knowledge as measured by adult literacy rates; and (c) a decent standard of living as measured by estimated earned income. This makes it possible to measure gender equality with better accuracy. GEM is also able to measure with reasonable accuracy whether women and men are able to participate in the economic and political life and decision making. There are certain ways to define gender empowerment. The most recognized index developed in measuring gender equality is the Relative Status of Women (RSW). If RSW < 1, women are discriminated against

in comparison with men; if RSW > 1 men are discriminated against in comparison with women; and if RSW = 1, there is gender equality between women and men (Dijkstra and Hanmer, 2000). In addition to RSW a few other gender equality measuring tools are available such as Gender Relative Status Index (GRS), and the Women Disadvantage Index (WD). The proper measurement of gender equality is necessary to understand both its theoretical and practical aspects.

In my study measurable indicators, as described by Lourdes and Permanyer (2010), Seguino (2007), Charmes and Wieringa (2003), Dijkstra and Hanmer (2000), were incorporated into the questionnaire in order to determine if any changes in gender inequality occurred in the families of formally blind persons who had undergone cataract surgery.

#### *2.3.3.3. Gender inequality*

Social development matters such as divorce, polygamy, dowry, and early marriage can be considered as key elements of gender inequality between men and women. Rahman and Vijayendra (2004) developed a methodology to analyse gender inequality which consists of qualitative and quantitative analyses. In my study, I utilized a similar approach with a few modifications to questions that suit the local setting. It is also necessary to consider the economic and educational status of the women and the sample should be homogenous. It is also necessary to measure the availability of assets and non-consumable materials that can be used for a longer time to evaluate the wealth of the women. Information was collected on marriage and other cultural practices in order to obtain first-hand information about ethnographic differences and kinship practices.

The decision making variables are categorized into two types. The first type is comprised of two categorical variables created from the following questions on household expenditure:

(a) Do you have a say in how the household's income is spent?

(b) Do you receive any cash in hand for household expenditures?

The second set of variables measures the level of participation in household decision making. This is measured in two ways. First, I included categorical measures of the respondent's economic authority within the household: whether the wife has any authority in how household income is spent and whether she receives cash for household expenditures. Asking these questions assumes that direct control of cash implies greater autonomy. At the second stage, I examined which members of the household participated in decision making and who was the most important decision maker. The questions covered decisions regarding expenditure on the household and work by the respondent outside the house. I assumed that greater women's decision making authority implied greater autonomy.

The decision making variable was measured by the following questions. The answers were binary.

(a) Do you have any authority on how the household's income is spent?

(b) Do you receive any cash to spend on household expenditures?

### 2.3.4. Mobility and personal autonomy

#### *2.3.4.1. Mobility decisions*

The questionnaire filtered information on various aspects of household behaviour and community practices, related marriages and inheritances, female mobility and decision making. The questionnaire also included detailed questions on household wealth, income, and socio-economic status. Freedom of mobility and participation in household decision making were considered as variables.

Information to measure female mobility variables were obtained by questions such as:

(1) Do you have to ask your husband or a senior family member for permission to go to:

(a) any place outside your house?

(b) the home of relatives or friends in the village?

(c) the local health centre?

(d) the local market?

(2) Can you travel alone to each of the above places?

#### *2.3.4.2 Social change and quality of life*

Time use data provides information on social change over a period of time. In most of the developing countries, environmental degradation has altered household time allocation for economic activities and increased child labour for fetching water and collecting fire wood for cooking purposes (Skoufias, 1994). Adults in the household are spending more time in market

activities, and this has a direct impact on their children's schooling and educational activities since children need to provide support to other day-to-day activities such as fetching water, feeding animals and other activities in the household. This places an additional obstacle on their future job opportunities.

## 2.4. ACTIVITIES AND TIME-USE

### 2.4.1. Understanding of household living standards

The allocation of time is crucial in many aspects of household living standards. Understanding how a household member allocates time is necessary to measure the level of income of the household. Low income households often devote a large number of hours to fetching water, to searching for fuel (fire wood), and to processing their food. Some processes, such as smoking meat products, collecting honey and salt preservation, or drying fruits and vegetables, require much more time from household members. Travel and waiting time are also important aspects of the cost of using health and education services. It is also necessary to understand how the rural poor spend their time on leisure activities and its relationship to blindness. The task is to comprehensively analyse one household member's activity such as fetching water, collecting fire wood and growing crops for his/her own household consumption and to see how this affects the lifestyles of other persons in the household. To understand the comprehensive time use model, it is necessary to interview all households with a lengthy questionnaire. However the current study focuses on changes of activities due to cataracts of individuals and does not consider how changes of activity affect the other people in the household.

It is necessary to know how much time is allocated by individuals to their household tasks in order to measure various important areas such as living standards, human capital investment decisions, labour force, gender and age inequalities in the household, the use of public services, social change and household quality of life, leisure and social interactions. Time is an important component of various assets for poor households where capital is limited. Many studies show that in developing countries, members of a household utilize their time for the overall benefit of the household, regardless of age and gender (INSTRAW, 1996). A minimum number of hours spent for the basic survival of the family is called the household time overhead. According to this concept defined by Vickey (1977), the key principles of poverty are a function of time and money. Household time overhead consists of a number of hours preparing meals, both directly or indirectly, washing clothes, cleaning, gardening, doing housework, and fetching water and cooking fuels such as fire wood. The number of children assisting in these tasks has a noticeable impact on the welfare of the household.

### 2.4.2. Leisure and social interaction

Poor people are required to spend more time on their food production and have less time to spend time on leisure activities and relaxation. Measuring leisure activities is difficult since people use different activities to entertain themselves. Leisure activities may include relaxation, social interaction, cultural activities, physical exercise, and participation in games or sports. Leisure time activities will occur during spare time and participation will be voluntary. They must not be included in non-market activities. Transitions between subsistence and market economies alter social interaction among family members in the household. For example, a woman who is working in a school or in others' fields with her children has the opportunity to

transfer social skills to them while a woman working in a factory has no such opportunity since she is isolated from her children.

Time use data was collected by using the World Bank Living Standard Measurement Survey (Harvey and Taylor, 2000) and a specific questionnaire was administered at the pre- and post-cataract surgery stage. Data was gathered for (i) work for own use and others, (ii) intra-household time allocation and gender inequality, (iii) evaluating social change and quality of life, and (iv) measuring leisure and social interaction. The data was utilized to measure changes in gender and power relations in rural households before and after cataract surgery.

### 2.4.3. Measuring time use

Measuring time use can be exhaustive. Monitoring specific time periods for specified activities is a popular method for collecting time use data. This method is more selective than continuous sampling for specific time periods for all activities. For a time use study, the basic time use unit is an episode which is a single entry for a specific activity. The number of hours spent working in the field can be an accumulation of a few episodes or one single episode. Four hours of continuous labour is a greater burden on an individual than two two-hour episodes. It is also necessary to record an activity's duration, frequency, and location. The time of day of the activities also must be recoded when collecting data. This provides information about how social systems are organized, the number of hours that health clinics, community centres, libraries are open, or the peak time of day for the use of a public transportation systems. Time use data helps us to understand how individuals organize their day. It helps to schedule operating hours for social services in order to provide greater access for the community. When collecting time use

data, information must also be gathered about any concurrent activities, for example women caring for children while preparing food. The collection of time use activity data should not undermine the occurrence of a second activity. However, a large percentage of domestic and personal care activities are not recorded in many studies. While it is a difficult to record all the activities of the participants, it was also not fully necessary for measuring living standards and for understanding the overall aspects of this study. In most of the developing countries, people do not schedule their work based on a clock but on nature. Therefore time use needs to be measured without a clock. During the harvesting period farmers go into the fields very early before sunrise. It is also necessary to understand the local perception of the time measurement for the purpose of survey design. Consequently when women say that a given activity took them the whole morning, it can be interpreted as four hours (Kennedy et al., 1991). Traditionally, time use data is mostly collected by the researcher after observing activities in the household. The cultural context can then be added to the time use data. However, this practice is very costly for larger samples. Random observation can be used in such situations. Most often, household questionnaires are used to collect time use data, although this method may have reporting and interpretation errors.

The stylized activity list collects information about time spent, duration, and frequency for the listed activities. In general, total time spent for activities during the day should not exceed 24 hours. It may be difficult to obtain accurate information if an activity does not occur regularly. For example, time waiting at a health clinic may not be measured, since this activity does not happen very often. An open interval time schedule helps to measure what time of the day an activity starts and what activity comes next. For each principal activity list, the start time and location is recorded. An open interval time activity is better in many ways when compared to a

stylized activity list. It allows respondents to recall the activity of the previous day in a systematic manner, answers are given in the participants' own words, and it allows the interviewer to gather accurate and significantly detailed information covering each activity (Niemi, 1983). It is necessary to capture both primary and secondary activities in order to capture accurate information. It is also necessary to obtain data about the location where the time is spent. Information collected about time spent without a location is less meaningful. It is important to find out how far from home an activity occurred and how much time parents spent not caring for the children.

There are many advantages and disadvantages associated with the different techniques used to collect time use data. The most obvious limitation is that we are not able to acquire a complete picture of an individual's activities on the previous day in terms of the full 24 hours. It is also difficult to measure one person's labour activity and how it affects others in the household. As well, is a difficult task to compare activity based on how much energy is consumed and on how much activity was performed. Proper approaches must be used as they generate accurate information. Pilot studies are recommended for most surveys to avoid adopting an improper approach. It is necessary to collect time use data for personal care, sleeping and leisure. It is also very difficult to measure activities that are not related to specific tasks such as agriculture and farming. Another major practical problem is that participants may not be able to recognize primary and secondary activities and specific questions about time use. For example, women may not report any time spent for child caring activities if the child stayed the whole day with her in the field. Time use data collection is time consuming and takes approximately 10 to 15 minutes for each person.

My research project collected time spent for activities by participants by asking specific questions to measure time use. I based my time use data collection instrument on the stylized activity list used by the World Bank Living Standards Measurement Survey (LSMS) (Harvey and Taylor, 2000). The activity categories were modified slightly so that they were relevant to the target group. I also added a question on whether assistance was received with each activity: no assistance, some assistance or fully assisted. A list of activities was generated and participants were asked how they spent their time on these activities during a specific time frame such as a day, a week or a month.

In designing the questionnaire, the following considerations were taken into account: (a) sampling (a representative random sample will help to obtain accurate information); (b) geography (the sample must lend itself to the analysis of a significant diversity of economic and ecological areas); (c) recall period (the questionnaire should request recollection of events that occurred more than two days earlier); (d) data collection day (usually the date should be randomly assigned and days where specific cultural, religious, political, and social activities takes place in the village or surrounding areas should not be chosen; (e) time of the year (the time of special activities such as seasonal crop harvesting should be avoided); (f) time of the reference day (data must be collected from midnight to midnight); and (g) open interval (the respondents need to provide complete information on what they did rather than what they did in the last 15 or 30 minutes). Harvey and Taylor (2000) stated that primary activities must add up to 1,440 minutes per day to generate accurate information. For this study, the United Nations international classification for time use activities and coding system as explained in Harvey and Taylor (2000) was utilized. It is also necessary to understand the effect of cataract surgery on the use of time by the participants. The World Bank Living Standards Measurement Survey

developed a “stylized activity list” and these activities can be categorized into eight sections as follows: (1) personal: sleeping, bathing, dressing, eating, other; (2) household/family: cooking/washing dishes, cleaning house/clothes, shopping, looking after children/elderly/sick, other; (3) paid work: paid employment, commission work, self-employed/own business, other; (4) work for own use: agriculture, animal rearing, fetching firewood/water, processing agricultural products/food, other; (5) leisure outside the home: social visits, attending ceremonies, attending meetings; (6) leisure inside the home: reading/listening to radio/watching TV; chatting, relaxing with friends/family; prayer, other; (7) no activity; and (8) travel. Time use and activities can be examined to understand power and gender relations in a post cataract surgery situation in a household. However participants with the least mobility, such as those with a physical walking disability who have had cataract surgery, cannot be expected to increase their productive activities substantially. I employed a mixed methods approach to construct a stylized activity list and an open interval time to collect time use data. The research method was developed to analyse gender and power relations in rural households by focusing on activities and time use. The participants were observed after the cataract surgery and subsequent changes were measured with regard to the household.

Cataract blindness is a major health concern and many actions have been taken to address this issue. Many clinical studies have been performed to evaluate performance after cataract surgery. However I was not able to find any literature on patients with cataracts in Indian society and how their surgery affected power and gender relations within the household. Therefore this exploratory research adds a new dimension to the social and cultural understanding of rural Indian society.

# CHAPTER 3

# METHODOLOGY

## 3.1 REFLEXIVITY AND CRITICAL REFLECTION

Reflexivity and critical reflection were applied during this exploratory study of the gender and power relations in rural Andra Pradesh, India. Reflexivity and critical reflection impact on power relations in the interviewing process, and in the measurement of power relations between men and women. The inclusion and exclusion of participants in the research process, and the nature of social knowledge are also critical within exploratory investigations.

Regardless of the particular research methodology used, reflexivity and critical reflection are integral components of the research process (Fanow & Cook, 1991; Maynard, 1992). Concepts relating to reflexivity and critical reflection have been developed and explored in the gender and power relations research literature for several decades (Ryan & Golden, 2006). In a feminist approach, place, time, and situation promote the use of researchers' reflexivity and critical reflection to recognize and respond power and relations in the research process (Cosgrove & McHugh, 2000). In general, the relationship between subjects and the interviewer trigger uses of reflexivity and critical reflection. In other words, engaging in reflexivity and critical reflection draws attention to the different forms of social power. The subjective aspects of the research process at the different stages affect power relations between the researcher and interviewer

(Mauthner, 2000). It is well known that reflexivity and critical reflection constitute an interrogation of the practices that construct knowledge (Campbell, 2004). The researcher and participants are influenced by their own subjectivities relating to factors such as gender, race, and sexuality among other social identities (Ali, 2006).

Mauthner (2000) examined reflexivity with regard to the methodological dilemmas of interpretation and representation. Gray (2008) presented examples in a reflexive account of her biographical relationship to migration, arguing that critical reflexivity cannot be ignored when conducting research. Ale´x and Hammarstro¨m (2008) clearly noted in their study ‘‘discursive reflexivity’’ (i.e., with regard to power relations in interviewing, how researchers position themselves within discourses on age, gender, education, body and ethnicity and the impact of their positions on the kinds of narratives told by participants). The practices of reflexivity and critical reflection are aligned in that they both privilege a critical stance toward power, knowledge, and self; however, they are also different from one another. Being reflexively engaged in the research process involves reflecting in action where researcher question both self and participants. (Schon, 1983).

In my research project, I did not conduct the interviews as I cannot speak the local language. Rather, I trained the SIO staff for this purpose. They are capable of speaking the local language as well as English. All interviewers were familiar with the local settings and able to gather information from participants when they answered open-ended questions. I utilized 6 male and 6 female interviewers. Participants were assigned to the interviewers randomly; interviewers interviewed both women and men. As a researcher from South Asia (Native Sri Lankan) I have a sound understanding of social norms and structures in the region. However, when formulating

the questionnaire, I focussed on the research questions and discussions with local partners in India about the questionnaire. I was aware of culturally sensitive information in the questionnaire. This process added additional quality control for the data collection. My cultural biases with regards to specific issues explored in the research project were minimized. In order to mitigate interviewer and translation issues, I utilized strict quality control procedures to ensure that answers were based on the recorded data. For example, I checked every tenth transcript with an external reviewer to ensure that the translation was accurate.

I am of Sri Lankan Singhalese ethnic origin and married to a Sri Lankan woman. We have two daughters, aged 13 and 24. Even though I was born in Sri Lanka, I have spent most of my life in western countries where I went to secondary school and have been employed. I am now living in Canada and my wife and I consider ourselves to be integrated into western culture. My wife enjoys the freedom found here. All the family decisions regarding our children are made by my wife and I in consultation with each other. There are both similarities and differences between me and the participants in my study.

I believe that the divorce rate among Canadians is about 60% while in the Indian community it is much lower, about 2%. The majority of the participants in my study were over 50 years of age and lived with their partners. In rural India the lower divorce rate can be examined and compared to its urban counterpart. In that respect, my wife and I more closely approximate the Indian norm than the western norm and I can more easily understand the mindset that keeps people together. While there are social pressures to remain married, the material necessities of everyday life also are a factor in a setting involving subsistence living.

The nature of the conjugal relationship is also affected by male dominance in India. Family and social hierarchy are clearly reflected in south Asian culture and typically the man becomes head of the household. There is power balance in favour of males around the family structure. When participants explained their experiences about decision making about their children, I was able to understand their situation readily as it was one that I had seen and lived as a younger person. I could understand the context of their answers about the decision making power and financial authority in their household, the preparation of meals and decisions about their children's marriage. I could understand the cultural context of decisions about children's marriage, even though that is something that neither my wife nor I would impose on our daughters.

Male domination has characterized gender relations since humans became sedentary and took up the practice of agriculture. The transformation of gender relations and progressive gender equality are very important social changes wrought by the 20th Century. This transformation is most pronounced in the western world where women became more independent and are gaining equal rights to men. At the beginning of the 20th century, the roles of men and women in society were more sharply differentiated; specifically the woman's place was in the home as mother and housewife, while the man occupied a dominant place in the public sphere.

My personal history and present living circumstances have influenced my views on women's autonomy. I think about what the women in my life say in the context of women's autonomy. However during open ended discussions relating to personal autonomy, I am compelled to compare the answers that my wife and daughters give me from the western point of view. I am sandwiched between my current living circumstances and my family heritage, my background and its cultural norms. This influenced my interpretation of the results of my study as what I

learnt and experienced mainly supported what the participants said about their local settings and relations. I had to be certain that my interpretation of the results was neither affected by my personal biases nor influenced by western culture.

In the interviews with participants, many wives complained about their husbands and many of those complaints were associated with domestic violence. As men are seen to be the head of the household, they are also seen to have power over the lives of their wives and children. Drunken husbands beating their wives was a common complaint and Indian society tends to accept this type of behaviour as normal. Officially, in Canada, domestic violence against women is not tolerated. However, in practical terms, Canada's stance is much more ambiguous as cases of domestic violence are not always punished civilly or criminally unless they rise above a certain level of severity.

I had mixed conceptual attitudes towards women's autonomy in India and I had to confront an unsettling situation when I was interpreting the data. However I carefully worked through my thinking about gender relations when analysing the major variables in the context of local Indian settings. I was able to set aside my personal biases and was able interpret data accordingly. When I look at the data, I tend to believe that women's autonomy to be more evident when dealing with decisions about personal matters such as attending local ceremonies and going to health centres.

In Canada, women have seen tremendous gains in gender equality, but significant inequalities still remain. When I was examining the transcripts to identify key components of the open ended answers in order to determine what changes in power relations had occurred in the household, I was reluctant to consider Canadian aspects of the issue. In the 21$^{st}$ century in Canada, over 60%

of mothers with children under six and nearly 80% of mothers with children in school are now in the labour force. This extraordinary change of participation by women in the labour market was influenced by responses to women's demands and by government policy change with regards to gender equality. Even though I have been highly influenced by the male dominant culture, I have strived to be balanced about my thinking and to look at the issue in terms of cultural norms and practices.

According to the participants, many adult children are living with their parents until they get married. This is the cultural norm in India. But in Canada, the majority of adult children leave their parents after adolescence. In conducting this research project, I became very aware of the place of the extended family in the lives of the participants. I was culturally shocked to see the family structure of the participants. This led me to investigate the factors underlying the extended family. My personal experience with western culture did not influence the results and the conclusions. My results were based on the qualitative research data.

My two daughters first learnt about the roles connected to gender in the home. They have learnt that "patriarchy" or "rule by the father" which was founded on male domination inside the family was historically the main form of gender relations. Gender relations are not formed in intimate relations within the family; but they are socially constructed. A central aspect of the gender relations within my family is the division of labour over domestic tasks.

As I looked further into gender relations in rural households, I became more and more aware that the "rule by the father" concept was still deeply embedded in rural households. I was

overwhelmed to see such results in this research project. However my interpretation of the data is not directly derived from my personal experiences. They were well supported by the literature.

### 3. 2. OVERVIEW AND SETTING

This chapter provides an explanation of the sample, the procedure and the instruments used for the study. Utilizing the literature discussed in chapter 2 was helpful in designing the interview guides/questionnaires (see Appendix 1 and 2) and developing indicators to measure changes in gender and power relations after formerly visually impaired participants had undergone cataract surgery. The chapter also provides an explanation of the development of quantitative indicators which involved the combination of particular questions and collapsing categories of responses. Finally, positive changes, such as increased activities following cataract surgery were investigated using mixed methods that incorporated questions from the World Bank Living Standard Measurements as described in Harvey and Taylor (2000) along with open-ended questions. The analysis was carried out considering the dependent variables in order to determine whether any changes in gender and power relations had occurred in the household of a formerly blind person who had undergone cataract surgery. This study included consideration of the socio-economic status of the household. The impacts of cataract surgery on gender and power relations and any transformations in these relations were studied by examining the consequences of increased activities following surgery and their connectivity to the societal and cultural norms of the formerly visually impaired person.

The qualitative and quantitative data were gathered simultaneously as the structured interview guides/questionnaires in the pre-test and post-test phases were administered in a manner that

enabled the participants to "tell their stories". The quantitative measures were embedded within the interview in a manner that allowed the interviewers to pose them as questions in a conversational manner. Berg and Lune (2012, p. 137) described the *dramaturgical interview* as a type of interview that "is intended to convey the notion of a very fluid and flexible format for conducting research interviews… to assist the subject in conveying almost a monologue on the research topic… [and] to help the subject to offer his or her accounts". The interviews were conducted in a manner consistent with this approach.

Two interviews were scheduled, one prior to cataract surgery and the second 90 days after surgery. The interviews were transcribed verbatim and analysed according to principles and practices of narrative analysis (Gubrium & Holstein, 2009) and qualitative analysis outlined by Tesch (1990) for general thematic coding. The methods described by Strauss and Corbin (1998) for open, axial, and selective coding were followed but other steps for grounded theory method were not utilized. SPSS 19 software was employed as an aid to the management and analysis of quantitative data.

### 3.2.1. Setting

The Srikiran Institute of Ophthalmology (SIO), a hospital specialized in treating vision loss, is located in Kakinada, Andra Pradesh, India. The prevalence of blindness in Andhra Pradesh is 190 in every 100,000 according to the National Sample Survey conducted in 2002. The SIO has the capacity and capability to perform 50 to100 cataract surgeries every two days. With regard to the overall operation of the hospital, to be cost effective, at least 50 cataract surgeries are required to be performed every two days.

As a first step in developing the methodology for the study, historical data stored in the Outreach Department of the SIO were examined. The highest number of cataract patients were from West and East Godavari. Dandona et al. (2001) found that the prevalence of cataracts in West Godavari was 1.30%. This indicates that, at any given time, 1.30 individuals in a population of 100 faces the risk of cataract blindness. The National Sample Survey 2002 and the historical data from the Outreach Department of the SIO were used to identify populations with a relatively large proportion of possible cataract patients. In addition, the population statistics from 2003 were used as a key tool to reach the required number of individuals in the selected locations. It was estimated that at least 50,000 individuals had to be approached in order to reach 50 cataract patients.

Eye screening camps were conducted by experienced medical staff who identified visual impairment due to cataracts. One hundred and fifty cataract patients (male and female) who were selected by the medical staff to undergo surgery were interviewed (qualitative and quantitative components) at the hospital prior to surgery. The same patients were invited to attend a post-surgery clinic 90 days later and a second set of interviews was conducted with them. According to the previous experience of the field staff, 70% of patients were expected to return for the second interview. Individuals who did not participate in the second interview were omitted from the final analysis.

Historically, many researchers have determined good vision by measuring visual acuity of $\leq 6/60$ (Murthy et al., 2005). This level of visual acuity became the standard in the Indian context. In the current thesis project, this parameter was utilized to establish the baseline of visual impairment

and it was used by the hospital to determine eligibility for cataract surgery. However, it is worth noting that the World Bank standard for good vision visual acuity is set at ≤ 3/60.

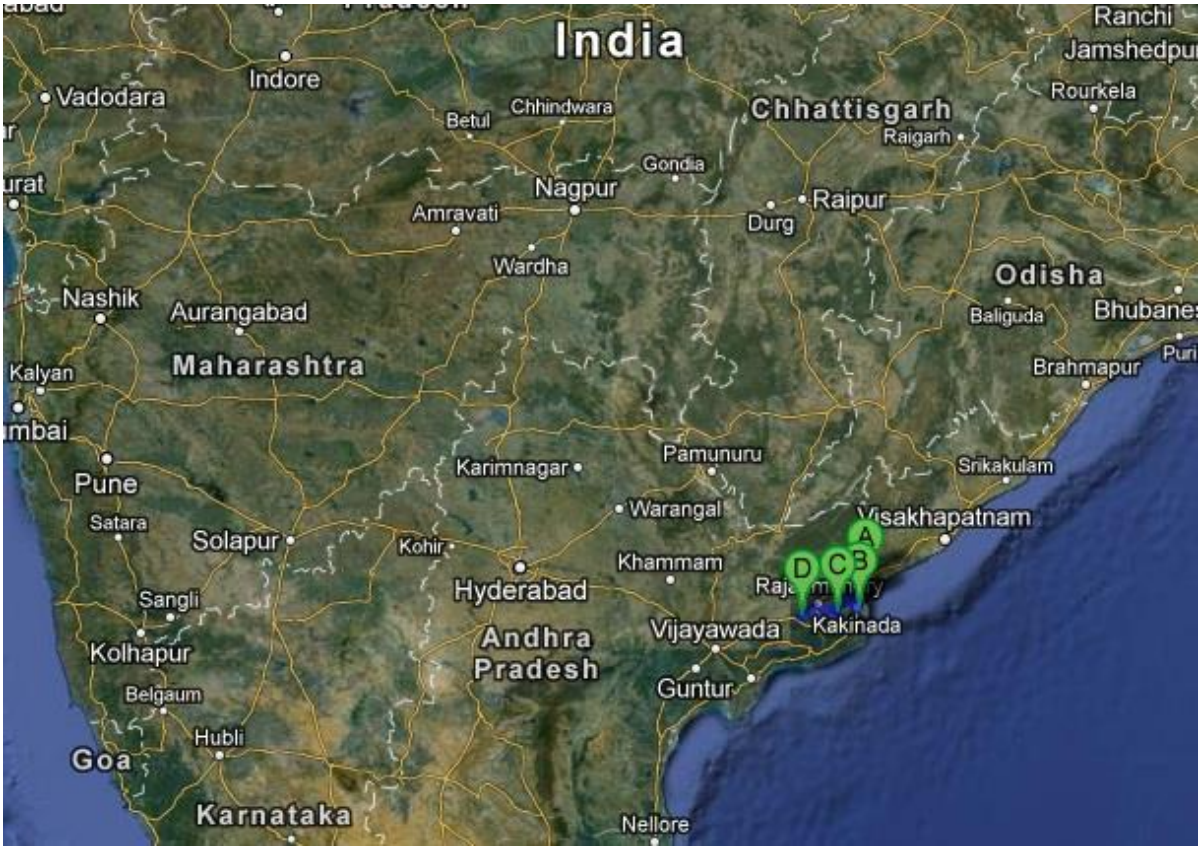
### 3.2.2. Reaching out

The Outreach Department identified local partners within a 250 km radius of the SIO. The local partners were responsible for identifying and arranging a suitable location for the eye camps, one that would allow about 300 people to gather. On most occasions, public places, such as temples, schools and community centres were utilized for this purpose. Once a suitable location was identified for pre-screening procedures, a field camp was announced in the surrounding villages, reaching a population of 50,000 to 80,000. Several communication methods, such as auto rickshaw announcements, leaflets, posters and banners were employed for this purpose. This announcement contained the date, time, location, and additional information required for pre-screening procedures. The public was encouraged to participate in the field camp which was held at no charge to individuals or families. The SIO employs its nurses, vision technicians, and ophthalmologists, counsellors, and support staff to conduct the eye camps. The medical equipment was transported with the SIO staff to the field. The SIO has its own fleet for this purpose.

SIO agreed to hold three field camps for the current study. On April 19, 2011, the first field camp was carried out in the village of Chebrolu. The second field camp was carried out on April 24, 2011 in the village of Rayawarn. The third field camp was carried out on April 26, 2011 in the village of Jagannadhapuram. The eye camp locations are highlighted below in figure 3-1 and figure 3-2.

**Figure 3-1: Map of field eye camp locations**

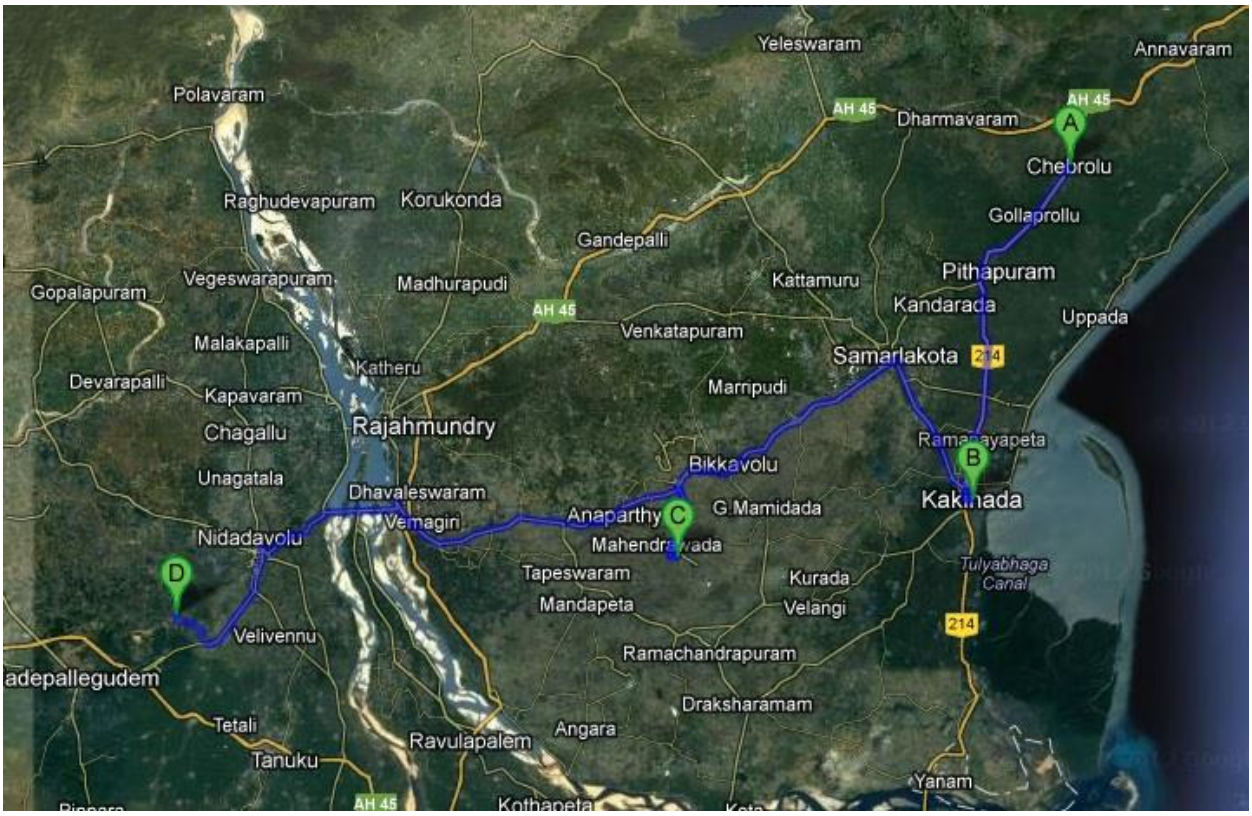
**Chebrolu (A), Srikiran Institute (B), Rayavaram (C), Jagannadhapuram (D)**




In addition, the sample of participants selected from the three camps was not geographically biased. They were registered to attend the camps on a first come, first serve basis. All patients who visited the camp were examined by the medical staff at the SIO and the sample was randomly distributed. The locations, Chebrolu *(A),* Rayavaram *(C),* Jagannadhapuram *(D)* were randomly selected for the three camps and they were within a 250 kilometre radius from the SIO (B).

**Figure 3-2. Detailed map of field eye camp locations**

**Chebrolu (A), Srikiran Institute (B), Rayavaram (C), Jagannadhapuram (D)**




### 3.2.3. Pre-screening

All participants who attended the field camps followed the six steps outlined below.

#### *3.2.3.1. Step one*

Following the hospital's standard procedures, all participants registered with the SIO field camp and each participant received a patient identification number. This patient identification number was utilized to record each patient's clinical data. The SIO maintains the clinical data of every patient examined at its pre-screening field camp. Given potential challenges linked to literacy, a colour coding system was implemented in order to mitigate the issue. Yellow cards represented the patients who had been screened in the field. Subsequently, a hospital nurse checked

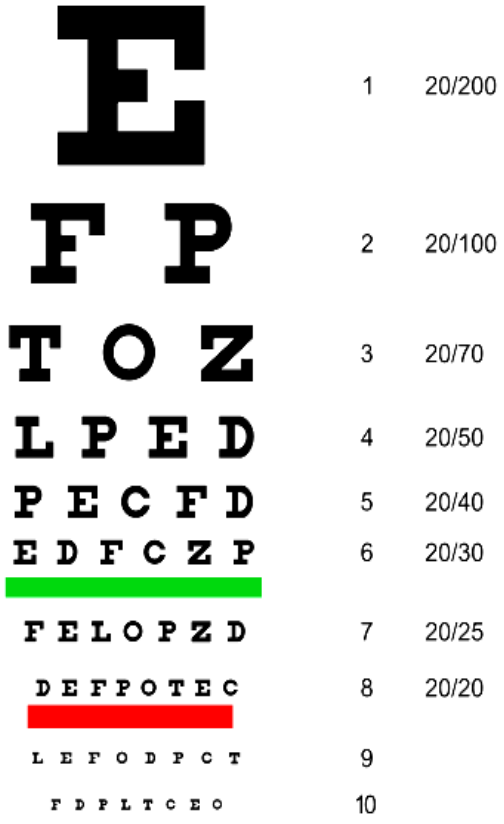
participants for their general medical condition such as blood pressure and glucose level in their urine. If any patient had a problematic result from these tests, they were not referred to the next step. They were instead advised to manage their blood pressure and sugar levels in order to eventually be eligible for cataract surgery.

#### *3.2.3.2. Step two*

All the registered participants (i.e., those having no identifiable complications due to underlying medical issues) were directed to the second step. At the second stage, vision technicians measured the visual acuity of the patients (see Figure 3.3).

Most of the participants were illiterate. Therefore, the Snellen chart (see Figure 3-3) was modified by replacing the letters with familiar animals from the rural areas while still representing all of the standard measurements of the original chart (see Figure 3-4).

**Figure 3-3: Typical Snellen chart (Source: Dahl, 2012)**




### *3.2.3.3. Step three*

Once visual acuity was recorded, the participants moved to the next step. At this stage, the slit lamp test was carried out. The slit lamp is an instrument that provides a magnified, three-dimensional (3D) view of the different parts of the eye. The individuals were examined to identify any medical issues with their eyes. Once a vision technician or an ophthalmologist had identified those individuals who had cataracts, they were advised to receive surgery. In addition, the hospital counselling staff provided further advice and guidance as required.

**Figure 3-4: Snellen Chart used in the field camps**


### *3.2.3.4. Step four*

The participants who had different issues, other than cataracts, in their eyes were directed to a specialized hospital and appropriate advice was given. The individuals who were identified as cataract patients were required to undergo another procedure involving clearing of their nasolacrimal duct (also known as the tear duct). This enables any extra tears in the eye to easily flow into the nasal cavity. This procedure reduced post operation complication and infections.

### *3.2.3.5. Step five*

The patients identified for cataract surgery were transported by bus to the SIO without charge.

#### *3.2.3.6. Step six*

Upon arriving at the SIO, the individuals were admitted as patients. All patients underwent pre-operating procedures and were prepared for the cataract surgery on the following day. The patients who agreed to participate in pre-surgery interviews were interviewed at this step. The participants met the inclusion criteria for the current study if they were women or men above age 34, with visual impairment due to cataracts.

### 3.3. SAMPLE SIZE

Determining sample size for my study was a critical task. As in all studies, time and resource constraints must be considered. Although the size of the sample had to be relative to the size of the population examined (in other words *n*/N), this was irrelevant to the issue of the accuracy of the sample. The sampling error could be reduced by increasing the sample size. However, as I tried to obtain greater accuracy, it became apparent that the project was not viable economically. Also, after a certain level of accuracy was reached, it tended to tail off (Bryman, and Cramer, 1990).

A non-response rate of 5 to 10% was expected for the questions during the interviews as well as a participation rate of 70% in the 90-day follow-up. Consequently in order to obtain the final sample target of 100, it was deemed necessary to interview 150 pre-surgery subjects. A key issue to consider was whether the field camps proportionally represented men and women as the literature had previously stated. Disproportions in the representation of the gender groups, would

affect the final accuracy of the results. However, interestingly, the participation of men and women in the camps and the study was close to my expectations for the project.

In addition to considering the theoretical and practical aspects of the sampling, existing demographic and clinical data from previous camps was examined. Preliminary reviews of existing data from prior camps indicated that a total sample of 90 to100 participants with both pre-and post-surgery participation would be sufficient for this thesis project. As noted above, three field camps were organized with the support of the out-reach division of the SIO which recruited patients and thus the required sample. The details for each camp are shown in Table 3-1.

At the field camps, 105 participants from Chebrolu, 42 from Rayawaram and 81 from Jagannadhapura were identified for cataract surgery. However, 10 individuals from Chebrolu, 11 from Rayawaram and 15 from Jagannadhapura were excluded due to various medical issues such as eye irritations, diabetes, wounds, hypertension, and unwillingness to receive the cataract surgery. In addition, some of the participants who were transported to the SIO had their surgery postponed due to further medial issues diagnosed by the physicians: 6 from Chebrolu, 1from Rayawaram and 6 from Jagannadhapura. These results are summarised in Table 3-2.

**Table 3-1. Details for field camps**

| Number of participants who: | Number of Participants at Each Field Camp | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | ***Chebrolu*** | | | ***Rayavaram*** | | | ***Jagannadhapuram*** | | |
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Attended the camps | 97 | 106 | 206 | 91 | 68 | 159 | 135 | 186 | 321 |
| Were diagnosed for with a cataract | 52 | 53 | 105 | 26 | 16 | 42 | 26 | 55 | 81 |
| Were admitted to SIO | 46 | 49 | 95 | 19 | 12 | 31 | 21 | 45 | 66 |
| Received surgery | 45 | 44 | 89 | 19 | 11 | 30 | 19 | 41 | 60 |
| Did not receive surgery | 1 | 5 | 6 | 0 | 1 | 1 | 2 | 4 | 6 |

**Table 3-2. Number of surgeries performed**

| Field Camp | Men | Women |
|---|---|---|
| Chebrolu | 45 | 44 |
| Rayawaram | 19 | 11 |
| Jagannadhapuram | 19 | 41 |
| Sub Total | 83 | 96 |
| ***Total*** | ***179*** | |

Only individuals who were selected by hospital staff for cataract surgery were invited to participate in a pre-surgery interview. A total of a 148 pre-surgery interviews were carried out. Of these, only 101 individuals participated in the post-surgery interviews. Individuals who did not participate in the post-surgery interviews were excluded from the study. In addition, two individuals who participated in the post-surgery interviews were removed from the sample due to problems found in the completed questionnaires. Therefore, the final sample was composed of 99 participants—52 men and 47 women.

### 3.4. INSTRUMENTS: MEASURES AND INTERVIEW GUIDE/ QUESTIONNAIRE

Pre- and post-surgery interview guides/questionnaires were designed to obtain answers to the research questions. They were also designed to minimize the burden to the respondents and to obtain data of maximum quality. Participation in the study was voluntary. As required by the Laurentian University Research Ethics Board, all participants provided informed consent and were provided with a copy of the consent form and confidentiality agreement. All interviewers, transcribers and translators also were required to sign confidentiality agreements to protect privacy and the research data. All respondents were informed of the objectives of the study, its approximate length and their rights prior to the start of the interviews. A pre-screening of the questions was included at the beginning of the questionnaire. The interview guide/questionnaire was designed to be as short as possible in order to encourage participants to complete the interview within a reasonable time-frame in order to maximize participation in the study.

The questions were simply and clearly written in the local language (Telugu) and easy to understand. The answers that were not directly related to the questions were categorized under

"other". The interview guide/questionnaire was also designed to allow for a smooth transition from question to question and topic to topic. Since a mixed methods approach was employed, the participants were given the opportunity to provide additional details for each question through open-ended responses.

Three major indicators, social status, economic status, and time use and activities, were developed to measure gender and power relations and changes within the context of post-surgery recovery. The social status of participants was measured by asking specific questions in the following subcategories: education, inequality and the status of wives in the family. The economic status of the household of the participants was measured by asking specific questions in relation to inequality and income. Their time use and activities were measured by asking specific questions about employment, intra household allocation of resources, social change and quality of life, and leisure and social interactions. The quantitative data was categorized in ordinal, nominal and scale to be entered into SPSS 19, creating the database for the study. Gender and power relations were measured and coded keeping in mind previous research findings, on a scale from 0 to 4, the higher value indicating greater power.

Both pre- and post-surgery questionnaires were pre-tested prior to starting the interviews (pilot testing). For the pilot test, eight pre-surgery interviews, four with men and four with women, were conducted. Parameters such as willingness to participate, interview completion time, respondent's behaviour, any special responses or comments to questions were also considered in order to ensure data quality. The participants' understanding of the questions and flow of the interview, their ability to respond to questions accurately, and their thought process as they answered the questions were also considered. Based on the results from the pilot questionnaire,

both pre- and post-surgery interview guides and questionnaires were slightly modified to enhance data quality, participation rate, and data capture. Taking into account responses and comments made during the pilot test, the modifications helped to obtain better clarity in the answers.

The post-surgery interview guide/questionnaire (Appendix 1) was slightly different from the instrument used pre-surgery (Appendix 2). It mainly focused on how the subjects' activities changed after cataract surgery and how it affected gender and power relations in the household.

## 3.5. PROCEDURE—DATA COLLECTION

### 3.5.1. Participatory research design

It was explained in previous sections of this chapter that the project was designed and conducted in conjunction with the SIO. The founder of the hospital assisted with the development of a collaborative relationship with stakeholders. In keeping with participatory principles, an advisory committee (AC) was formed to provide input into the design of the study, the procedures for collecting data and the instrument used for data collection. The members of the AC included hospital staff as well as staff of the school that was built on the hospital site. The AC was vital in ensuring that the process followed was culturally sensitive and appropriate for the rural population that was served by the hospital. As Liamputtong (2010, p. 61), an international leader in cross-cultural research, has noted, stakeholders can "identify and respond to important issues and situations within the community." In the current study, the members of the AC provided information to the researcher during a site visit to the SIO that took place prior to the pre-test

data collection. The input was helpful in designing procedures that were appropriate for recruiting and interviewing people from rural India who had experienced vision loss due to cataract(s) and who, for the most part, were illiterate and not able to read consent forms. The AC also assisted by ensuring that the research procedures were consistent and compatible with hospital procedures. In addition, AC Members helped to develop and translate the research instrument, as is explained below.

The initial interview guide/questionnaire was prepared in English, and then it was translated into Telugu, the local language. All interviewers were staff of SIO: they included nurses, vision technicians and support staff. A training session was held to ensure consistency in the interview process. Interviewers were provided with clear instructions about how to conduct interviews, how to conduct research ethically, and how to obtain information required for the research project by asking probing open ended questions. The interviews were conducted in Telugu.

All interviews were voice recorded and later translated and transcribed verbatim into English. The participants were interviewed twice, once at pre-surgery (Appendix 01) and then post-surgery (Appendix 02). The post-surgery interviews were carried out after 90 days in the respective villages.

To ensure the accuracy of the transcribing, one out of 10 voice recordings were verified by a third person. Similarly, one out of 10 translations were verified with a third person to ensure the accuracy of the translations. Once all the interviews were completely transcribed into English, this researcher systematically selected the translated answers to each quantitative question and

inserted them into the English questionnaires for processing into SPSS. A similar procedure was followed for the post-surgery interviews.

Quantitative data were coded and entered into the SPSS 19 software and a database was created. The recorded comments of the interviewers and participants were transcribed verbatim. The transcriptions were prepared for qualitative analysis by compiling transcripts for each participant.

## 3.6. APPROACH TO THE ANALYSIS

### 3.6.1. Narrative analysis

Gubrium and Holstein (2009) draw attention to the significance of narratives or stories as providing an understanding of the everyday contexts of peoples lived experience. These authors discuss the history of narrative methods within the discipline of sociology tracing its roots to descriptions of working class people in London, England in the mid-1800s based on interviews with people living in extreme poverty. The narrative tradition of research was subsequently utilized by Shaw (1930) in the USA to describe the authentic lived experience of "delinquent boys". Narrative methods have also been referred to as individual case studies. Butler-Kisber (2010) identifies the roots of narrative inquiry as emerging from the Chicago School of sociology during the 1920s and 1930s. There was substantial interest during this period in the personal lives of individuals living in urban centres which paralleled the focus of anthropologists on the life histories of people from cultures unknown to those in the Western world.

Gubrium and Holstein (2009, p. 6) note that a feature of the narrative method is that it draws upon "own story" material. A critical aspect of in-depth interviews with marginalized groups is that they can provide an understanding of the social worlds of individuals which are otherwise only made visible through the perspectives of elite or administrative accounts. Thus narrative accounts may be seen as "windows on inner life" (Gubrium & Holstein, 2009, p. 7).

Berg and Lune (2012) note that individual case study methods may utilize data from a single interview, if adequate information is gathered to answer particular research questions. In the current study, as noted above, two interviews were conducted with each participant. Berg and Lune (2012) state that the objective is usually to obtain as complete a picture as possible of the perceptions of the individuals interviewed. Liamputtong (2010) has put forward the argument that oral histories, as personal testimonies, enable researchers to gain an understanding of individual perceptions and interpretations. Furthermore, gathering information through individual interviews can "allow cross-cultural researchers to work more sensitively with the research participants" (Liamputtong, 2010, p. 162).

In the current study, the goal was to gather data on the narratives of the participants by allowing them to share their perspectives in the form of personal testimonies of individual experiences before and after undergoing cataract surgery. Their narratives were accounts of their social lives interconnected with the social structures of communities in rural India. As Gubrium and Holstein (2009, p. 22) note, researchers must be aware of the "profoundly social influences on narrativity". Thus, the transcripts were explored to gain an understanding of how they revealed the hierarchies within communities based on the social locations of individuals; these were often determined by gender and caste. As residents of poor, agricultural, rural communities, the

participants reflected their perceived social location relative to the interviewers as characterized by lesser social power. The responses of participants were frequently punctuated by signs of respect through the utilization of terms translated as "Mam" or "Sir". The term *deference ceremony* has been used to describe how people show "a kind of intrinsic respect for each other's avoidance rituals (Berg & Lune, 2012, p. 135). Showing mutual respect for each other, according to the cultural context is an appropriate way to build rapport and share in "an unspoken expectation that this respect will be reciprocated in some later exchange" (Berg & Lune, 2012, p. 135). A review of the transcripts revealed that such practices were used in the interviews. The participants showed deference to the interviewers but also the interviewers were respectful of the interviewees. Some participants may have felt constrained in their responses, given the differences in social status between the staff of the hospital (interviewers) and poor residents of rural villages in the region (participants); thus some provided relatively brief answers to questions in the semi-structured interviews. However, some participants were quite open in sharing their views and accounts.

The narrative analysis drew upon interviews with six participants who were willing to share their perspectives openly and fully and collectively provide for an understanding of the lived experiences of women and men across the age spectrum from 35 to 76. The sample for the narrative analysis was based on gender, age and the quality of the interview data. A woman (given the pseudonym Badari) and a man (Raghvan) between the ages of 35 and 54 are within the younger age group of the participants receiving cataract surgery. The accounts of a woman (Paravathi) and a man (Kaasi) both aged 70 are also analyzed .Finally a woman (Kavya) aged 75 and a man (Ramesh) aged 76 are among the oldest participants in the sample. The data extracted from their interviews includes pre-cataract surgery information about their living circumstances,

marriages, education, children's education, children's marriages, ownership of houses and land, household and financial decision-making. Information is also provided about any changes after their surgery in terms of household and financial decision-making, improved mobility, improved relationships and work outside the home.

Following Gubrium and Holstein (2009), the narrative analysis used a text-based approach[4] and focused on the stories of a strategic sample of the participants with the intent of identifying themes and features such as consistency. Factual elements were verified through repeated reading of the pre-and post-surgery interviews. The narrative analysis was conducted as an exploratory step in the qualitative process, in order to provide an in-depth exploration of the participants' lived experiences. The accounts are presented in a sequential manner in the results, offering a holistic exploration of the experiences of the younger woman and man, followed by the woman and man in the two older age groups. At the end of each account, a summary is provided of the changes following surgery, as articulated by each participant.

### 3.6.2. Identifying the themes for the qualitative analysis

A general thematic analysis was conducted (Tesch, 1990) to identify relevant themes. The qualitative narratives of the participants revealed gender and power relationships within four major domains:

Intra-household matters,

Employment,

Material and financial matters, and

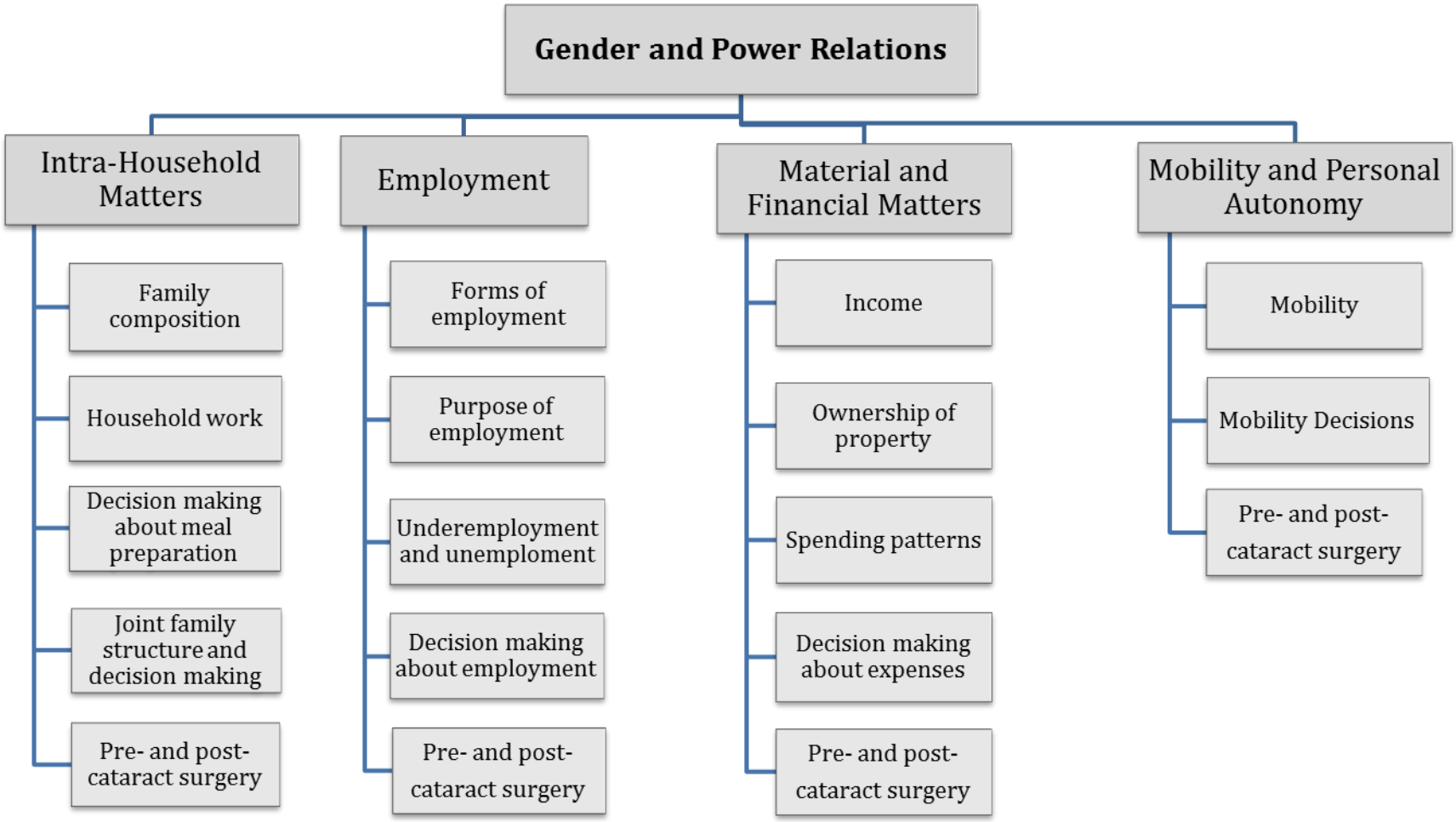
[4] The narrative analysis did not aim to describe the internal organization, functions of elements within the story or the plots (Gubrium & Holstein, 2009).

Mobility and personal autonomy.

The above themes are not mutually exclusive and contain various subthemes. At the end of each theme, a description of gender and power relations pre- and post-cataract surgery is provided (see Figure 3-5).

The theme of intra household matters is divided into the sub-themes of family composition, household work, decision-making about meal preparations, and joint family structure and decision-making. The theme of employment contains the sub-themes of forms of employment, purpose of employment, underemployment and unemployment, and decision-making regarding employment and gender. The theme of material and financial matters encompasses sub-themes of income, ownership of property, spending patterns, decision-making about expenses and pre- and post-cataract surgery. The last theme pertaining to mobility and personal autonomy includes the subthemes of mobility and mobility decisions.

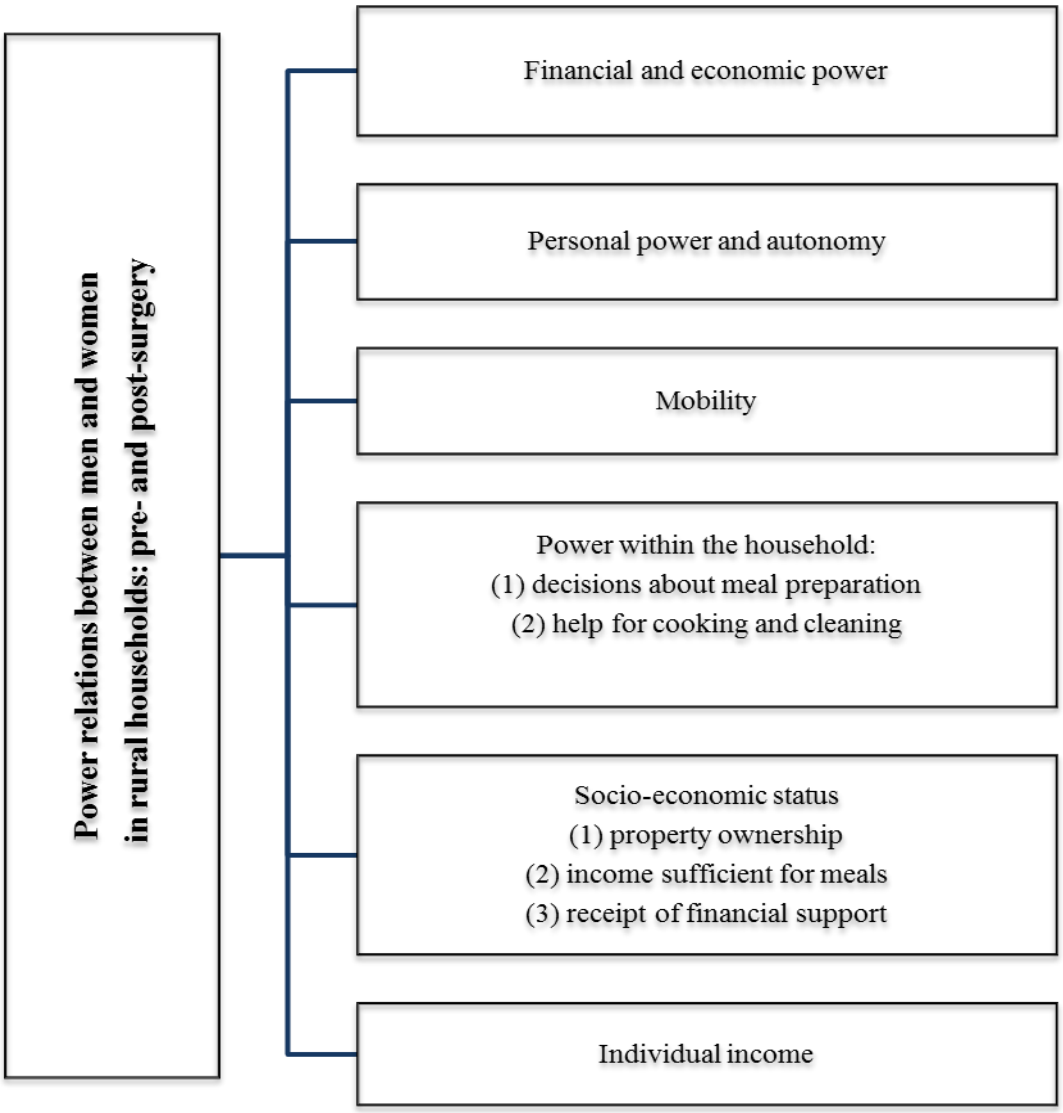
**Figure 3-5. Themes relating to gender and power relations pre-and post-cataract surgery**



### 3.6.3. Constructing the variables for the quantitative analysis

In order to measure changes in power relations in the household after cataract surgery, the following indicators were identified: 1. financial and economic power, 2. personal power autonomy, 3. power within household, 4.socio-economic status, 5. individual income, 6. physical mobility, 7. contribution to family/household economy—measuring time and 8. social activities participation (see Figure 3-6).

**Figure 3-6. Measuring power relations by gender**




### *3.6.3.1. Background/demographics*

Questions pertaining to household demographic characteristics were asked in order to get a better understanding of the family's situation: woman as head of the household, live-in father-in-law or mother-in law, wife's age, husband's age, length of the marriage, years of schooling for both

husband and wife, and literacy level of the wife's parents. Household wealth was measured by ownership of land, and the presence of major appliances or equipment such as a radio, a television, an electric fan, and a bullock cart, in the household.

#### *3.6.3.2. Intra household matters*

##### *3.6.3.1.1. Power within the household—receiving help for cooking and cleaning*

Domestic labour plays a vital role in rural households. Job tasks such as cleaning and cooking traditionally belong to women in rural India (Vera-Sanso, 2000). However, when the woman is blind due to cataracts and once the visual impairment is removed after surgery, changes in the dynamics of the household may occur. It is posited that such changes are directly related to power within the household. Power within the household was measured by asking the question: who helps you with household work such as cooking and cleaning? If no help was received for household work, the individual was deemed subject to someone with more power within the household. Therefore, the answer *self* was coded as 1. The response, *others*, was coded as 0.

##### *3.6.3.1.2. Power within the household—decisions about meal preparation*

In the Indian context, cooking and serving food is the typical marker of the conjugal relationship (Vera-Sanso, 2000). Therefore household authority and decision making processes were directly associated with the decision about what type of meal was to be prepared and its preparation. Power within the household was measured by asking the question: who makes the decision about what is to be served at each meal? The answer *self* was coded as1 and *others* was coded as 0.

In order to measure intra-household power relations, the following six questions were asked and index scores were given to the answers. (1) Who in your family decides: (a) what food to prepare for family meals? (b) whether to purchase major goods for the household? (c) whether or not to work outside the home? (2) Who has the most authority to decide: (a) what food to prepare for family meals? (b) whether to purchase major goods for the household? (c) whether or not to work outside the home?

#### *3.6.3.2. Employment*

##### *3.6.3.2.1. Individual income*

Since income is directly related to socio economic status (Sen et. al, 2010, Sauvaget et. al, 2011, Adhikari, 2010), it must be measured in order to explore whether there are any changes to individual income after surgery. Changes in individual income also reflect how well subjects were integrated into the family and society. Individual income was measured by asking the question: how much money do you earn working outside the household? Answers were scaled from Indian Rs.1 (CDN $0.02) to Rs.1,000 (CDN $17.54).

##### *3.6.3.2.2. Socio-economic status—sufficiency of household income for meals*

In the context of socio economic status (income), power within the household was measured by asking the question: is your household income sufficient for two meals per day? Answers were scaled *yes* = 1 and *no* = 0.

#### *3.6.3.3. Material and financial matters*

##### *3.6.3.3.1. Financial and economic power*

Agnihotri et al. (1998) and Anand and Sen (1995) identified earning income and an ability to control expenses as leading to women's empowerment. Gage (1995) and Mason (1987) stated that working women, particularly those who earn cash income, are presumed to have greater control over household decisions. Since the literature heavily supports the argument that persons who handle and control money have higher authority in society, all three answers relating to the variable financial and economic power were collapsed. Financial and economic power was measured by asking three questions. (1) Who controls the money in your family? (2) Who makes the decisions about how household money is spent? (3) Who makes the decision about the purchase of major household goods? These variables are binary and answers were scaled *yes* and *no* and coded *self* (participant) as 1 and *others* as 0. These three answers were collapsed to create one composite variable, financial and economic power. Changes in financial and economic power in the context of gender and power relations were examined by comparing responses prior to surgery and after surgery.

##### *3.6.3.3.2. Socio-economic status—receiving financial support*

Many researchers have used education, household income and occupation to measure socio economic status (Sen et. al, 2010, Sauvaget et al., 2011, Adhikari, 2010). Participants were asked questions relating to household income in order to identify the source of their income—that is money received from parents, family members, friends and others. Based on the amount of financial support received, the responses were scaled *none* = 1, *little* = 2, *some* = 3, *much* = 4.

The four answers were collapsed to create one variable reflecting socio-economic status—financial support.

*3.6.3.3.3. Socio economic status—property ownership*

Ownership of property is a key indicator of economic status in rural India. Wealth is measured by ownership of agricultural land, house and other property such as buildings (Gaiha, et al., 1998, Mohanty, 2010). Questions on property ownership were included in the questionnaire. Three questions were used to measure socio-economic status (property), such as do you own property: house, agricultural land, and other property. Answers were coded as *yes* = 1 and *no* = 0. These answers were collapsed to create one variable, socio-economic status—property.

***3.6.3.4. Mobility and personal autonomy***

*3.6.3.4.1. Personal power and autonomy*

Mistry et al. (2009) discussed women's autonomy. Personal power was defined as the freedom to exercise one's own judgment in order to act for one's own interests. The same approach as Mistry et. al. (2009) was used to measure personal power and autonomy. Autonomy was measured in two ways, based on decision-making and permission to go out. Personal power and autonomy were measured by asking four questions. Do you have to ask permission to go (i) to the home of relatives or friends in the village? (ii) to the local health centre or to seek medical advice? (iii) to the local market? (iv) Do you have any influence on whether you work outside the house, in the fields or elsewhere?

The answer *yes* was coded as 1 and *no* was coded as 0. The answers to the four questions were collapsed and one operational variable was created, personal power and autonomy.

*3.6.3.4.2. Mobility*

After cataract surgery, the vision of individuals improves. Vision is an important element required to manage the activities of day-to-day life. Borrel et al. (2009) studied SIMPS (Sociological Interaction Mobility for Population Simulation) to understand each human's specific socialization needs, quantified by a target social interaction level, which corresponds to personal status such as age and social class (Forsé, 1981, Laporte, 2005).

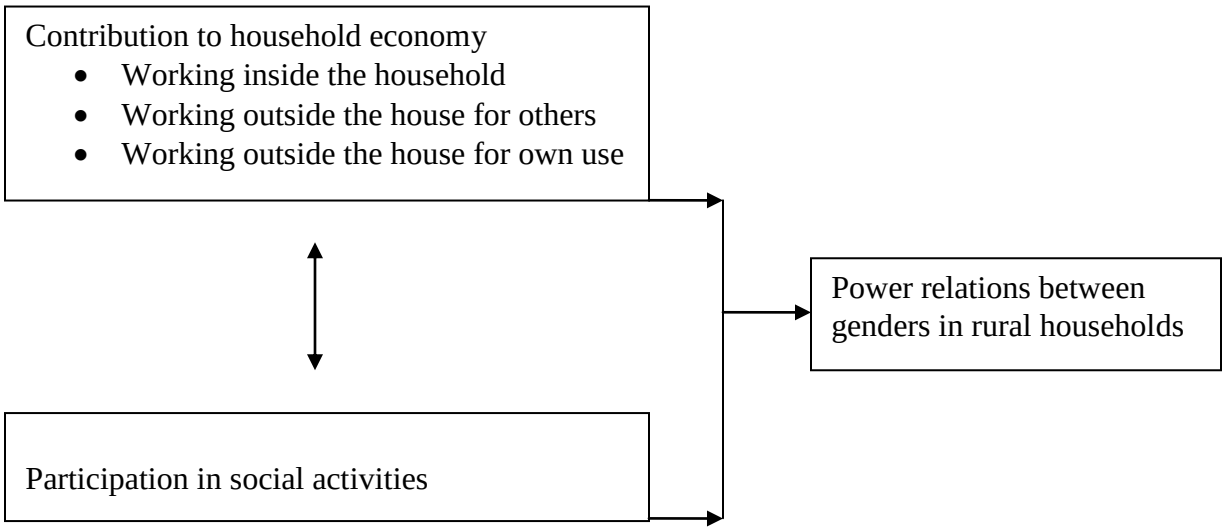
Social interaction level and socialization needs are directly connected to mobility. Mobility was measured by applying concepts that consider the local setting of the participants in the study. The following questions were asked: can you go by yourself (i) to the home of relatives or friends in the village, (ii) to the local health centre to seek medical advice, and (ii) to the local market? Answers were coded *yes* = 1 and *no* = 0. The answers were collapsed and one operational variable, physical mobility was created. This allowed for changes after cataract surgery in the physical mobility of former visually impaired subjects' to be measured.

**3.6.4. Measuring activities and time use**

In 1980, the World Bank developed the Living Standards Measurement Study (LSMS) described by Harvey and Taylor (2000) to explore ways of improving the collection of data about household economic and social activities. I utilized the LSMS standard method, modified in light of the local situation, to address any changes in time use and activities of the target group.

Activities were categorized into variables such as (i) contribution to household economy—working inside the household, (ii) contribution to household economy—working outside the house for others (iii) contribution to household economy—working outside the house for own use, and (iv) participation in the social activities (see Figure 3-6). Data was collected using a 24 hour time-scale and changes were examined between pre- and post-surgery conditions.

**Figure 3-7: Measuring activities and time-use between men and women**




Note: Tested at the pre-surgery (pre-test) and post-surgery (post-test) and changes were measured.

In my study, specific questions were designed as described by Hill and King (1995), Becker (1981), Alderman and King (1998), Rivers and Vuong (1988), Rahman and Vijayendra (2004), Agarwal (1994) about gender and power relations in the household.

### *3.6.4.1. Contribution to the household economy*

#### *3.6.4.1.1 Working inside the household (no cash income)*

It is necessary to take unpaid household work (domestic labour) into account in order to evaluate the economy of the household and a person's contribution to the household economy (Vera-Sanso, 2000). In order to measure a person's contribution to the household economy, combined two approaches were utilized. First, the World Bank's stylized activity measurements were used while keeping in mind that it was being applied to a rural household economy. Also utilized was the approach of Harvey and Taylor (2000) to measure the "time use" for each activity. Polack et. al. (2010) studied the impact of cataract surgery on activities and time-use in Kenya, Bangladesh and Philippines. In that study, (i) cooking, (ii) washing dishes, (iii) washing clothes and (iv) other activities were combined into one category. A similar approach was employed in the current study. The measurement of each activity was based on the amount of time used which was scaled from 1 to 24 hours. The four answers were collapsed and computed as one variable "contribution to household economy—inside the house", and changes in pre- and post-surgery time use were examined.

#### *3.6.4.1.2. Working outside the house for cash income*

The same approach utilized by Polack et al. (2010) in their study was integrated into the current study along with Harvey and Taylor's (2000) World Bank stylized activities survey and design principles. The work outside the house was categorized as (i) self-employed, (ii) own business, and (iii) all other activities. Time use was scaled from 1 hour to 24 hours. The number of hours used for each activity was collapsed to create one variable, "work outside the house for cash income", and pre- and post-surgery changes in time use were measured.

*3.6.4.1.3. Working outside the house for own use (no cash income)*

Most rural men and women in India have no regular employment. They mainly farm their own lands and/or provide unskilled labour to other land owners. Labour is exchanged for money and goods. Non-paid labour can be categorized in two ways: working inside the house and working outside the house. In the current study a new variable "working outside the house for own use without generating any cash income" was created. For this variable, the contribution to family economy was measured in a similar manner to Polack et. al (2010). In their study, (i) animal rearing, (ii) fetching firewood/water, and (iii) processing agricultural products for own use were categorized as one variable. In the current study, Harvey and Taylor's (2000) World Bank stylized activities approach was used to create the categories used by Polack et al. Answers were scaled from 1 hour to 24 hours. All answers were collapsed to create one variable, "work for own use outside the house—no cash income".

### *3.6.4.2. Participation in social activities*

Social events are common and important in the lives of individuals. Informal social interactions and networks depend on both social events and casual encounters (Motiram and Osberg, 2010). Motiram and Osberg (2010) noted that, in rural India, 1 out of 20 males engaged in social events with an average duration of about 1 hour and 20 minutes. In their findings, men were involved in social activities for 5% of recorded time use and women 3.85% of their recorded time use. According to these results, women were engaged in fewer social activities utilizing less of their time use compared to their male counterparts. They also point to the existence of a power hierarchy in the household. Any changes in the time spent in engaging social activities before

and after cataract surgery can be considered to be an indicator of changing household power among men and women.

Polack et al. (2010) measured time used for leisure activities outside the house as (i) social visits, (ii) attending ceremonies, (iii) attending religious and death ceremonies, (iv) attending meetings, (v) praying at the temple, and (vi) other activities. The current study utilized a similar approach modified in response to the local settings of the study. Harvey and Taylor's (2000) World Bank stylized activities was also used in operationalizing the variable "participation in social activities". Responses were scaled from 1 to 24 hours. All six answers were collapsed in order to measure household power.

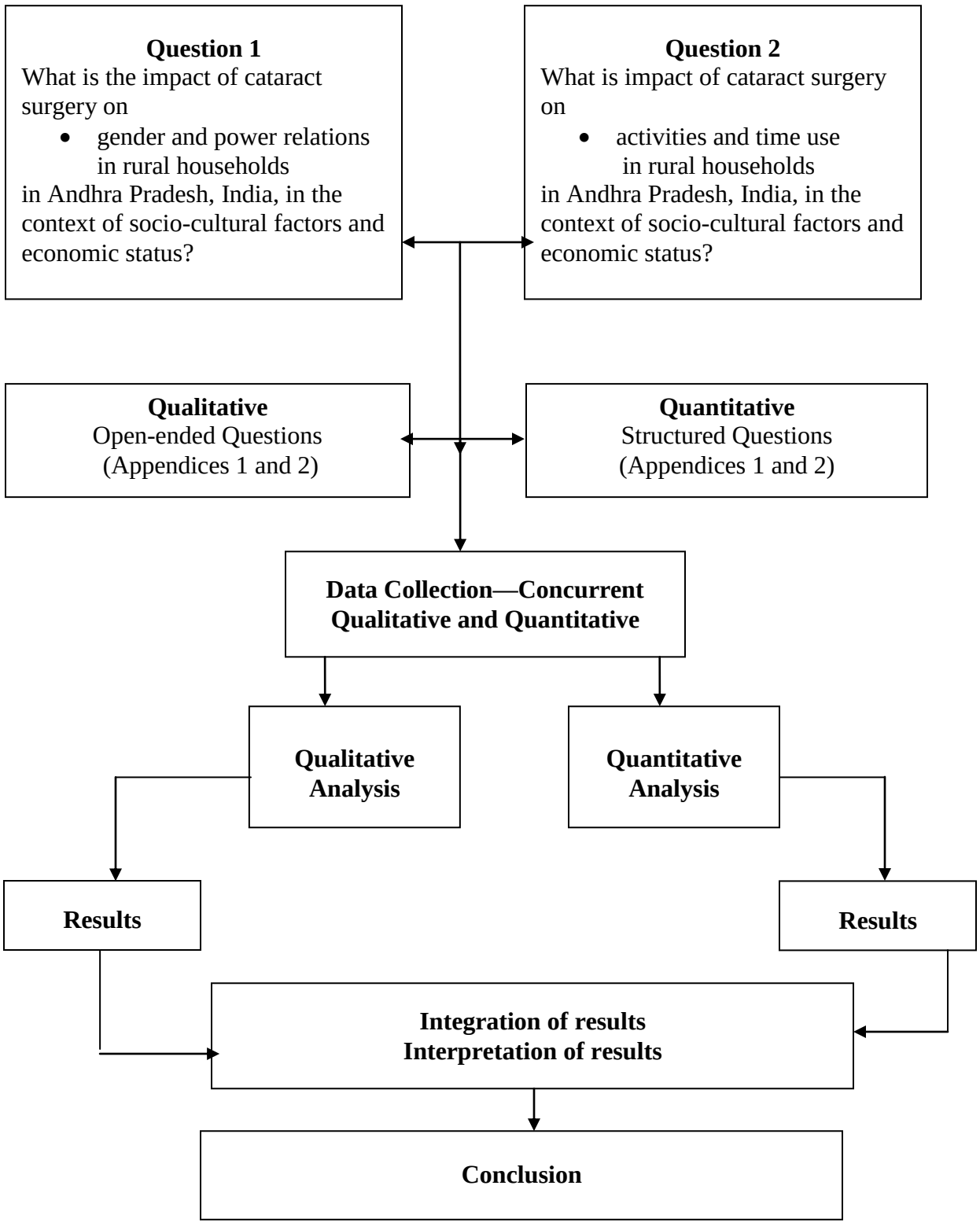
Based on the variables developed, any changes in time use and activities were analysed using SPSS 19. For the quantitative analysis, all variables were analysed utilizing one way ANOVA tests, paired-samples *t* tests and cross-tabulations to determine any changes in power relations before and after cataract surgery.

### 3.6.5. Integrating qualitative and quantitative data

Qualitative and quantitative data were collected concurrently in the thesis project. Since it was a priority to collect both quantitative and qualitative data simultaneously, the two types of data can be considered as "equal" (Bryman and Cramer, 1990). The primary method, qualitative data collection, was utilized to allow for an in-depth analysis of the complex phenomena under study. The quantitative findings supplemented and complemented the qualitative data and analysis. The integration of the two types of data (qualitative and quantitative) occurred at different stages of

the project, at the data collection, data analysis and interpretation stages. For the data collection, the interview guide/questionnaire included closed questions in order to gather precise data but also open-ended questions allowed participants to provide details through narratives that were audio recorded (see Figure 3.8 for an overview of the design).

**Figure 3-8. Mixed methods—convergent parallel mixed methods design**



#### *3.6.5.1. Missing values*

As in any study, some participants do not provide answers to some questions.

Various guidelines are used regarding the acceptable proportions of missing values. Some researchers refer to five percent as a guideline to follow for the deletion of cases with missing data (Hardy, Allore & Studenski, 2009). It has been put forward that it is common and acceptable in a given study to have five percent of values or data missing. Similarly, the default setting in software programs, such as the selection of descriptives in the SPSS *Missing Value Analysis*, specifies "omit variables missing less than 5% of cases".

Yet missing values exceeding five percent frequently occur. Indeed Ibrahim, Chu and Chen (2012, p. 3297) note that, "It is not uncommon in many analyses that 30% of the participants have missing data." Ebrahim (2007) stated that it is problematic when "more than 20% of the intended information is missing." In the current study, the "often used rule of thumb" indicating that it is acceptable for 15% of values to be missing is used (cf. George & Mallory, 2003, p. 48).

The SPSS procedure for missing value analysis was used to examine the number and percentage of missing values on each of the 11 key variables analysed in this study, along with the indicator variable "gender". The results showed that, in the pre-surgery data, there were more missing values among women participants than among men on the variables measuring personal power/autonomy and household income sufficient for meals. In the post-surgery interview, there was a larger percentage of missing values among women on the variable measuring socio-

economic status through the ownership of property. However, the percentage of missing values on all three of these variables did not exceed 13 percent.

The final sample was based on 99 participants who completed the first and second interviews (52 men and 47 women). Responses were within the accepted level (i.e., no more than 15% of missing responses) for all 11 variables operationalized for the t-tests and analyses of variance. In any analyses utilizing these variables, cases were deleted pairwise.

In the current study, efforts were made to minimize missing data. Most strategies suggested by Hardy, Allore and Studenski (2009, p. 722) were followed, including "adapting data collection to the special needs of the target population, pilot testing data collection plans, monitoring missing data rates during the study and adapting data collection procedures as required." Despite these efforts, some missing data were inevitable; as observed by Hardy et al. (2009, p. 722), conducting research with older adults is challenging due to "health and functional problems that interfere with all aspects of data collection". As these authors advise, the reporting of missing data/values is important as a means of considering the potential impact of missing data on findings and conclusions. Accordingly, while missing values did not reach the cut-off of 15 percent that was utilized in this study, given that the missing data exceeded five percent on numerous variables in the database, findings and conclusions based on the quantitative data are interpreted with caution.

#### *3.6.5.2. Convergent parallel mixed methods strategy*

The use of the mixed methods approach is expanding in research in the social and human sciences. This is clearly evident from recently published articles in the field of occupational therapy, interpersonal communication and AIDS prevention. There are several types of different strategies that can be used in a mixed methods approach (Bryman and Cramer, 1990; Creswell, 2014). I utilized a convergent parallel mixed methods approach (Creswell, 2014).

A convergent parallel approach uses only one data collection phase during which both qualitative and quantitative data are collected. Convergent or nested means that both aspects of the embedded method address the research question, rather than considering only one to be a dominant method, which is either quantitative or qualitative (Bryman and Cramer, 1990; Creswell, 2014). The convergent/nested strategy helped to examine the results. The analysis and interpretation of data and the conclusions were based on a comparison of the results. Data collection was enriched and the mixed methods approach provides definite advantages for interpretation. When the quantitative data proved difficult to interpret, the qualitative approaches (narrative and thematic) provided a basis for interpretation. One of the major advantages of this method is the ability to collect both types of data simultaneously during the data collection phase. Another is that it allows one to examine perspectives using different types of data; also, the conclusions can be derived by considering both qualitative and quantitative data. Using this strategy, the integration of the two types of data is critical at the final stage of interpretation and discussion.

The strategy in this thesis was adopted to employ the qualitative data as a starting point for the analysis and providing for an understanding of the complexity of the issues. The qualitative findings allow for a more effective approach to interpreting the quantitative results. The qualitative components of the analysis were critical for this study, especially when it was not possible to measure changes statistically or when the changes were not statistically significant. The qualitative results were categorized under same general categories as the quantitative results: financial and economic power, personal power and autonomy, power within the household, power in the context of socio economic status, physical mobility, contribution to the family and household economy, and participation in social activities. Each participant was identified by a pseudonym in order to ensure confidentiality and the statements of the participants were analysed and connected with the same indicators identified in quantitative study.

# CHAPTER 4

# FINDINGS

## 4.1 BACKGROUNDS OF PARTICIPANTS AND PERCEIVED CHANGES IN VISION

### 4.1.1. Background

In his study of castes, Srinivasulu (2002) described the structure and struggles of caste/class-based socio-economic oppression in Andhra Pradesh. Srinivasulu (2002) stated that social movements to improve conditions for people of lower or "backward" castes drew attention to demands for higher wages for agricultural workers and an end to forced labour. However, while these movements have brought about some positive change, they have been adversely impacted by internal dissention, schisms and decline. According to Srinivasulu (2002, p. 59), "As a result, we continue to witness the prevalence of labour bondage, usury, sharecropping and the absence of the implementation of minimum wages in this advanced region [Andhra Pradesh]." Caste continues to have an effect on the experiences of individuals in rural areas. A participant of the current study expressed a viewpoint that was not uncommon about the influence of caste, "We [women] don't go out of the house and work, in our caste. Husbands go out and work. If it were some other caste, we would have gone out and worked." As an aspect of the social context, it is therefore important to understand the caste-based social location of the participants.

Most participants (88%) provided information about the caste into which they had been born. Just over half (52%) identified the Kappu or Kaapu caste—a dominant peasant or farming caste

in Andhra Pradesh. Including those who identified Reddy (7%), which is a caste related to Kappu (Srinivasulu, 2002), the Kappu caste comprised 59% of the responses. Two additional castes, each identified by 6% of the participants, were Gollallu (identified as a backward caste) and Shetti. Five participants (6%) stated that they were part of an untouchable caste such as Madiga or Maala (Srinivasulu, 2002). Another five percent were from other castes identified as "backward" (Srinivasulu, 2002). In addition to caste, most participants stated their religion; a majority of those who indicated their religion were Hindu (83%) while a minority were Christian (17%).

The 52 men and 47 women in the sample were between the ages of 35 to 82. However, men were slightly older than women, with a mean age of 64.9 compared with 55.7 for women. The age range for men was 40 to 82 while the range for women was 35 to 75. However, it should be noted that some participants were unsure of their age. For example, a participant who revealed some uncertainty about her age stated, "I must be 65 years old". Another whose medical record indicated that she was 61 commented that she thought her age was 45. Through a discussion about the length of her marriage, the woman agreed that she was over 60. Similarly, another woman stated that she did not know the ages of her first and second sons, "I don't know, exactly, as I am uneducated. There is a three-year gap between elder and younger son—you calculate based on that. I am unable to remember [their ages] properly". Another example of the lack of clarity regarding time pertained to the estimation of the amount of time it took to complete tasks. This was evident in an interview with Deena, a woman aged 60,

> Interviewer: How much time do you spend with your grandchildren?
>
> Deena: I don't see time. I just go and come back.

It was also common for people to use the words “must be” with reference to questions about age (e.g., I must be 60). Therefore, information about age groups, length of time (e.g., of marriages) and the time required for tasks must be viewed with caution.

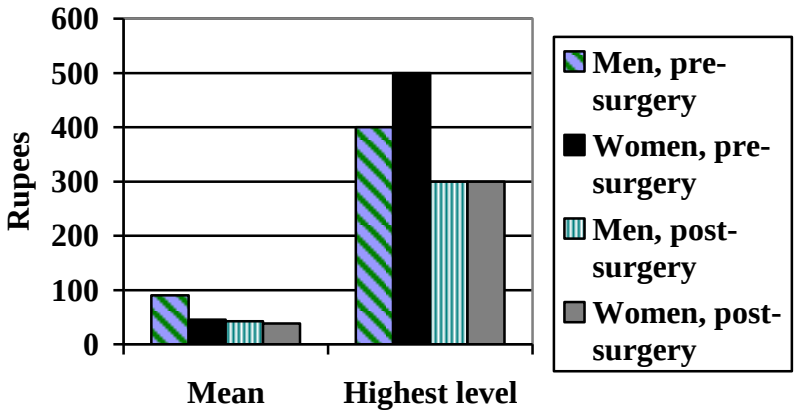
Despite being younger, on average, the women had been married slightly longer than men, with a mean of 40.1 years compared to 38.8 for men. This finding reflects the early age of marriage for many of the women. Women participants mentioned having been married when they were as young as 10 years of age and it was common for them to have been married at age 13. Both women and men were most likely to be living in a household with their male children; 92 percent of men who were living with extended family members were living with one or more sons compared to 77 percent of the women participants. Men had a broader range of extended family members living with them, including mother, father, brother, sister, sister-in-law and male or female children. In contrast, women stated that extended family members residing in the same household were mother-in-law, brother and male or female children.

The level of education of the participants ranged between none and ten years. However, it is important to note that approximately two-thirds reported that they had no education. Over three-quarters had less than three years of education. Men and women had similar levels of education but five men compared to one woman had more than five years of schooling. Only a few individuals did not state their knowledge of reading and writing. A woman given the pseudonym Anathi stated, “I did not study [at all]. I cannot read or write. I can’t sign, sir.” Most women and men reported that they could not read (71% of women and 78% of men) or write (93% of women and 74% of men). The indication that few of the participants had received much schooling and

that most had low literacy reflects the rural nature of the sample and the patients recruited by the hospital. A primary objective of the SIO is to improve the quality of life of people in need of support within the rural and remote areas of Andhra Pradesh. Information about the education levels of children and grandchildren indicates that changes are taking place as a majority of the participants reported that their children had more education than they and many participants indicated that grandchildren had attained or would attain a higher level of education than their children.

Participants were asked about their monthly income, measured in the Indian currency, rupees (Rs.). As of October 15, 2015, one Indian rupee was valued at C $0.02. The income of women in the pre-surgery interview showed a larger range at 0 to 500 compared to the range for men which was 0 to 400. However, the average income for men was higher (mean=Rs. 90.18) than that for women (mean=Rs. 45.80). In the post-surgery interview, the range of men's and women's incomes was the same at 0 to 300. However, the average income of men was higher (mean=Rs. 42.60) than that of women (mean=Rs. 38.12). Figure 4-1 shows the incomes of women and men.

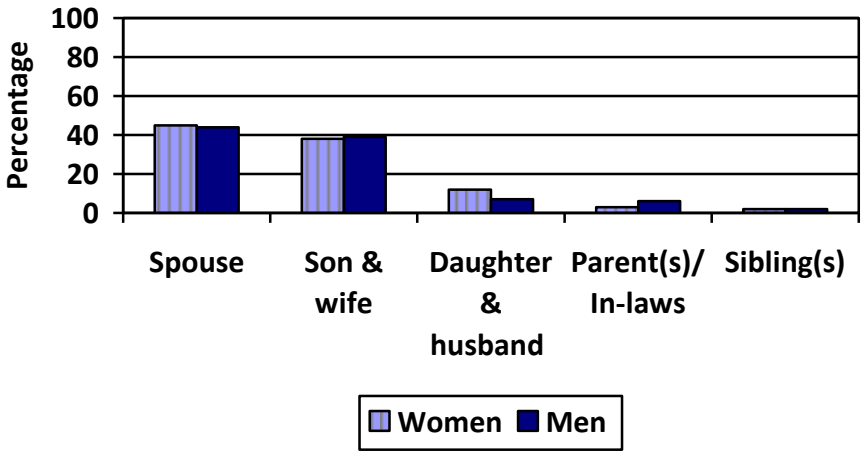
**Figure 4-1. Income by gender**



### 4.1.2. Living arrangements and visits from family members

Men and women in the sample had similar living arrangements. An analysis of multiple responses shows that living arrangements are influenced by norms which specify with whom older men and women are to reside. Firstly, men tend to marry younger women. Consequently a quarter of the men (24.5%) but over a third of the women (39.5%) were widowed and women had been married longer than men (M=38 years, W=41 years). Figure 4-2 shows the living arrangements reported by men and women based on the percentage of responses. It was most common for men and women to live with their spouses as well as male children and his wife and children. As indicated by the results in Figure 4-2, spouse as well as sons and wives were important people in the lives of both men and women in the sample.

**Figure 4-2. Living arrangements of participants**

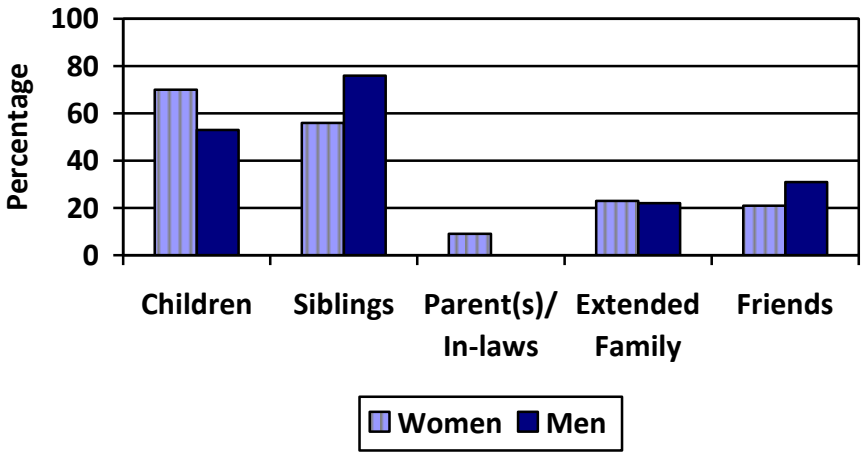



When taking into account the number of cases, due to multiple responses provided and some missing values on living arrangements, 77 percent of men and 72 percent of women were living

with their spouse and a combination of other family members. Well over three quarters of men (92%) and women (89%) reported that they had been or were still married. Some women were disadvantaged by living with in-laws who when relationships were problematic, as was revealed in the qualitative analysis.

Connections to others in one's social network can be an indicator of personal power. While women reported that they received more visits from their children and parents or parents-in-law, men reported that they received more visits from their siblings and friends (see Figure 4-3). The results shown in Figure 4-3 are based on multiple responses.

**Figure 4-3. Visits received from family members of participants**



### 4.1.3. Perceived changes in vision following cataract surgery

The cataract surgery was perceived by participants to have improved the vision of nearly all individuals in the sample (see Figure 4-4). Bhanu, a man in his 70s summed up his experience with the outcome of the surgery,

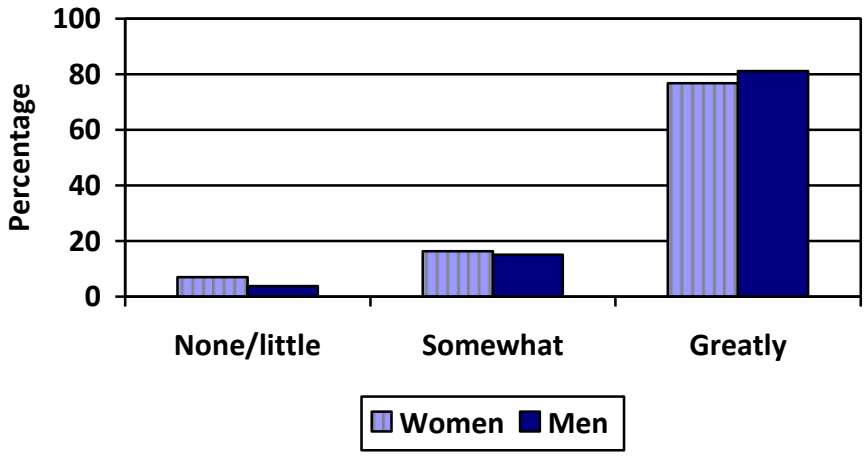
> Before the operation, I was not able to see. But now I am able to see clearly. If I had to cross the road [prior to the surgery], if anybody was crossing, I used to run behind them to cross the road. Now, here at the hospital, after I got the operation done, I am able to see clearly. Because of that eminent person [founder of the hospital], I got a chance to live for some more days. Otherwise, I felt like dying, Mam. If vision is not proper, how can a person live? Because my vision is fine now, I am able to get some vegetables or fruits and earn a rupee. If my eyes are not working, where can we go? One day, I almost fell under a lorry.

Similarly Deena, a 60 year old woman, described a positive impact on her vision, "Previously my eye was red; I was unable to see.

After the operation, I am able to see clearly." Figure 4-4 shows participants' perspectives on changes to their vision following surgery. A strong majority, over three-quarters of women and men, perceived that their vision had improved greatly following the cataract surgery. Very few participants reported that they had experienced little or no change in the vision. In these cases, they were subsequently informed that once they received glasses (provided free of charge by the hospital), their vision would improve. Some participants who stated that their vision was not

clear after the surgery provided an explanation for this, as did Beena (F, 60) whose son-in-law had died within two weeks after her surgery, "I cried and that's why I feel hazy. Because I cried during the last 15 days, it is a bit hazy now. I am able to go [out] by myself but not in darkness." Beena believed that her tears had affected her eyesight. Nevertheless, she affirmed that her vision was improved following the surgery, "I am able to work [inside the home] after surgery. Previously, I did not go near the stove and my daughter cooked for me".

**Figure 4-4. Perceived improvement in vision following surgery**




### 4.2. QUALITATIVE ANALYSIS

As noted above, qualitative analyses were performed to explore participants' perspectives and understand the extent to which gender and power relations may change after cataract surgery. Societies change continuously; yet it is challenging to examine changes within a short period of time because they occur slowly. It is often difficult to measure changes using quantitative techniques, given the complexity of the issue. Qualitative methods were employed in this study

in order to enable the participants to "tell their stories"; collecting narrative data about the complex nature of their social and economic lives and their power relations was a way to gather information about possible changes. Incorporating a narrative analysis allowed for a deeper exploration of the interactions between aspects of gender and power relations, as reflected in the perspectives of the men and women who participated in the study. Open ended questions posed during the interviews provided in-depth information about gender and power changes in the rural household. The open-ended interviews provided substantial narrative data.

In the first step, a narrative analysis was conducted on six cases of men and women who were in age categories across the spectrum from the youngest to the oldest and who spoke extensively about their circumstances. The narratives of the three women and three men are presented as case examples and information presented is consistent with the four major themes, (1) intra household matters, (2) employment, (3) material and financial matters, and (4) mobility and personal autonomy that provided for the organization of the second step, thematic qualitative analysis.

In the second step—the thematic qualitative analysis—each major category was divided into different subcategories which reflect the responses of the participants (see Figure 4-5 presented in the section describing the thematic analysis). The results of the qualitative analysis are described in the sections that follow the narrative case examples. The corresponding quantitative findings are presented in the final section of this chapter. These findings are organized according to Figure 4-6 which shows the same four dimensions as noted above.

### 4.2.1. Narrative analysis

The narrative analysis was conducted to provide for a holistic exploration of the lived experiences of six participants—three women and three men. The participants were in various groups across the age spectrum within the sample. The following sections provide a summary of the circumstances of the six participants, including their own statements about their lives.

In the section after the summaries is an exploration of similarities and differences between the women and men who were selected on the basis of gender, age and the level of detail provided within their interviews. Participants were selected who were open in sharing their perspectives and experiences: Badari, a woman aged 35, Raghvan, a man aged 54, Paravathi, a woman aged 70, Kaasi, a man aged 70, Kavya, a woman aged 75 and Ramesh, a man aged 76. Their narratives are summarized below.

#### *4.2.1.1. Badari's narrative*

##### *4.2.1.1.1. Pre-cataract surgery*

Badari is a 35 year old woman who has been married for 20 years. When she was 13 years old, her parents made the decision that she would marry a maternal uncle. She began having children at a young age,

> Badari: I was not aware of [plans for] my marriage.
>
> Interviewer: Were you very young at that time?
>
> Badari: Not very young, I was 13 years old.

Interviewer: So, they [mother and father] did not take your opinion at all and got you married?

Badari: Yes, they got me married without my opinion; he was my relative only [my maternal uncle] whom I got married to.

She stopped going to school after her marriage and her education was limited to grade seven. Her current visual impairment had prevented her from practising her reading and writing skills. She stated "Yes, I can read and write but my eye troubles are preventing me from reading and writing".

Her family belongs to the Shirdi Sai religion and she was born into the Kappura caste. The Kappura people are "dominant peasants who originate from the coast of Andhra." (Srinivasulu 2002). This caste is commonly involved in agricultural occupations and labour work.

Her youngest son, who is 18 years old, lives at home and studies at an engineering college. Her eldest son resides in Bangalore where he works and studies to upgrade his education in the area of finance. Both her children were required to obtain employment in order to pay for their studies and accommodation. When she was younger, Badari wanted to assist her sons with educational costs but she was not able to do so due to financial challenges within the family. Initially the family had inherited agricultural properties and the household was financially comfortable. However, they were required to pay an exceptionally large amount of money for the marriages of her five sisters-in-law. Badari had previously owned one acre of agricultural fields, but when the household finances became difficult, she was obligated to sell half an acre of her land. The

requirement to pay for the marriages of her sisters-in-law led to the current situation of financial hardship within her family,

> From the beginning it was like that, and we were owning lot of properties too; we were comfortable when I was [first] married to him; so there was no need at all for me to go for work. But, because of my sisters-in-law, we had to spend a lot of money on their marriages and part with our property—selling the properties. That is the reason we don't have anything now.

Despite the need to sell some of her land, she retains half an acre of land held in her own name (given to her by her parents at the time of her marriage) which her husband farms. Her husband does not possess his own agricultural fields; he labours on numerous fields and provides the household with fresh vegetables.

Badari has not gained employment outside the home because her husband will not permit this. In addition, her mobility is affected by her visual impairment. Partially as a result of her visual disability but primarily due to traditional views on women's roles being restricted to labour within the home, she has not worked to provide supplementary income. She states, "For everything I take my husband's permission."

> Interviewer: Do you go outside and do any field work?
>
> Badari: I don't do any work, Mam. Men do such things. Women don't do those things. I don't do anything; I just do the cooking [and cleaning and washing], that's it.
>
> Interviewer: If you say you will go out and work, will your family agree?

Badari: They don't agree if I go out and work. I don't have any earnings.

Badari and her husband struggle financially because they do not obtain a substantial amount of income daily from his agricultural work.

No, there is nothing that we save in the bank; whatever he earns, sometimes it is difficult to manage the household expenses too, but, somehow we are pulling along. We manage with whatever he brings, but we don't go and ask anybody for anything.

The ownership of the house is registered to her mother-in-law and they live in her home due to tradition and because she and her husband could not pay for their own household expenses. Badari's mother-in-law, her husband and one son reside in the house with her. The limited cash income that the household acquires is provided by her mother-in-law's government pension.

Badari's husband is the primary decision maker about matters regarding household and financial decisions. He makes choices concerning any purchases of expensive household items, for instance a new television or refrigerator. Badari commented that they do not make many such purchases because they do not have any savings and there are too many household expenses.

Badari remains optimistic that their lives may improve, specifically due to the cataract surgery. Her vision loss may be linked to financial issues, but also it created challenges concerning her personal autonomy because she could not travel independently. Badari required assistance to go to the hospital which is located outside of her village. She is also expected to ask her husband's permission to go out of the home for any reason, including visits with her friends and family.

Even though Badari has visual impairment, she feels that she can perform her day-to-day activities. She prepares the daily meals with food provided by her husband, cleans the house and washes clothing. Her parents live in the same local village and they visit on a regular basis to provide assistance. Her mother and mother-in-law alleviate the pressure for Badari to do all the cooking, cleaning and washing independently. When Badari's father visits, he assists her with small chores in the household but he does not want to interfere with family matters. Badari states that her mother-in-law is the dominant care giver because she resides in the same home. Badari's father-in-law died many years ago due to an illness related to sugar [e.g., diabetes].She says that he was intelligent and frequently gave informative and helpful suggestions with regard to household matters. The first interview with Badari indicated that she had positive relationships with all members of her family. They were helpful by supporting her to cope with her bi-lateral vision loss.

*4.2.1.1.2. Post-cataract surgery*

Badari conveys a sense of optimism in her interviews and smiles in response to questions about her future. Following the surgery, she had gained more independence.

> Interviewer: After the operation, how are you able to do your house work and all?
>
> Badari: I am feeling fine now. I am not having any difficulty with working. Previously, I used to find it difficult, but now I am fine.

While she still asks for her husband's permission to leave the house, she stated that she was able to go out on her own, whereas previously she had been more limited by her visual impairment.

Interviewer: Are you able to go to your friends' homes, to nearby hospital, or to bazaar by yourself?

Badari: Yes I am able to go alone.

In the first interview, Badari noted that it was only men who did work outside the home. However, in the second interview there was a change; she stated that the family owned two buffalos and that she was spending an hour per day outdoors attending to the animals.

Badari is certain that the remaining visual impairment in her right eye can be managed without assistance. She does not like feeling vulnerable and dependent on others. She has received surgery to correct her disability in her left eye but she is on a waiting list to receive treatment for her right eye. The cataract surgery is crucial for her to more fully regain her sense of personal autonomy, the freedom of mobility and her self-worth. When Badari's eye sight is fully corrected, her goal is to learn how to do handwork and stitching. This statement about her future goal is significant in that the SIO offers a program for women which focuses on teaching them how to sew so that they can earn income by doing this work inside the home. Her aspiration to learn to do sewing, along with the shift towards outside work with their buffalos suggests that she may begin to take on more varied tasks and perhaps earn income in the future.

#### ***4.2.1.2. Raghvan's narrative***

##### *4.2.1.2.1. Pre-cataract surgery*

Raghvan is a 54 year old man who lives in a house given to him by his father. He stated that his caste was Vada Balija. According to Srinivasulu (2002), Baliga is a business caste while Kumari

(1998) stated that Vada Balija people had low status among Balijas. Raghvan obtained a seventh grade education and stated that he reads and writes. He lives with his wife of 35 years, as well as his son (age 30), daughter-in-law and their children. Raghvan's mother had explored many potential matches for him and eventually settled upon his wife. He was pleased with his match and his mother performed the marriage. Raghvan's in-laws have had a significant impact on his life and marriage. His relationship with his mother-in-law was problematic. He states that she did not treat him well and did not provide him with any financial support. In contrast, Raghvan had a good relationship with his father-in-law who regularly gave Raghvan advice; in turn, Raghvan asked for his father-in-law's opinion frequently.

Raghvan has a daughter (age 34) who lives nearby with her husband and his family; they are employed in the hotel business. Raghvan's children both attended school to the $10^{th}$ grade. Raghvan and his son have both been employed as cigar makers, although the former has not been able to work for some time due to vision loss. Raghvan's son works approximately 10 hours per day to earn Rs. 200 daily. Previously, Raghvan worked a similar number of hours in cigar making but his deteriorating eye sight has prevented him from doing this job. His source of income is a monthly government pension of Rs.200 which he has been receiving for two years.

His parents, brother and parents-in-law have passed away and Raghvan stated that he feels alone and without support,

> No body supports me, mam. [Relatives] are worried about the house but nobody cares about me. My daughter is there to give me some breakfast in the morning and some

> dinner in the evening. [Yet] I am having only one meal per day for many days mam. That is what has happened.

He stated that he does not receive enough nourishment throughout the day to develop his strength for recovery.

Raghvan says that his children do not seek his advice in regards to financial, spiritual familial or cultural matters. His son takes full responsibility for the household expenses, the financial affairs of the household and family matters. Raghvan feels that his son's dominance affects his personal autonomy and the traditional roles within their household.

> My son gets easily angry. If he gets angry, I too get angry and ask him to leave my house. I am telling you frankly, Mam, if he gets angry, I would say the house is mine and that he should get out. But he is still here, mam.

Raghvan rarely receives visits from his extended family, such as nephews. He stated that, if he visits them, they give him Rs. 5 or 10 and then they ask him to leave. He feels neglected by his family considering his current state of health (pain in his legs and visual impairment). He commented on their lack of interest. "If they had cared for me, I would have come to this hospital long ago and gotten this operation done. But they didn't care for me". Raghvan feels that, due to his visual impairment, his family members resent his inability to work and to provide additional income. He stated that he was spending most of the day resting inside the house.

A religious man, Raghvan prays daily and often goes to a temple for two to four hours every evening. He prays to different gods and, although he does not describe his religion as Christian, he prays to Jesus Christ to help him with his deteriorating eye sight. Raghvan believed that it was his own weakness that led to the development of cataract blindness,

> It all happened due to a mistake on my part mam. I was not subjected to any trauma. It was due to my mistake. I am praying to God for forgiveness for that mistake of mine, mam. My mistake made me suffer the most, mam. Nobody made me suffer mam.

In the first interview, Raghvan hoped to recover successfully from his surgery and improve his physical, emotional and spiritual well-being. Prior to his cataract surgery, Raghvan had been unable to go anywhere for five months due to poor health. Pain in his legs and his low vision affected his mobility. However, with support from his son-in-law, he was able to attend the eye camp in his village and was identified as a suitable candidate for cataract surgery.

*4.2.1.2.2. Post-cataract surgery*

Following his surgery, Raghvan stated, "My vision is clear". He also asserted that he is able to go by himself to a nearby health centre, temple or market. His mobility is no longer impeded by his vision, but only by pain in his legs. However, his relationships with his family members did not appear to change substantially after his surgery, perhaps because of his inability to work. He states that his monthly government pension of Rs. 200 is inadequate,

> Interviewer: Is your income enough to fetch you two meals a day?

Raghvan: It is not enough.

He stated that his daughter does not seek advice from him but, if he raises issues with his son, they engage in joint decision-making. With regard to the marriages of his grandchildren, he states, “They will push me aside if I interfere…They won’t allow me to go near the premises where her [granddaughter’s] marriage is to take place”. Hence the nature of Raghvan’s relationships was largely unchanged after his surgery; he said, “Nobody helps me. Nobody talks with me.” Nevertheless, the cataract surgery provided an improvement to his quality of life and independence as he stated, “If I want to go [out in the village], I will go, otherwise I won't go. I don’t need to ask anybody. I go by myself and come back.” In his interviews, he does not speak about his wife of 35 years, other than mentioning that she lives with him and that he was happy with his marriage. Raghvan is not an elderly person and his interviews convey the serious impact of vision loss on his ability to work and to provide income. He is bitter about the poor relationships with family members, his dependence on them for basic survival, his marginalization and social isolation within the community. His good vision 90 days after the cataract surgery had not yet improved his relationships but it is possible that his situation will change in the future as his recovery continues.

#### *4.2.1.3. Paravathi’s narrative*

##### *4.2.1.3.1. Pre-cataract surgery*

Paravathi is a 70 year old woman who lives with her son, his wife and their son. She did not receive any education and does not know how to read or write. She reported her caste as Kapu, a dominant peasant caste (Srinivasulu, 2002). Her husband had died of complications from leprosy

six years earlier. While she was uncertain about how long she had been married, she stated that her parents arranged the marriage when she was very young and she was unhappy with the choice her parents made for her,

> Interviewer: Did you do your marriage on your own or your parents?
>
> Paravathi: My parents did the marriage
>
> Interviewer: Didn't you know anything?
>
> Paravathi: No. I was not even mature at that time. If I am mature, do [you think I would] marry a leprosy person, I am just telling? My mother had given me to him by knowing that he is a leprosy patient. What I can do? He used to use that American medicine.

Paravathi and her husband had two sons and a daughter. She stated that her sons received grade five education but her daughter did not have any formal education. Similarly, Paravathi reported that she had not received any education and that she could not read or write, "I do not know anything. My mother had 5 daughters so she could not give education to us." Her husband had operated a pot and pan shop when he was alive and she had sometimes worked in the shop. However, she stated that her husband did not otherwise allow her to go out. The exception to this was when one of their children had to be taken to the local hospital, "Because he was a leprosy patient, he did not use to go out. He used to give money, then I took them to the hospital."

She commented that he had taken care of all financial matters, "I did not use to know anything—everything was looked after by him." Following her husband's death six year prior to her first interview, the pot and pan shop was closed, "After his death, they told [us] to remove the shop. So now I am living with my children's help only, whether they feed me or not."

Paravathi had been living with her older son, his in-laws and a grandson. She mentioned that both her son and her grandson had disabilities, "My elder son lives with me. He lost his leg in an accident. He has two disabled children." Her younger son and her daughter lived in a nearby village. Parvathi's responses in the interview indicated that she felt quite isolated,

> Nobody is looking after me. [Extended family members] come once in 2 years or 1 ½ years. They are looking after their families. But my younger son will come once in a year to see me. I am living with my elder son. Though I am living with him, he does not have anything to feed me. He and his disabled son have to get on.

Her daughter-in-law restricts her interaction with her son and grandson,

> They tell that it is not necessary to tell them [anything]. They are like that, what do I do? If sons try to talk [to me about] something, also daughters-in-law will not accept. Recently my daughter-in-law beat me because I am in their house. Where do I go, what do I tell and how do I lead my life?

The main support for Paravathi is from her daughter who visits her once per month and who takes care of her if Paravathi is ill. In addition, Paravathi's younger son visits her once or twice per year and sends her money—Rs. 200 monthly—to help with the cost of food. Other sources of income are from a government pension. Paravathi now manages her own financial matters, even though she has very little,

> Now my financial matters are looked after by me only. I do not feed anything to my children now. I cook for myself separately. After my husband's death, I have been doing it separately. I too do not have anything to give them. My daughter also does not expect anything from me. They are also leading their own life.

Paravathi had bi-lateral cataracts which impaired her vision severely. She stated, "Until [recently], I used to go [to market or daughter's home] but now I am not able to go. I do not go anywhere. I have not been going anywhere for two years." Her mobility was limited by her vision loss and by pains in her legs, "My legs are paining. I cannot walk so I am not going."

In response to the question, "Can you do any work?", Paravathi summed up her difficult life circumstances,

> No I cannot do any. If you listen to our history, my son has two disabled sons, my husband had leprosy and my son also is a disabled person. Like this, it is very big history. We are leading our life like that, what else can we do? My disabled son also does not work. So what God has given to us? With that only, we are getting on. In these last days, I could not get on. What to do?

*4.2.1.3.2. Post-cataract surgery*

Following her surgery, Paravathi has been living with her daughter and she stated, "She is affectionate with me". In addition, in reply to the question, "Does your younger son care for you?" she said, "Yes, my younger son comes and visits me now and then." She also asks her

younger son for advice if there are matters to discuss. However, her financial situation had not improved in the three months after her surgery,

> Interviewer: Is the money given to you by your younger son and government pension enough to fetch you two meals a day?
>
> Paravathi: Enough or not enough, we have to manage and get by.

Overall, Paravathi's circumstances were slightly improved after the surgery. Staying with her daughter seemed to be positive. In addition, she was able to manage household tasks more effectively,

> Interviewer: After the operation, how are you able to do your house work and all?
>
> Paravathi: I am able to work.

She also noted that she was visiting with her grandchildren and caring for them when she went to their homes. She was also visiting with neighbours and occasionally watching television with them. Overall, the tone of her second interview was more positive. Regaining her vision had enabled her to interact with others and to contribute to household tasks and caregiving.

#### *4.2.1.4. Kaasi's narrative*

##### *4.2.1.4.1. Pre-cataract surgery*

Kaasi is a 70 year old man who was born into the Reddy caste—a peasant caste (Srinivasulu, 2002). During Kaasi's childhood, his father had died from cholera. Kaasi and his four brothers worked as labourers to help their mother and youngest brother financially.

> All four of us worked—in houses like yours and others—took care of mother and another brother sir, two of us sir. A lot has happened in those days. Even though we have a house now, we didn't have at that time. Previously when my father died, we used to have land, it seems sir, but they sold it off.

Kaasi did not acquire any formal education and he explained that he has not learned how to read properly and he cannot write at all. He cites these factors as contributing to his lifelong hardship and struggles with grueling manual labour. He believes in Jesus Christ but does not attend church; rather, he worships in a private manner and does not publicly speak about his religion. Nevertheless, he stated that God has saved his life at various times and he trusts that God will help him through his current struggles and the barriers he faces in life.

Kaasi has been married to his wife for nearly forty years; he states that his wife is alive and well. His mother had arranged the marriage when he was 30 years of age,

> Interviewer: Did you see the girl and did the girl see you before marriage or not?
>
> Kaasi: Nothing like that.

Interviewer: They just performed your marriage, that's it?

Kaasi: Yes sir.

They had two children together, a son and a daughter. His son obtained a grade four education while his daughter was married, apparently with little formal education. He resides with his wife and son in a home he constructed on the side of the road, on government property, as he was given permission to do so even though nearby property owners have objected to it and want it removed. He described it as a "small hut". Recently, he and his family had become homeless because his house was burnt in a fire caused when a coconut leaf fell on the wire bringing electricity to the home. His family members lost all their belongings in this disastrous accident. He had to pay for the damages and the government did not provide any compensation for his home, "It cost me Rs. 10,000 in total sir. It was on government land sir. It was on the side of the road. In this way, I have many worries sir."

He did not ask anyone for any assistance because he believes that it is not appropriate for a man to ask for financial support. He does not own any farmland but his family receives a monthly subsidy of rice. Kaasi stated that the government is supposed to provide each family with 35 kilograms of rice per month as well as other food. However, he described routine experiences with corruption as the individual who is responsible for distributing the food does not provide the full amount, as is revealed in the following exchange with the interviewer,

Kaasi: Government is giving me rice sir. Actually, we can happily eat 30 kilograms of rice for two months, sir.

Interviewer: They give you 30 kilograms of rice per month?

Kaasi: Yes sir. We eat 35 kilograms for two months sir.

Interviewer: They take away [some] kilograms of rice?

Kaasi: Yes sir. They take it.

Interviewer: Did you ask them any time why they are taking it?

Kaasi: I did not ask them sir. If I ask, unnecessarily there would be quarrels.

Interviewer: Are they robbing kilograms of rice from everybody?

Kaasi: Yes sir. They are [also supposed to provide] red gram [a legume and] sugar, and we never get them sir. We leave them to him, to the person who gives subsidy. We don't get them sir…: Everywhere, bribery is rampant sir. There is no body who does not take a bribe. Everybody is cheating and thieving sir.

It seems that Kaasi does not challenge the corruption due to concern about potential disruption to relationships within the village. Yet, the restricted access to the food subsidy contributes to the hardship that Kaasi and his wife endure.

Kaasi's unmarried, thirty-year-old son lives with them. He is employed as a mason who works from three in the morning and until one in the afternoon. He earns Rs. 300 to 400[5] but he does not provide his parents with any financial support. Kaasi mentioned that his son will not even give his father enough money to pay for a cup coffee. Kassi has attempted to arrange a marriage for his son. He has incurred costs because his son did not want to follow through with these marriages. "I saw three matches for his marriage. I lost all my money. He said he won't marry."

[5] Kaasi stated that his son worked 10 hours and earned between Rs. 300 and 400. It is possible that Rs. 400 is a daily wage according to data from the World Bank in 2013 which indicated that the average daily salary for non-farm labourers was Rs. 200 in 2008 (Himanshu, Lanjouw, Murgai & Stern, 2013).

His son is not interested in being married and Kaasi summarizes his son's perspective by stating that "if there is no wife, he won't have any worries or troubles". In contrast, his daughter was married at a young age (Kaasi arranged the marriage) and she currently lives at the home of her father- and mother- in- law. Her husband has had a conflict with Kaasi which prevents his daughter from frequently communicating and visiting with her parents. This situation contributes to social isolation that Kaasi described,

> I don't speak with them. They do not speak with me. My son-in-law was already married and hiding the fact that he married my daughter. He already has a son and daughter through his first marriage. When he came here, I questioned him and from then onwards, he doesn't come to me and doesn't speak with me. My daughter comes to me sometimes, that's it. Nobody comes to see me sir. No family and friends.

Kaasi has endured multiple injuries and health issues throughout his life. The first injury occurred when a coconut fell on his head and his hand. This injury caused significant brain trauma and it also resulted in three fractures to his right hand, which have never properly healed. He stated that it would have cost Rs.10, 000 to have surgery, which he did not receive as he did not want to ask for financial assistance from family or friends. His fractured bones were apparent to the interviewer and his hand is a source of frequent pain. He requires medication for his head injury which costs him Rs. 2 daily. The hospital has advised him many times to refrain from working but he cannot afford to stop.

His second accident occurred in the evening when a motorcycle collided with him while he was washing his face on the side of the road. His leg was broken, yet the man on the motorcycle

simply drove away from the accident. Kaasi had no transportation to the hospital and he had to walk to find a doctor. The medical bill for his treatment was too expensive; therefore, he bandaged his leg himself and, consequently, it did not heal properly.

Kaasi has also suffered with low vision and he has had eye surgery twice. During the day, he struggles to see clearly and in the evening, he loses his vision entirely. He has received eye operations free of charge and he received complementary eyeglasses the first time. Unfortunately, he lost his glasses when a bird picked them up while he was working in the fields and he has not had an additional pair since. He suffers with double vision and bright light causes severe pain. Kaasi also received an injury to his eye when he was milking a cow and the animal's tail hit his eye. This injury causes further pain and discomfort to his eye. However, Kaasi maintains an extraordinarily positive attitude regarding his work which appears to help him to endure his challenging circumstances. He stated that he thanks Jesus Christ every day for saving him and for providing him with hope to continue on with his life.

Presently, Kaasi travels to and from work independently regardless of his current health condition. He begins his work at a banana plantation at three in the morning and he works until the evening performing varied activities including carrying water. During the day, he also sells milk and leafy vegetables which he cultivates to earn some extra money. In addition, he collects coconut leaves and prepares broomsticks which he sells within his community. He works with 150 trees to make the broomsticks. He sells his broomsticks for Rs.5; however, he is required to pay the land owner Rs.3000 and a banana bunch for using the land, "…for every 15 days sir, I have to pay a chit of Rs. 3000". Kaasi is left with an extremely limited income. He commented that there are times when he earns nothing due to the amount he must pay to the land owner. He

further states, “I am not going for agricultural work, sir. If I step into mud, I am unable to pull my legs up.” His only option for obtaining income is to continue with the various types of labour that he performs at the plantation. When he has completed his work each day, he returns to his home, washes his face on the side of the road, eats dinner and then goes to bed shortly afterwards. Kaasi’s wife remains at home throughout the day and prepares half a kilo of rice and vegetables for their meal. She prepares all the meals but he is the primary decision maker in regards to what and how much they can eat. However, he says that he has a good relationship with his wife,

> Interviewer: How are you feeding your wife then?
>
> Kaasi: Government is giving me money sir, with that I am feeding her.
>
> Interviewer: Does your wife treat you with love and affection? Does she like you?
>
> Kaasi: Yes sir.

*4.2.1.4.1. Post-cataract surgery*

After his surgery at the 90-day follow-up, Kaasi learned that he would receive, free-of-charge, a new pair of eye glasses which would enable him to see close-up which he had been unable to do. He stated that he was continuing to work in the field (banana plantation) daily and was earning Rs. 20 per day or less by selling produce locally,

> I work for some time and when I start getting body pains, I stop the work and come back. Then later I go back again and do some more work. I work for about two hours a day [seven days per week].

Kaasi stated that he is able to go out on his own, earn and grow enough to provide two meals each day. Based on a World Bank study, Kaasi earns substantially less per day than the average (Rs. 100) for agricultural labourers (Himanshu, Lanjouw, Murgai & Stern, 2013). However, he also receives his monthly pension of Rs. 200.

His relationship with his wife and son did not appear to have changed following the cataract surgery. Kaasi appears to maintain control over his wife within the home. He stated that he is the decision-maker about all household matters, including what meals will be prepared, "We don't eat fish or meat. She cooks whatever I ask her to prepare." His wife is responsible for tasks in the home relating to cooking, cleaning and laundry and he states, "She doesn't speak about anything". His son continues to work in his masonry job but does not contribute to the household income. Kaasi speaks disapprovingly of his son in his second interview,

> He goes to work. He does not care for us. He does not give us a penny. He comes home, shouts at us if there are no vegetables at home, and eats, and goes off….He doesn't care for me. If I ask him to give me a rupee to drink coffee, he doesn't give me. He goes to movies with friends.

As Kaasi spends a majority of his time working in the field, he does not have much time to spend time with his wife or family. However, he stated that his daughter treats him well and talks nicely with him. As a seventy-year-old man with multiple physical injuries, due to the requirement to expend his energy and time on labour, Kassi speaks relatively little about his wife or family life. He is largely preoccupied by the need to continue working in order to survive. The

cataract surgery is important to his ability to perform labour but, given his poor physical condition, the improvement to his vision may not lead to substantial change in his life circumstances.

#### *4.2.1.5. Kavya's narrative*

##### *4.2.1.5.1. Pre-cataract surgery*

Kavya is a 75 year old woman who was born into the Kaapu caste, a "dominant peasant caste in coastal Andhra" (Srinivasulu 2012). Kavya suggested that there were limitations pertaining to employment that stemmed from her caste,

> Interviewer: Do you go to work in fields?
>
> Patient: No. I do not. We are Kaapus. I cannot go. Do I know all those works?
>
> Interviewer: Don't you go for household works?
>
> Patient: No. Do Kaapus go to household works? No.

She stated that she spends a portion of each day, from 12:00 pm to 4:00 pm praying to Jesus Christ, "We worship Christ. Wherever they arrange prayers we will go. We have been to Guntur, Samalkot, Kakinada and Peddapuram. Every week we go to church every Friday and Sunday… By folding my legs I will pray for God Jesus and request to provide me vision to take care of myself every day. Otherwise how that Rs. 200 [government pension] will be sufficient?"

Kavya did not know her father as he died six days after her birth. Consequently, her mother raised the family on her own. Despite the death of her father, she reported that she had a good

family life. Kavya's mother had displayed strength in making the familial and household decisions and demonstrating strong personal autonomy. When Kavya was 16 years old, her mother arranged a marriage, "It was done on my mother's opinion. In those days dowries were not used to be there so my mother has given Rs. 100 to him [husband], it seems. Now we need lakhs of money, education etcetera." Kavya did not have any schooling,

> Interviewer: Are you literate?
>
> Patient: No, I am illiterate
>
> Interviewer: Do you know reading, counting numbers or writing?
>
> Patient: No. I do not know anything.

She was married for 55 years and her husband had died from a heart attack a few years prior to the cataract surgery. Kavya's mother had been dead for 25 years, and her death occurred around the same time that Kayva began having children. She and her husband had four children—three daughters and one son. Her husband sold leaves for cooking fuel,

> My husband used to live by selling leaves—leaves used for having meals. He did not use to go for agricultural work. He used to tie the leaves used for meals to his cycle and used to go Kakinada to sell them. He used to do that business. The days were like that, 25 years ago. Rice, oil etcetera, goods are very cheap in those days. If he [husband] gets all the goods, then I used to cook them all.

Kavya and her husband did not own property, agricultural land or livestock which made it difficult to make ends meet. However, they had managed to save some money from time to time

and were occasionally able to purchase meat for their four children. Kavya had participated in decision-making about household and financial matters with her husband when he was alive. Furthermore, Kavya had wanted her children to obtain a formal education and she had supported all four of her children in obtaining 10 years education. She mentioned that a granddaughter is studying at the post-secondary level.

Kavya was the dominant decision maker and had arranged the marriages of her four children. Three daughters currently live in another village with their in-laws. Her son had two daughters and he lives with his wife and children in another village. Kavya stated that only one of her children, a daughter, comes to visit her and occasionally gives her Rs. 20 or 30. These small amounts supplement her meagre monthly income of Rs. 200 from a government pension. She manages to purchase food for her meals with this income but she states that it is not sufficient to cover the basic necessities. She stated, "Who looks after me? I do not have even a small shelter to live in. Then who looks after me? Only one daughter who is staying in Gollaprolu will come to see me once in a month or once in fortnight." It is not clear what type of shelter Kavya lives in but she repeatedly says that no one cares for her. A majority of her family members have died and others do not visit her. Kavya feels abandoned—struggling to survive on her own. The loss of her vision compounded the challenges she was facing; she was told that she had bi-lateral cataracts and that she will require a second surgery. Her disability creates many barriers for her including completing household responsibilities, visiting friends or family members and purchasing food. She does not believe that spiritual medicines will heal her eyesight; however she believes that prayer will assist in her cataract surgery. "I believe in God Jesus. I will pray for God Jesus day and night to give vision to me. I will pray for God Jesus and request to provide me vision to take care of myself every day."

Although Kavya is limited in her daily activities, she manages to live independently. She visits the general hospital in her village for regular appointments and makes her own decisions about her personal mobility. She tries to visit the hospital once per week to monitor her condition. However, due to her diminishing eyesight, she is sometimes not able to find her way. Neighbours sometimes provide Kavya with assistance to go to the hospital. In addition, she requests assistance from her neighbour to obtain coconut leaves for her daily cooking. Kavya states that she requires "one bash of coconut leaves" for approximately four days. Due to the difficulty in obtaining leaves for cooking, on many days she must skip breakfast and only drinks tea. Kavya cooks limited amounts of rice for her meals,

> I will not cook much every day I will cook only some small glass of rice. I will prepare rice starch by adding salt, that's it. I do not cook curry because my teeth are not in good condition. I will buy Rs.2 curd and eat. How do I get curries, meat, fish? I too have desire to eat but how do I get?

She survives by going to a nearby ration shop to purchase household items.

> I will get some rice, say four kilograms, at subsidized rate from public distribution system and I am getting a pension of Rs. 200. With that I will purchase some kilogram of oil and cook for myself. Tea I will bring without taking any breakfast. I am leading my life [this way]. Again I will wait for other Rs. 200… If any times the brinjals [eggplants] are very cheap then I will purchase Rs. 2 brinjals and prepare curry, that's it… Who looks after me in these days? Nobody gives me anything. I too do not ask anybody. We should

not ask anybody with what we have; with that only, we need to adjust. Who will help to give money?

It takes Kavya one and a half hours to perform the household duties. She does not participate in any leisurely activities (e.g., watching television) throughout the day. Her days are consumed by cooking, some cleaning, retrieving water vessels for bathing, attending church and frequently praying. She stated that, if she becomes ill with fever, she walks slowly to a local hospital. She goes to bed at eight or nine at night and wakes up at five in the morning to pray for an hour. Her diminished vision is a barrier in maintaining healthy relationships with her family and friends. She prays with the hope of reducing the daily challenges that her vision causes her with regard to daily household chores, mobility, and purchasing basic necessities.

*4.2.1.5.2.Post-cataract surgery*

After Kavya's cataract operation, she stated that she was content with the results of her surgery. Her eyesight was somewhat restored although she said that her eyes become watery on occasion. However, her relationship with her children and grandchildren did not appear to have changed following the cataract surgery. Her children were not visiting her and she was struggling with loneliness. She was continuing to take care of her financial affairs on her own. While she had control over decision-making and personal autonomy, survival was a struggle as she relied on the small government pension,

Interviewer: If the government does not give Rs. 200, what is the situation?

Kavya: I just will drown myself in a well and kill myself.

Since her cataract surgery, a neighbour had been helping Kavya by cooking and feeding her. With her vision partially restored, she stated that she could independently obtain the basic necessities for cooking and she was able to do her own cleaning and to perform basic household duties. In the first interview, Kavya had noted that it had taken about an hour and a half to do her chores. In the post-surgery interview she stated that she performed her daily tasks in approximately 15 minutes. She was continuing to visit the temple regularly each afternoon from 12:00 to 4:00 pm for prayer. In a change from her pre-surgery interview, she was travelling with another woman to the hospital in Kakinada to receive treatment.

#### *4.2.1.6. Ramesh's narrative*

##### *4.2.1.6.1. Pre-cataract surgery*

Ramesh is a 76 year old man who has been married for over 30 years. He is a Hindu and he was born into the Telaga caste. The Telaga people have been described as a "backward peasant caste" (Srinivasulu 2002). Ramesh resides in a small house with his wife who is quite ill. He receives a small income of Rs. 200 from the government for his monthly pension. He also provides his household with an additional income of Rs. 10 daily by cutting and selling grass. He goes out at 10:00 am on a daily basis and he cuts and sells grass for approximately two hours. Due to his age, health and vision loss, he cannot work longer than two or three hours a day, **"**Up to afternoon I do. Now I am 76 years; do [you think] I can do more than that?… For 2 hours, we can't do after getting 76 years. Who will do, tell me?" The limited income combined with the challenges of low vision create multiple barriers and challenges for Ramesh and his wife.

Ramesh had a good relationship with his parents and he cared for them until they died. His parents had arranged his marriage. In addition, he stated that he had a positive relationship with his mother-in-law and that they did not have any disputes. Yet Ramesh suggested that he did not pay attention to his mother-in-law's views after the marriage,

> Interviewer: Why didn't you take decisions of your mother-in-law?
>
> Ramesh: Anybody thinks that, after marriage, the girl belongs to the other.

Nevertheless, Ramesh claimed that, "They used to treat me well" when speaking about his relationships with his mother and mother- in-law. Both his parents and his wife's parents died prior to the birth of their children.

Ramesh and his wife had two children together, a daughter and a son. Ramesh had arranged his daughter's marriage and she was living in another village with her husband's family. Ramesh and his wife did not arrange the marriage of his son. His son married his wife based on a "love match". Ramesh stated that, after his son married, he had abandoned his parents and moved away to another village. Ramesh expressed the view that his son moved away so that he would not have to care for his parents.

> Interviewer: How many children are there in your house? Do you have any small children in your home?
>
> Ramesh: No. We have got son but after marriage he had gone to another village because, if he is here, he should look after us. So he left…. After he grown up he did not listen to our words or care for us.

Ramesh and his wife rarely receive visits from other relatives or friends. Occasionally, about once per month, their daughter comes to visit.

Ramesh did not have the opportunity to obtain any schooling and he stated that he is illiterate. He also stated that his children did not show any interest in receiving a formal education. Neither of his children went to school. Even though he did not receive any education, he took pride in owning his house, even though it is very small.

Ramesh and his wife are equally responsible for their financial matters concerning the basic necessities of life. They do not receive any financial assistance from their children, relatives or friends. He stated that he was able to obtain and purchase household goods in his village. He asks his wife what they require for their meals and Ramesh goes out to purchase the food. If they require any other goods, he and his wife discuss the matter together. He generally goes out alone and, out of courtesy, he informs his wife about his plans. Ramesh and his wife have a mutual appreciation for each other and they inform each other of their wishes.

Ramesh stated that they can only spend Rs. 2 for each purchase to save income. He stated that they cannot make any major purchases, "We do not have TV or fridge. We don't have even gas." He brings home food items and his wife prepares and cooks the meals. Ramesh and his wife receive eight kilograms of rice and some cooking oil from the government which provides them with most of their meals,

Interviewer: To have two meals per day with the income you are getting now, is it sufficient?

Ramesh: We have to adjust. [Since] some time ago, they [government] have given us food. Can we ask them to feed our stomach full? We have to adjust to what we have.

Ramesh stated that his wife is able to wash the dishes, clean the house, launder their clothing and she does the majority of the cooking. Yet his wife cannot perform all the household chores due to her deteriorating health. This poses a barrier for the couple because of Ramesh's diminishing eyesight.

Ramesh fetches two vessels of water each day for the household from a water tap that is located near his home. The small hospital that had been located in his village had closed; currently, he has to travel two kilometres via auto rickshaw in order to receive healthcare. If he has an additional Rs.30, he will spend that income on transportation to go to the hospital. The cost of transportation to the hospital has decreased the number of visits Ramesh and his wife can seek for their health care, "No, rarely we go—once in two months or three months if we are not feeling well; otherwise we do not go. We will bring some tablets from local medical shop and use." Ramesh's vision loss has contributed to their challenges through the effects on his mobility, personal autonomy, household decision-making, ability to do outside work and his relationship with his family.

*4.2.1.6.2.Post-cataract surgery*

Ramesh's surgery was successful with the complete restoration of his eyesight. He explained the difference in his second interview,

Interviewer: How are you feeling after the operation?

Ramesh: After operation, I am able to see clearly.

Interviewer: Do you find any difference before and after the operation?

Ramesh: Spots are not there sir after the operation.

Since his operation, he is able to efficiently perform his daily tasks. For example, he is able to retrieve water in less time (ten minutes as compared with half an hour prior to his surgery). His mobility has also improved considerably due to the cataract surgery. He stated, "Previously, I used to not go because I cannot see. Now I can go."

Other significant changes had taken place since his pre-surgery interview. Ramesh stated that his son and daughter-in-law were now staying with him in his house whereas, prior to his surgery, they had been living in another village. Moreover, Ramesh has obtained a buffalo which provides them with milk and additional income. He gets up earlier each day and takes care of the buffalo. On average, he spends nearly five hours with the buffalo. However, his family is concerned that Ramesh may fall and injure himself while he is working in the field with the buffalo.

There has been a transformation in the relationship between Ramesh and his son post-cataract surgery. In addition to returning to live in his parents' home, the son performs labour to

contribute to the household expenses. Ramesh's son has taken responsibility with regard to the financial decisions for the family as well. If the household requires an expensive item, Ramesh stated that now he would consult with his son about the decision. He also stated that he asks permission from his son to go out into the village.

His daughter and son-in-law visit Ramesh once a month to monitor how Ramesh is progressing in his recovery, "They come to check if my son is taking care of me or not". In addition, his daughter recently had a baby boy, which has made Ramesh a grandfather once again. He anticipates that his grandchildren will receive a formal education up to the tenth standard. He emphasized the importance of studying and believed that it will improve their lives. He tries to spend half an hour with his family members each day.

The decision making in the household has been altered since the cataract operation. Ramesh has taken more responsibility for the decisions regarding the meal preparation and cooking, perhaps because his wife's illness has progressed, "Yes, I did [the cooking yesterday] as she was unable to get up. I did for about an hour. We cook once for the whole day sir."

> Interviewer: Who decides what to cook for the day? Will it be your decision or anybody else's?
>
> Ramesh: I ask her to do this curry, that curry and she cooks.
>
> Interviewer: Do you decide?
>
> Ramesh: Yes sir.

Ramesh has become the dominant decision maker in this aspect of the household. The decisions concerning meal preparation and purchasing food used to be made through a mutual agreement between him and his wife. If his wife is unable to cook the meals due to her illness, he performs this task. Additionally, since Ramesh's wife is sometimes incapable of moving, Ramesh's daughter-in-law assists with the meal preparations for the household. However, Ramesh does not speak highly of her, "What does she know, sir? She is second wife for my son." Due to the improvement in his eyesight, in addition to his work with the buffalo, Ramesh helps with the daily tasks of cleaning the house and obtaining food for meals and cooking, as well as the weekly task of doing laundry.

#### *4.2.1.7. Synthesis of findings from the narrative analysis*

The narrative analysis showed that the profiles of the women and men in the younger and older age groups were quite different, yet there were also similarities (see Table 4-1). All participants had been in arranged marriages and only two of the spouses of the participants had died. The younger participants had received some education and were able to read and write while the four older participants were illiterate. There was also a difference in the education levels of the children in that the younger participants had supported the education of their children to a higher level compared to the older participants. Nevertheless, all but one of the participants reported that their children had obtained more education than they themselves.

**Table: 4-1. Comparison of participant narratives pre- and post-surgery**

| | **Badari Woman, 35** | **Raghvan Man, 54** | **Paravathi Woman, 70** | **Kaasi Man, 70** | **Kavya Woman, 75** | **Ramesh Man 76** |
|---|---|---|---|---|---|---|
| **Pre-surgery:** | | | | | | |
| Had an arranged marriage | Yes | Yes | Yes | Yes | Yes | Yes |
| Education | Grade 7 | Grade 7 | None | None | None | None |
| Children's education | M-studying post-sec | M-10$^{th}$<br>F-10th | M- 5$^{th}$<br>F-none | M-4$^{th}$<br>F-unknown | 10th | None |
| Arranged marriage for child/children | No | Son-No<br>Daughter-Yes | Son-No<br>Daughter-Yes | Yes | Yes | Son-No<br>Daughter-Yes |
| Owns land/house | Some land in her own name | House/father sold land | No | No, Mother sold | No | Yes |
| Makes decisions in the home | No | Partially | No | Yes | Yes | Yes |
| Makes financial decisions | No | No | No | Yes | Yes | Yes |
| Inter-personal relationships | Good | Difficult | Difficult | Difficult | Yes | Difficult (son) |
| **Post-surgery:** | | | | | | |
| Makes decisions in the home | No | Partially | Partially | Yes | Yes | Yes (shared) |
| Makes financial decisions | No | No | No | Yes | Yes | Yes (shared) |
| Improved mobility | Yes | Yes | Yes | Yes | Yes | Yes |
| Improved relationships | No | No | Yes | Yes | Yes (neighbour) | Yes (son) |
| Works outside home | Yes | No | No | Yes | No | Yes |

There was variation in the marital choices for the children of the participants. Badari, age 35, was supportive of her sons' decisions to pursue higher education and to seek professional occupations. They were unmarried; yet they were still young men and were studying at the post-secondary level. However, Raghvan, age 54, had arranged the marriage of his daughter but his son had a "love marriage", similar to the sons of Paravathi and Ramesh. The oldest participants—Kavya and Ramesh had arranged the marriages of their daughters. Kaasi had also arranged the marriage of his daughter and had tried to arrange the marriage of his son but his son had refused three "matches".

The male participants made at least some decisions about finances while the women did not have control over decision-making about household or financial matters, except for Kavya, who stated that there was no one else who was able to make such decisions or help her with them. Raghvan had partial control over decision-making because he owned the house in which he was living. Kaasi stated that he had always made all decisions, even about which kinds of foods would be prepared while his wife carried out the meal preparation, cleaning and washing. Badari also stated that she consulted her husband in all matters and followed his wishes.

Certain patterns emerged following the cataract surgery. While decision-making patterns did not change substantially, all participants stated that their mobility had improved after the cataract surgery. This improved the quality of life for all of these participants. In addition, the quality of relationships improved for two of the women and two of the men. Prior to the surgery, Paravathi spoke about physical abuse from her daughter-in-law, while Raghvan, Kaasi and Ramesh described psychological or financial abuse or neglect. For the most part, participants stated that

their in-laws were those involved in the problematic interpersonal relationships. However, a number of these participants reported that their relationships with in-laws were good.

A notable change following cataract surgery was explained by the youngest participant, Badari, who said that she hoped to learn how to sew and engage in craftwork following the surgery. Moreover, she had made an immediate change in her life by beginning to provide daily care for the family's buffaloes for the first time. Prior to the cataract surgery, she had taken the view that all outside work was done by men. In addition, the oldest participant, Ramesh, had also obtained a buffalo. In caring for the buffalo, he was obtaining milk for the household and some additional income by selling some milk. His improved vision allowed him to perform this work and improve the well-being of the members of his household.

### 4.2.3. Thematic qualitative analysis

In addition to the narrative analysis, qualitative data from the participants assisted with understanding the complex issues related to gender and power relationships through a thematic analysis. This analysis provided information about four major domains: (i) intra-household matters, (ii) employment, (iii) material and financial matters and (iv) mobility and personal autonomy. As is widely recognized in qualitative analysis (cf. Tesch, 1990), these themes are not mutually exclusive as they contain various subthemes, some of which intersect with themes or concepts in one of the other domains (see Figure 4-5). Dominant themes within the four domains are listed in Figure 4-6 and they are described in the following sections. At the end of the section for each theme, a description of gender and power relations pre- and post-cataract surgery is

provided. In the following sections, W refers to woman while M refers to man. The notations in parentheses indicate the gender and age of the participant (i.e., M, 70 refers to a man aged 70).

#### *4.2.3.1. Intra household matters*

Intra household matters includes family composition, distribution of household work, decision-making about meal preparations, and decision making within the context of joint family structure.

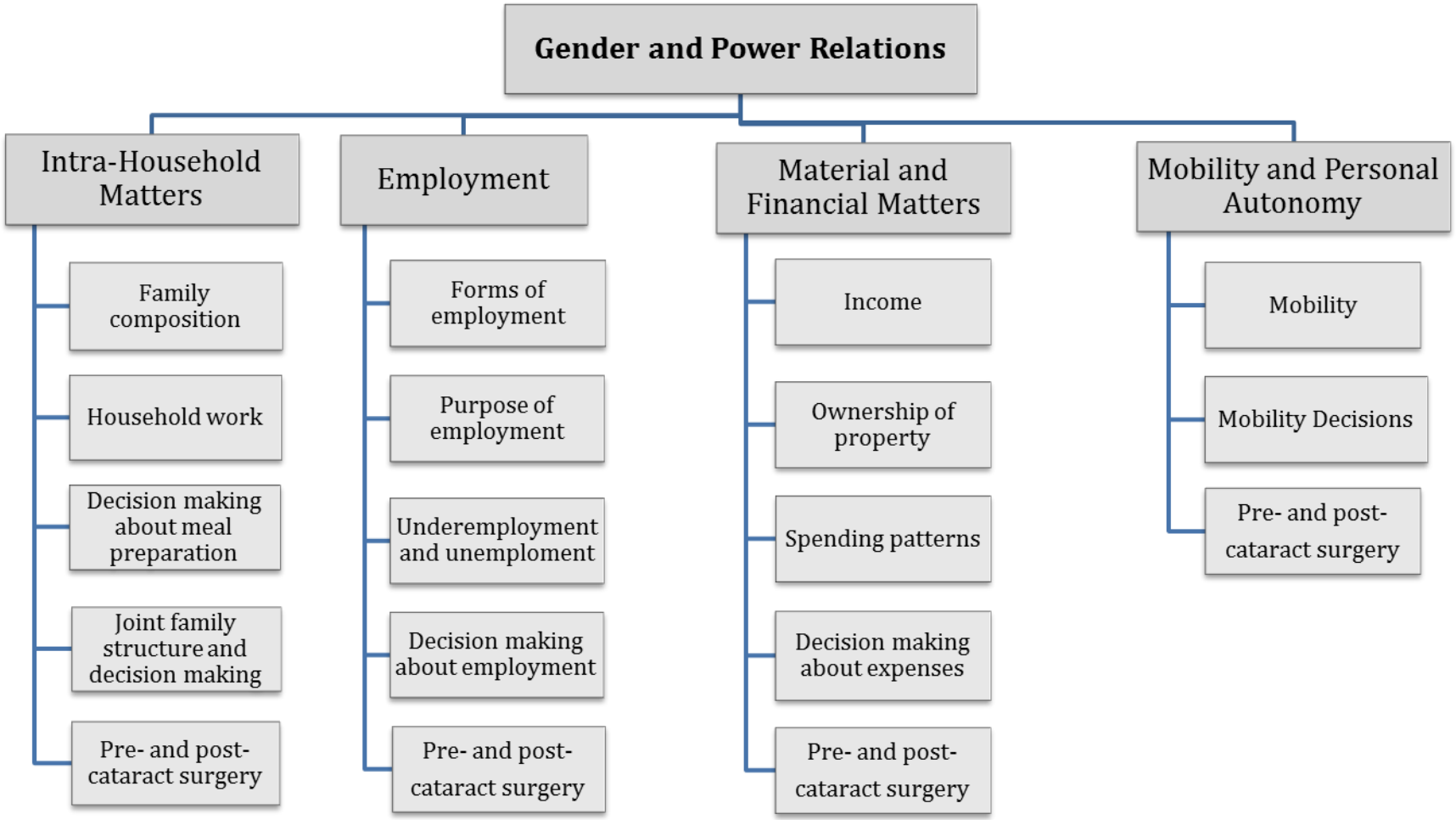
##### *4.2.3.1.1. Family composition*

Family or household composition varied considerably among the participants and revealed a combination of traditional and non-traditional arrangements. More than half of the male and female participants mentioned that they were living in a joint or extended family which included in-laws, husband, wife, son(s), daughter-in-law(s) and grandchildren. For instance, Reddi (M, 70) and Ganji[6] (W,45) mentioned that their household members included spouses, sons, daughters-in-law, and grandchildren.

Rani (W, 50) and Rudra (M, 62) stated that their household included their spouses and the in-laws. A number of the participants stated that their children (i.e., sons) were working in a city. Elderly participants often reported that their parents and parents-in-law had passed away and that their children were married; hence they were living independently.

[6] All names are pseudonyms.

**Figure 4-5. Gender and power relations pre- and post-cataract surgery**



Nevertheless, the analysis showed that, often, unmarried son(s) or daughter(s) were living with the participants. Badari (W, 35) remarked that she, her two sons, her husband, and her mother-in-law were living in the house. Kapil (M, 70) first stated that there were three members of his household; he stated, "My wife, myself, and my younger son". Later in the interview he revealed that other family members were also living with them, "My sister stays with us." He mentioned that his daughter-in-law also lives in his home as well as his older son. He further added that his younger son was working and providing income for the family by running an auto rickshaw, which they owned together.

Kapil (M, 70) explained why one of his sons and grandsons was not living with him. He stated that his son was separated from his wife and that his grandson lives with the family of his daughter in-law.

Lata (W, 60) and Hema (W, 60) remarked that their elder son(s) were married and living separately; while their younger son was unmarried and staying with them. Similarly Vama, (M, 80) revealed "I have three daughters. One is married. Two daughters are staying with me."

Traditionally, daughters or women typically left their parental homes after marriage to live with their husbands and in-laws. For example, Kapil explained, "[My eldest daughter] is married. We left her [with him]. She goes to work at her in-laws' place…My daughters are married and leading their own lives… I am not involved with sons-in-law. They don't come [to visit] or talk [to us]". Bhanu also made a comment about the circumstances for a daughter who lived with her husband and in-laws.

> "I have a daughter. She comes to see me. Even if she comes to see me, she is not in a good position. If she comes to see me, she too feels sad. But what can we do for what we don't have? We try to console her and send her back."

Under exceptional circumstances a daughter might return to live with her parents. Anika (W, 60) mentioned that her daughter had been ill with polio; as a result, this daughter was staying with her. Hansa, (W, 60) stated, "I and my husband are staying in the house. One daughter who lost her husband is staying with us. She takes care of us. She does not have a leg and she has a son." Contrary to social norms, Sarala (W, 55) stated that her daughter, son-in-law, and granddaughter were staying with her although she did not provide any explanation for this arrangement.

A few participants stated that they were staying with their children. Raghvan (M, 54) replied that he was living with his son, although he was the owner of the house; hence, his son and family were living with him. Beena, (W, 60) said, "I have five daughters. I wrote my house in my youngest daughter's name and I am staying at her home now." Beena further clarified that she was staying with her daughter as she did not have a son. Similarly, Pallavi,(W, 60) stated "I am staying with my younger daughter as my husband died two years ago." On rare occasions, two women were living under one roof on their own. Udaya, (W, 60) said "my daughter and I stay in the house."

One fourth of male and female participants explained that they were living by themselves as a couple. Often this meant that the children (sons or daughters) were living separately and leading their own lives. Rajive (M, 48), Kamala (W, 50), Anathi (W, 65) and Mandeep (M, 70)

mentioned that they lived with their spouses; thus some participants were living in a nuclear family structure as opposed to a joint or extended family structure.

Sometimes participants had living arrangements within their house that provided for privacy, a level of independence and a way to make ends meet on very small budgets. Mahesh, (M, 71) said "I, my wife, and my son stay in the house. My son stays in his portion of house and we in ours." As a result, the couple was leading their own lives and their children were living their own lives, all under one roof. Amla (W, 45) described a similar situation, "my husband, daughter-in-law, son, and I stay in the house. My son stays separately in the same house." Prakash (M, 70) explained "my wife, myself, my younger son, his wife, and their two sons [stay in the house]. They cook separately; we cook separately." Asha (W, 50) also explained that a son, his wife and children lived with her and her husband along with a daughter, son-in-law and their children. They had given away the house as a dowry for her daughter but were living in the home with them. Asha stated, "All of us live separately even while living in the same house. My husband and I take care of our needs". Bhanu (M, 75) stated that he owned a house with "small, small rooms." He lives with his wife, a son, his wife and children as well as his daughter-in-law and her children from Bhanu's son who had died. He explained that each family lives in the small rooms, "not together, even though we live separately, we share the same house." He stated that his son has not been able to make ends meet so they are all struggling to survive by sharing a small house.

Some participants mentioned that their spouses were deceased and they were living alone. Kaveri (W, 60) stated that she was staying alone as her husband had died and she had no children. Harish (M, 60) explained why he was living alone:

> I am staying alone; all the persons have gone to in-law's house. I stay alone. My wife died....[I have] four daughters and only one son. Son also passed away. Out of four daughters, one daughter passed away and other three are there. My son died after his marriage. He has two daughters and a son. My daughter-in-law is living at her mother's place along with the children...daughters, three of them, they are living their own lives."

Deena (W, 60) was also living alone as her husband had died and her daughters were living in the homes of their in-laws. She stated that she had her own room in a very small house which she owned, "A very small bed can fit in that room." Some tenants were also staying in the house.

At times participants such as Deena were living alone, even when they had children. However, some participants did not clarify the reasons for such an arrangement. For example, Bilal (M, 60), Jagan (M, 65) and Nakul (M, 70) noted that they were living on their own and their children were living separately.

Thus, the living arrangements of the participants were complex and depended on the circumstances. It was quite common for them to note that some of their children had died. Among older adults, frequently parents and parents-in-law as well as siblings were deceased. Some participants appeared to be quite socially isolated. Daughters typically lived with their husbands and in-laws and had obligations to their husbands' families. Anathi (W, 65) described a common set of circumstances,

> Daughters visit about once a month, or two months or three months. They will come if they are free, otherwise they don't come. They live with their children, they don't usually

come often. Even if they come, their husbands won't let them take care of us. I and my husband are living alone in all ways, sir.

*4.2.3.1.2. Household work*

Household work included cooking, cleaning, fetching water, finding sticks for cooking, making fires for cooking, sweeping, cutting vegetables, preparing meals, washing clothes and doing dishes. As revealed through the accounts of male and female participants, intra-household work was mainly performed by female members of the house including wives, daughters, mothers-in-law and daughters-in-law. For instance, Madhu, (M, 55) stated "my daughter-in-law and my wife take care of those matters. It is ladies' duty." Dharma (M, 70) described similar practices at his home where his daughter-in-law and wife took care of household chores. Kapil (M, 70) revealed the gendered nature of work inside his home,

Interviewer: Do you do any housework or cooking? Or do you help your wife with those chores?

Kapil: I don't do any such work. I don't help her too.

Interviewer: Do you get her vegetables?

Kapil: I don't know much about vegetables.

As he viewed domestic labour inside the home to be the responsibility of his wife, he did not take part in these activities. Bhanu (M, 75) did not help with cooking but he assisted by searching for sticks for the fire and by obtaining vegetables, "My wife asks me to get some vegetables. I will go and get it for her." Regardless of their physical condition, women continued

to perform prescribed gender roles. As observed by Reddi (M, 70), "Nowadays she [wife] is not feeling well but all household work is done by her only". A majority of the male participants reasoned that household work is not the responsibility of males and they supported gender-based roles. This was captured in the statement by Tanav (M, 45) who remarked "I don't do any help. I just will have meals and go, that's it."

Fetching and carrying water was a daily chore for some women. A 65-year old woman, Anathi, stated that she spent an hour each day carrying water to the home. She also commented that it took about two to three hours per day to cook meals because she cooked with a wood fire, "Because I cook on firewood, it takes time".

A majority of the women stated that they did not seek or receive any help from their husbands. Kamala, (W, 50) said "No, I don't ask anybody [for help]." However, a small number of female participants questioned the gender roles; Anathi (W, 65) posed a rhetorical question on this topic, "a husband is supposed to help wife and wife should help husband, isn't it [right]?" Yet Anathi also reported that she was doing all the domestic labour and caring for her husband,

> I work for both of us [self and husband]. If I die, who will take care of him, sir? …I work in other people's houses. I can do that work only. I don't have any other job. I go at four in the morning and come back at nine. I work for four to five hours a day. I earn about Rs. 800 [per week]. We depend on that money for our livelihood. If we have money, we eat, otherwise no… He [husband] is not so cooperative. If I cook, he eats".

There were some exceptional cases in which a woman received help from her husband for household chores. For instance, Abha (W, 50) stated, “my husband helps me.” In addition, a small number of male participants performed intra household work under rare circumstances when the female members of the household were away from town or were ill. Raj, (M, 70) said “if she goes out of town, I do the cooking otherwise there is no work for me. They do it all themselves.” Likewise, Ramesh (M, 76), stated “my wife does the work; if she is unable to, then I do.” Some male participants reported that they fetched firewood and groceries from the market. However, few men mentioned that they did their own household tasks related to cooking, cleaning or laundry. Yet Rao (M, 70) emphasized his contribution “...but I wash my clothes daily.”

Several women participants clarified that they received help from the female members of family including mother-in-law, daughter-in-law, daughters and granddaughters. Rani (W, 50) received help from her mother-in-law; while Amla (W, 45) and Nirmala (W) relied on their daughters-in-law for assistance. On the other hand, Sarala (W, 55) sought help from her daughter. Padma (W, 65) mentioned that she received help from her daughter and daughter-in-law; while Hema (W, 60) sought assistance from her granddaughters to perform intra-household chores.

On certain occasions when male participants had to perform intra household work, they received help from female members of family including daughters, daughter-in-law, and mother. At times, they obtained help from neighbours; however, it was not clear as to whether the neighbours were women or men. Further, a few male participants stated that they received help from their sons and grandsons to perform intra household work. Mahesh, (M, 71) stated “my daughter has three sons, one of them will come and help me.”

*4.2.3.1.3. Decision-making about meal preparation*

There was a considerable variation in the decision-making power within different households as revealed by the accounts of participants. Several women stated that they made decisions regarding what meals were to be prepared and served each day. These women included Rani (50), Abha (50), Kamala (50), and Nirmala; they asserted that they made decisions regarding meals. Charumati (W, 55) similarly stated, "I decide the menu" and Kaveri (W, 60) said "I cook whatever I like." Similarly, several male participants stated that the decisions about meals were made by their wives and they ate whatever was prepared by their wives. For instance, Kapil (M, 70) said "my wife does the cooking; whatever my wife prepares, we eat." A number of men of various ages made similar statements; Ranga (60), Daman (50), Gopi (50), Madhu (55), Raju (75), Jagan (65), Dharma (70), and Jayesh (70) stated that the decisions about meal preparations were made by their wives. One of the male participants remarked "everything is [cooked] as per her wish."

In some cases, men asserted that their wives made the decisions about cooking but these women took their husbands' preferences into consideration. For instance, Banu (M, 65) stated "She cooks one her own. Whatever she cooks, we eat, but she does not cook items not liked by me." Similarly, Vama (M, 80) stated, "she asks me and cooks whatever I like." Some female participants (e.g., Ganji, 45, Jyotika, 51, Padma, 65) stated that their husbands were the decision makers. This was reflected in the statement of Jyotika (W, 51) who said "I ask my husband what curry I should prepare; he tells me."

In certain households, male participants jointly made the decisions about meal preparation with their spouses. Ramesh (M, 76), Reddi (M, 70), Mahesh (M, 71), and Gulab (M, 58) described a joint decision making process with regards to meal preparation. Some of the men and women remarked that sons or daughters-in-law took the responsibility to make decisions about the meals; they included Raj (M, 70), Amita (W, 60), Lata (W, 60), Hansika (W, 50) and Anika (W, 60). Tanuja (W, 65) noted, "my daughter-in-law usually prepares what my son likes." In contrast, Rajal (W, 61) said that she gives instructions to her daughter-in-law about what should be cooked for meals.

One of the younger participants, Badari (W, 35) commented that decision making about meal preparations was made by her mother-in-law. Rudra (M, 62) mentioned that his mother decided upon the menu and meal preparations; Vasant (M, 58) stated that his daughter made such decisions. Kajol (W, 65) jointly made decisions with her granddaughter about meal preparations and Beena (W, 60) followed the directives of her daughter in this matter.

Some women and men reported that the men decided what food the wives would prepare for each meal. Asha (W, 50) explained that having food to eat each day depended upon her husband's ability to earn money, "If my husband gets money, we will eat, otherwise, no. If he gets money, he will tell me what to prepare. If he doesn't get money, what will he say?" As was noted above in the section on narrative analysis, Kaasi (M, 70) also stated that he decided what food, and how much, would be eaten each day and his wife prepared it.

*4.2.3.1.4. Joint family structure and decision making*

As noted above, in Indian society, a woman usually leaves her parental home after marriage and joins her husband in his home where she lives with his parents and other family members. Hence, female participants were asked to explain if they were invited to take part in the decision making process about household matters by their in-laws. Male participants were asked whether they were encouraged to partake in decision-making processes about household matters with their own parents. As the patterns differed for men and women, the results are presented separately

4.2.3.1.4.1. Female participants

Some female participants stated that their mothers-in-law actively involved them in decision making processes regarding household matters. Rani (W, 50) said, "I have good relationship with mother-in-law. She is intelligent lady. It is daily we discuss the household matters and proceed further." At times, women participants received suggestions and advice about household matters from their mothers-in-law. Sarika (W, 60) commented on this pattern by suggesting that her mother-in-law had provided instruction on how to manage the household,"[my mother-in-law] used to advise me about all those issues."

Some women participants revealed that they were never involved in the decision making process by the mother-in-law. Nirmala remarked, "She would do things her own way. She never told me anything." Some women shared their point of view but recognized that it was not always reflected in practices; Amla, (W, 45) stated "Sometimes. Not always, sometimes she takes my opinion whether is it good or bad to do this and then decides to proceed further."

A small number of female participants noted that they were able to made decisions independently and never received advice and suggestions from their mothers-in-law in household matters. These participants did not encounter interference from mother-in-law about household matters. In a few cases, women participants revealed that their mothers-in-law were not staying with them therefore there was no interference in decisions about household matters. Asha, (W, 50) stated "She stays with her daughter. She does not stay with me." A small number of male and female participants revealed that their mothers-in-law had been deceased for a long time. These women had never experienced situations in which they were subordinate to a mother-in-law.

Many women participants commented that they were never invited to participate in the decision making process regarding familial or household matters by their fathers-in-law. Amita, (W, 60) stated, "No, he never used to discuss [such matters] with me." Similarly, Kajol (W, 65) revealed "No, they (in-laws) never used to ask me in such matters." At times, women participants stated that they were not allowed to talk to male family members (e.g., father-in-law, brother-in-law); hence they were not invited to voice their opinions by these male members of the household. Jyotika (W, 51) said, "No. We don't talk each other. Because in our house, we [women] will not talk to men."

A small number of women participants noted that their fathers-in-law did not give advice but rather allowed the women of the house make decisions. A few of these participants mentioned that the mother-in-law had more control over household matters than the father-in-law. In contrast, a few female participants noted that their fathers-in-law actively participated in the decisions about household matters. Badari (W, 35) stated "Always. [Father-in-law] actively participates for household activities". Such fathers-in-law provided suggestions and gave advice

to the participants regarding household matters. A few participants commented that their father-in-law also listened to their suggestions. Gaddu (W, 50) said “He used to listen to my advice.” In some cases, the father-in-law had died a long time ago, hence the question of involvement in decision making process did not arise.

4.2.3.1.4.2. Male participants

Some male participants typically stated that they were always invited to take part in decision-making process about household matters by their mothers. Banu (M, 65) stated “She does not do anything without asking me.” Ekanath (M, 70) remarked “She used to decide by herself but she used to take our opinions as well.” Some of these participants explained that they were permitted to be involved in the decision making process because they were the oldest among their siblings. For instance, Reddi (M, 70) stated, “Yes she used to take [my advice]. I was the elder one in the home.”

In contrast, some male participants conveyed that they were never allowed to participate in the decision making process by their mothers and they never influenced the decisions about household matters. These participants reasoned that they were not allowed to participate in the decisions because they had been too young. Dharma (M, 70) commented “My mother used to have all powers at home.” These participants mentioned that their mothers never discussed household matters with them; however, these men accepted the supremacy of the mother and obeyed her decisions.

A few male participants mentioned that they received suggestions and advice about household matters by their mother. Prabhu (M, 65) stated “As they are elders, we take their advice, sir. If

there are things that we don't know about, we ask her [mother] and know about [such matters]." In a few cases, male participants mentioned that their mothers never advised them about familial or household matters.

A small number of male participants acknowledged that their father was taking care of family and household matters and often the mother was not allowed to provide input into the decision making process. Harish (M, 60) mentioned "No family-related suggestions were provided by her. My father used to take care of all the things." These participants were not invited to take part in the decision making by their father. Mahesh (M, 71) remarked that his father did not ask for his opinion on the household and other matters. He said "I don't have my say." Similarly Suraj (M, 40) and Ramesh (M, 76) conveyed the view that their fathers did not like to discuss household matters with them. These participants reasoned that they did not have enough time to look after house hold matters. Some male participants and their fathers were busy working outside of home; therefore, they were not able to take part in decisions regarding household matters. Yet some male participants revealed that their father, mother and elders took care of household matters and never asked for participants' suggestions. On the other hand, Banu (M, 65) and Reddi (M, 70) asserted that their fathers always sought their advice and opinions about household matters. Also a few male participants revealed that they received suggestions and advice from their fathers regarding outside work (e.g., agricultural work) and finances.

A small number of participants remarked that their father did not give any advice to them or other family members. These participants noted that their father's voice was not heard in the house. It seems that the father's status in house was less important in some homes and these men had less influence over decisions regarding household matters. In addition, it seems that it was

fairly common for mothers and other family members to take care of household matters. Hardik (M, 68) commented, “my father did not have much voice in the house”. For a small number of participants, their fathers had died long ago and the question of their participation in decision making did not arise.

*4.2.3.1.5. Pre- and post-cataract surgery*

The findings suggested that there was not much change in the family composition and decision-making before and after the cataract surgery in the participants’ households. However, there was a change in the nature of the tasks that people could perform, as noted above. While most women participants performed intra household work regardless of aging, physical disability, illness and vision loss due to cataracts, improved vision after the surgery meant that they could, once again, perform household tasks and duties more often. For example, Anathi (W, 65) reported in the post-surgery interview that she was spending time interacting with her grandchildren whereas she was not doing this prior to the surgery. She also stated that she was again performing tasks such as carrying water. Deena (w, 60) explained that her surgery and improved vision had improved her ability to perform cooking and cleaning duties. Despite her poor vision, she had struggled to do this work prior to her surgery. She explained the situation in her pre-surgery interview, “I cook by myself even though I am unable to see. Sometimes I overcook or undercook as I cannot see properly.” Following the surgery, she described her improved ability to do the intra household work, “There is a difference as my eye is fine now. I am able to see clearly. There is a lot of difference. I am able to do all housework now.”

Most male participants stated that they did not help with intra household work before and after cataract surgery. In addition, few changes were reported by male and female participants after cataract surgery regarding their involvement and influence in the decision making process related to meal preparations and other household matters. This was primarily women's domain but, as noted above, it was quite common for men to be the decision-makers about all matters within the household, including the type and quantity of food to be prepared and eaten.

#### *4.2.3.2. Employment*

This theme includes various dimensions of employment (e.g., forms, purpose) and decision making power associated with the employment-related activities as revealed by the participants prior to and following cataract surgery.

##### *4.2.3.2.1. Forms of employment*

The analysis suggested that a majority of the male participants were involved in agricultural work (e.g., ploughing, sowing, harvesting, grass cutting) and labour work (e.g., handloom work, factories). Some participants stated that they were not employed but very elderly people and most women explained that they were retired or did not work outside the home. Some participants had their own lands on which they raised various crops (e.g., sugarcane, rice). Other male participants stated that they were involved in a variety of occupations such as the milk business, forestry or lumber, office work, providing services as a cobbler or laundry worker, and office work. A few male participants earned money through odd jobs such as selling sacks of grass, buying and selling vegetables, making brooms and feeding animals.

Most of the female participants who earned outside income were employed in two areas: i) home-based, small scale independent enterprises or employment in domestic labour other households and ii) agriculture and labour work. Home-based small scale independent enterprises encompassed cleaning tamarind, sewing or stitching, weaving, housekeeping and selling pickles, vegetables, fruits, and coconuts. Some women, such as Asha (W, 50) and Beena (W 60), stated that, within their caste, women did not work outside the home, "In our caste, Kaapoos, women don't go out to work. We manage household work, that's it" (Beena, W, 60).

Depending on the form of livelihood, the work hours and total number of hours per week varied greatly among participants. Gaddu (W, 50) stated, "I go at 9 a.m. and come back 6 p.m. We bear all the brunt of heat and come home in the evening." Dharma (M, 70) stated "I go before sunrise in the morning and come back at 5 p.m.—about 10 hours per day." Mahesh (M, 71) commented that he worked five to six hours per week (i.e., one day per week), while Radha (W, 56) worked two days per week. Rajive (M, 48) mentioned "…I go to graze the buffalo, then come back at noon, have some lunch, and go back at 3 to graze the buffalo again and come back by 5 in the evening." The work patterns indicated that some participants worked throughout each day, whereas others worked during mornings or evenings only.

The findings suggested that female participants worked more hours than their male counterparts. Women performed intra household work (e.g., cooking, laundry and cleaning) in addition to agricultural, labour and home-based income generating work. Rani (W, 50) stated "I deseed 10 kg tamarind. At 10'clock [I begin] after finishing cooking, until evening—5 o'clock. If that work is finished, I then do cooking." Anathi (W, 65) was employed in household labour in the homes of others approximately five hours each day and then she carried water, cooked with firewood,

and performed cleaning and laundry within the home. Her domestic labour consumed several hours each day. She stated that she went to bed at 6:00 pm and arose at 3:00 or 4:00 am each day. Consistent with the rural nature of the sample, the participants were primarily engaged in farming and subsistence labour.

*4.2.3.2.2. Purpose of employment*

Most male and female participants said that they worked to meet the needs of family members including wife, husband, children and other family members (e.g., mother-in-law, daughter-in-law, grandchildren). Rao (M, 70) explained, "I am working for us [family] only. Till our death we need to eat, isn't it? It is enough for us. We do not want any money or assets. We are happy. If we have some rice starch to eat that's it." Similarly, Rani (W, 50) stated "I do [work] for the family"; while Ranga (M, 60) mentioned that "...both for my children and for me, I work hard." Gaddu (W, 50) commented "I work for children and for myself." Hence, a majority of participants worked for their families. This view was captured in a statement by Ekanath (M, 70) who said "everybody wants to take good care of their family by working hard."

A few male and female participants mentioned that they worked for themselves. Ganji (W, 45) said, "I work for my expenses." Likewise, Kajol (W, 65) stated "It is for myself only, it is to fill my stomach that I am working and earning." Indeed many participants made comments about the need to work in order to eat. Asha (W, 50) commented, "If my husband goes to work and brings money, we will eat, otherwise nothing." Anathi (W, 65) made a similar statement, " I don't have money or farmland. If anybody is offering us food, we are eating, otherwise nothing."

*4.2.3.2.3. Underemployment, unemployment and poverty*

A small number of participants were either underemployed or unemployed. Gender role expectations were clearly evident in such instances. Raj (M, 70) stated that he would engage in minimal work as his masculine gender role expectations did not allow him to remain idle. His views were captured in the following quote:

> It is not that I only sit at home without working, I do some work…I have to do little bit of work too. It does not look good if I just sit at home simply without doing anything. The only thing is I do little bit of work, not as much as I was doing earlier.

Similarly, socio-cultural gender role expectations were articulated by a few female participants. Also, Beena (W, 60) stated "I don't have any job. If my husband gets money, I cook and eat." Amita (W, 60) said "I don't work outside of home. Whatever is done is done by male members, that' it." These women expressed the view that it was appropriate for men to work outside the home while women performed intra household labour. Anathi (W, 65) explained that her living circumstances were characterized by extreme poverty, "I take loans from somebody like you and buy the item, that's it sir. I don't have any other means of living. All God gave us is our hands. How can we get money if there is no means for us, and no sons too?"

Many participants described the ways in which poverty and the struggle for survival was a primary preoccupation. Kapil (M, 70) explained this, "We manage somehow. One day we have something to eat, the next day nothing at all. We prepare some rice broth and manage somehow." As was noted above in the narrative analysis, Kaasi (M, 70) explained how, due to corruption,

some of the food and goods he and his wife were supposed to receive were never provided. Similarly, Asha (W 50) made reference to corruption, "My husband is old but still he does not get pension. Everybody gets pension but not my husband. Village politics are like that."

*4.2.3.2.4 Decision making regarding employment*

The accounts of participants showed that male participants did not need to ask for permission to work outside before and after cataract surgery. Instead of asking for permission, they usually informed their family members that they would seek employment. In the social, cultural, and economic contexts of India, males have inherent power to work outside. They are seen as the breadwinners and providers for the family. In addition, they have the authority to decide for themselves either to work or not to work. They are not forced by family members to work outside; the decision is theirs to make. Rao (M, 70) reflected this social reality when he said "I don't go, but nobody tells me also to do outside work."

However, the family members of some male participants expressed the view that they were not allowed to work outside due to age, physical disability, illness, and vision loss due to cataracts. Reddi (M, 70) said "No, they do not accept. I do not go out. They tell that you have become old. Why do you need to work?" Similarly, Ekanath (M, 70) commented "my family members will agree [that] my health is not permitting me to do any work."

Women participants experienced a different kind of social pressure. They made it clear that they required permission from male members of family, especially their husbands and sons, to work outside the home. Rani (W, 50) stated "Yes, he [husband] agrees and allows me to go and work;

he is good by nature." Some women participants did not work outside even though they were willing and capable of doing so. Gender and power relationships embedded in the familial and socio-cultural contexts prevented them from obtaining employment. Asha (W, 50) communicated a sense of resignation about and acceptance of her situation, even though she was not an elderly person,

> If my husband does not bring money and food, we will just stay like that [sitting]. I am accustomed to such a living, that's it. What [outside] work can I do now? My days are over.

Anika (W, 60) stated "Even if I am willing, they [sons] will not allow me to do it…[They will say] why should you go out and work? You have three sons; we can take care of you." Similarly, Amita (W, 60) said "I don't go for work, I just stay at home. They (sons) give me money and I do only cooking for myself that's all." Daughters also influenced the decision to work outside.

> My daughter does not allow me to go out and work. She says 'I will do the stitching'; you need not go out and work. (Bhavya, W, 52)

Notably, the caste system seemed to regulate the decisions and activities in relation to employment. Nakul (M, 70) mentioned "We don't go out to do any job. We are kaapoos." Women were at a greater disadvantage than men due to the caste system. Sarika (W, 60) stated "I don't do any work. In our caste, we don't come out the house."

Some women sought employment without conforming to societal expectations. Geeta (W, 66) asserted that she could make the decision to work outside without permission from anyone in the family. Pallavi (W, 60) commented "I went out and worked as a housemaid secretly. We are not allowed to do such work in our caste. I was also afraid someone in the church might know about it."Pallavi's statements reveal that some people were defying norms set out within Indian society, even within a small, rural community. Pallavi's narrative, as well as those of other participants which revealed that their adult children were employed in urban centres at a great distance from their home villages, suggest that social changes are influencing family life.

*4.2.3.2.5. Pre- and post-cataract surgery*

Many male and female participants mentioned they were able to work outside before and after cataract surgery. However, the ability to work outside amongst a small number of male and female participants was influenced by vision loss due to cataracts. The ability to continue to work was most likely due to better vision in one eye following the surgery. The loss of vision in both eyes due to bi-lateral cataracts is relatively rare; most people experience low vision in one eye. However, some individuals had poor vision in both eyes. Rajive (M, 48) stated "I am doing labour work if I feel well. Now this vision has become very poor, not able to see properly." An elderly man, Bhanu (M, 75) explained the significance of the surgery, "Money is lacking…I buy vegetables [and] I sell them in market. Because I came to hospital, I am able to see. Otherwise, I previously was not able to see."

Some participants changed the form of employment they were involved in post-surgery. Those who had been engaged in rigorous agricultural and labour work preferred to get involved in less

rigorous labour work or small-scale businesses. For instance, Rajive (M, 48) began grazing buffalo instead of doing labour work. Similarly, Raj (M, 70) said "Yes, I do work, though not very hard work. I take care of cattle, leave them for grazing." In the same way, Ganji (W, 45) stated "I used to work on sewing machine but since my eyes were failing, I stopped it as I cannot insert needle into machine." Ganji began working again on the stitching machine after her cataract surgery. In contrast, Nirmala (W, 50) began to participate in agricultural work after surgery. This was a change for her as she had been unable to perform it prior to surgery.

Some participants said that they were unable to do agricultural and labour work due to their aging, illness and physical disability. Vama (M, 80) said "I don't have any energy to work anymore. I am 80 years old. I am unable to do anything." Similarly, Bhanu (M, 75) explained that aging and physical disability other than that related to his vision loss had prevented him from working in farming, "I do agricultural work. I used to plough the stones. After this leg accident, I stopped doing it." Ekanath (M, 70) stated "I am unable to do any agricultural work nowadays. I used to handle all kinds of work that a peasant can do." Kaasi (M, 70) expressed his powerlessness as follows.

> I am not going for agricultural work. If I step into mud. I am unable to pull my legs up. That's why, I am not going to any such work. I raise some leafy vegetables and sell them. I also sell milk. There are coconut trees in the field. I prepare broomsticks and sell them.

As was explained above, most participants, especially men, were in their 60s, 70s or 80s. Due to various ailments, prior injuries, accidents and disabilities, in addition to vision loss, they were not able to perform physical work. While the cataract surgery improved their quality of life due

to improved vision, they did not have the physical stamina to engage in the type of work they had done when they were younger.

#### *4.2.3.3. Material and Financial matters*

This theme pertains to income earned, various forms of financial support, ownership of property, spending patterns, and decision making regarding expenses before and after cataract surgery.

##### *4.2.3.3.1. Income*

Individual income depended on the type of work and varied considerably among male and female participants. A majority of men and women participants described their earned income in terms of daily wages; however, some of them presented this information in terms of weekly, monthly, and annual income. Daily wages ranged from ₹ 10 to ₹ 300; although most of the participants commonly received between ₹ 80 to ₹ 150 per day. Some participants described their monthly wages between ₹ 300 to ₹ 3000; while others referred to their weekly wages between ₹ 100 to ₹ 200. And few of them stated that their annual income fell between ₹ 10,000 and ₹ 15,000. Interestingly, there was a discrepancy between the wages earned by men and women for the same labour work. Godha (W, 58) stated "we used to get ₹ 10 for women and ₹ 15 for men as wages."

Those participants who had small scale businesses clarified that their income varied every day. They did not have fixed income like labourers. However, if they earned a profit, it was greater than the fixed income earned by labourers. Madhu (M, 55) explained "If anybody goes to labour work then he is getting ₹ 200 to ₹ 300, but this is business. We will get ₹10,000 and loose ₹

10,000." Another source of income included rental properties. Rao (M, 70) said that he rented one room in his home and generated an income from it.

A few male and female participants received financial support from extended family members and community members. Financial support included various sources and often involved combinations of sources including pension from government, rental income, and financial support from children (sons, daughters), and in few instances from relatives, neighbours, extended family, church, and employer. A major source of financial support was identified as sons in the families. Kapil (M, 70) said "my younger son gives us money…[and] I do get government pension." Prakash (M, 70) stated "I don't take my daughter's money. My son usually gives me money." At times, participants declared that they could not receive financial support from their sons due to the poverty and hardships endured by their sons. Rajive (M, 48) commented "my son goes to labour work and says the money he is earning is not enough for him itself." Similarly, Ganji (W, 45) stated "my son too does not give us. He himself has three children."

In rare instances, participants were supported by daughter(s) and daughter-in-law(s). Harish (M, 60) expressed "…I gave away my land to my daughter-in-law and she in turn gives me ₹ 1000 as my son died. I get ₹ 500 as house rent. I manage with this money." Similarly, Rao (M, 70) mentioned that he was receiving approximately ₹ 200 to ₹ 300 from his daughters every time they paid a visit to him. However, some participants, such as Bhanu (M, 75) stated that he owned his home and a small piece of land, the land was not fertile and it did not provide any income or food for him and his wife. He stated,

> I somehow manage and get on mam. I could not save anything man, this year is full of starvation only…I will get some small works like cutting stones for ₹ 20 or 30 money, After that I will get 200 from the government. If my wife processes some tamarind, then she will get that money. She gets 1 ½ rupee per kilogram.

The findings further showed that a small number of participants received financial support from relatives, neighbours, extended family, church, and employer. Vedant (M, 70) received financial assistance from relatives, while Radha (W, 56) was given money by her neighbours in time of need. Vama (M, 80) received generous support from his employer at times and Geeta (W, 66) gained financial assistance from her church which supplemented her government pension. On the other hand, Udaya (W, 60) said "she (daughter) gives me money... sometimes she does give me food."

*4.2.3.3.2. Ownership of property*

Property ownership is one of the determinants of improved social status and an indicator of socio-economic status. It is one of the contributing factors to gender and power relationships in rural Indian society and households. Information about property ownership can reveal inequalities between men and women within Indian society. Properties include agricultural land, houses, livestock (e.g., cow, buffalo), and other properties including buildings, major appliances or equipment (e.g., radio, television, electric fan) and a vehicle (e.g., bullock cart, tractor, motor cycle).

The findings showed that many of the male participants owned properties before and after the cataract surgery. Properties mainly included a house and land/farm. Banu (M, 65) stated "I do have a house and a small piece of land in my name." However, a few male participants did not own any property and stated that the properties were owned by other family members. Rudra (M, 62) responded "I don't have any property. It is in my mother's name." In a similar manner, Mahesh (M, 71) said "Nothing. It is in my son's name." In some cases, participants stated that their parents had sold the family's properties and they were left with little or nothing.

Most women participants stated that they did not own any property before and after cataract surgery. Ganji (W, 45) commented "there is nothing in my name. Nothing like that." In most cases, properties were owned by husbands, sons or family members. Padma (W, 65) stated "I have a house. It is in my husband's name." In the same way, Tanuja (W, 65) said that she did not have any property and was living in a house provided by the government. She further added that the house was in her son's name. Charumati (W, 55) mentioned "I don't have anything. My husband deals with those matters." A few female participants owned properties. Badari (W, 35) said "There is a small farm and a house in my name."

On rare occasions, properties were owned by both husband and wife jointly. Kapil (M, 70) mentioned "I do have house in my wife's and my name." Other than a house and/or land or farm, very few male and female participants owned assets (e.g., auto rickshaw).

At times, male and female participants had inherited properties from their parents/grandparents or family members. Amita (W, 60) stated that she owned a house which was bequeathed to her by her mother. Similarly, Reddi (M, 70) stated that he had inherited a four-acre property from his

forefathers; subsequently he gave one acre to each of his four children. Furthermore, a few male and female participants mentioned that their home and/or land were provided by the government to them.

Social practices around marriage and dowry also played a role in property ownership. Often parents gave away their properties to their daughters as dowry. Mohan (M, 82) explained "I have a home which I wrote in my daughter's name as dowry. I am staying in that home." Thus some people who had transferred a home to a daughter were permitted to live in the home. However, some women who had been given homes or property by their parents had been forced to sell all or some of it to provide dowries for daughters or sisters-in-law. Likewise, Vedant (M, 70) commented "I don't have anything. We are living in a rented house. We sold our home when we married off our youngest daughter." Occasionally, dowry was a reason given by male participants to explain as to why their wives did not own any property. Banu (M, 65) reasoned "...dowry not given...asked many times; therefore, no property for wife." From the accounts of the participants it was evident that there was very little change in property ownership prior to or post-cataract surgery.

*4.2.3.3.3. Spending patterns*

Most of the male and female participants mentioned that they spent their earned money on basic necessities including shelter, food, clothing, and other household items. At times the earned money was not sufficient to fulfill their basic needs. The hardships of life were evident in the following statements. Anathi (W, 65) said "about ₹ 800...we depend on that money for our livelihood. If we have money we eat, otherwise no." Rani (W, 50) also explained that externally

obtained income was essential for survival, "…my husband, if he gets money, we will cook, otherwise no. When he does not bring [any], there is nothing in the house." Limited income also severely compromised the ability to save money for crisis situations, emergencies or long-term future needs. The participants stated that the cost of living was high and the access to external income was not sufficient to fulfill their family's and household's needs. Badari (W, 35) made it clear that it was difficult to manage household expenses with limited earnings and there was no surplus money left to generate savings.

Some of participants mentioned that their government pension was insufficient for livelihood. Mandeep (M, 70) stated "Yes I will get ₹ 200 pension from the government. On white ration card we will get 8 kg of rice at subsidized price with this only we should get on." Likewise, Udaya (W, 60) summarized the situation, "I get ₹ 200 per month as government pension. Even that ₹ 200 is not enough." Banu (M, 65) had been struggling to provide the basic necessities for his family, yet he explained that he had not yet received any government assistance, "Till now we do not get anything from the government. Till now I am leading my life with my hands work. From today onward we don't know what god decoded. I did not even get single rupee from any others."

Cataract, physical disability, age, injuries and illness constrained the ability to work outside for both men and women participants. This led to the accumulation of debt for survival amongst a number of the participants. Rajive (M, 48) commented, "I am unable to work nowadays. If I have no money, I take some debt and get by." Further, debt increased adversity, worry and a sense of powerlessness in the lives of participants. Kamala (W, 50) said, "What money can I earn? I have lots of debts sitting on me. Do you think I can earn good amount of money just by doing labour

job?" Some participants mentioned that they bought necessary and household items on a daily basis, as needed and when they could afford such purchases. Kapil (M, 70) stated "we buy on a day-to-day basis. We have debts. We sold a part of our home to honour those debts." In the same way, Abha (W, 50) explained the situation,

> Abha**:** No, he [husband]does not have [property]. Till now he used to go for labor works but now he is not able to.
>
> Interviewer: Who brings monthly ration in your house?
>
> Abha: In our house! My husband brings. [He] brings quota rice, oil—goods from [the] public distribution system. To sustain, we should take something, isn't it? So, we are leading our life like this.

A few participants did not buy necessary household items (e.g., groceries) on a daily basis as they did not have access to shops in their villages. These participants had to travel to other villages or towns to obtain items of basic necessities. Banu (M, 65) commented,

> We don't have the habit of purchasing daily for small quantities. If we had shops in our village, then we would have done like that but we don't have shops. Not even a single shop we have. It is very small village.

Several participants spent their money to fulfill family responsibilities and obligations such as marriage, medical expenses and child rearing. Banu (M, 65) stated "I have three sisters. I married them off and in the process my children grew up. So I could not save anything." Similarly, Mandeep (M, 70) explained how the dowry system depleted family income and property, "…for

one of our daughters I saved ₹ 75,000. We have given ₹ 50,000 as dowry and the remaining we have used for marriage. After all these earnings, I do not have any land now."

At times, participants provided material support to their family members, even though these participants had very little to give. For instance, Kajol (W, 65) said that she gave money or other items to her daughter whenever she paid a visit. She provided an explanation for her supportive actions by saying, "as parents we are supposed to give them something or the other. [If we] do not, it does not look good in the society. So I buy and give them whatever is possible for me." Madhavan (M, 62) commented, "whatever is left after our household expenses, a little bit, whatever I save, I give it to my son if he asks me. After all he is my only son; if he needs I will give him." Raj (M, 70) similarly explained that he provided financial assistance to his sisters and, in this way, fulfilled the responsibility of an elder brother.

Some participants commented that they spent money on their personal preferences or needs such as drinking coffee and paying for personal medical expenses. Gopi (M, 50) said "I do not have anything to save. I keep ₹ 10 for coffee or something and give rest at home." At times personal expenses were tied to family needs. For instance, Banu (M, 65) invested his money in the life insurance policy,

> Interviewer: Are you saving the money that you earn?
>
> Banu: I haven't saved anything but I got an LIC policy for which I have paid 10 to 15 installments 900 per year. That is only my income.

Banu explained that assets which had been held by his grandparents and parents had been entirely spent. He was experiencing pain in his knees but sought out and performed agricultural labour when he felt he was able to work. He received some funds from his sons who had moved to a large city for work and the money they gave provided enough for the expenses of his household.

*4.2.3.3.4. Decision making about expenses*

This theme pertains to control over money or finances and decision making power over day to day household expenses (e.g., grocery, rent) and purchase of major domestic items (e.g., television, fridge, stove, vehicle, cupboard, cot, ornaments). The themes emerging about decision-making regarding expenses must be interpreted in light of the numerous comments of participants indicating that they do not spend money on major domestic items because, for most, they did not have enough income to enable them to consider such purchases. Falung (F, 50) expressed a common viewpoint in her pre-surgery interview, "We don't go for such things, Mam. We think of bringing something to eat and enjoy and pass time like that. We don't buy any such things." In her post-surgery interview, she reiterated this perspective, "There is no way we can buy such things."

4.2.3.3.4.1. Day to day household expenses

The findings suggested that most male participants had control over finances and were the decision makers about day-to-day household expenses. Banu (M, 65) stated, "Everything done by me ... nobody's involvement is there." While Banu asserted that he was the primary decision-maker in his household, he also stated that he was careful about managing household expenses

within his means so that his sons would not question his decisions. He stated, "But my sons also did not tell anything like, 'why you have done this etc.' I also did not spend anything lavishly by crossing them."

A majority of the women participants asserted that their husbands were the decision makers and had power over money in relation to household expenses and expenditures. Among younger participants, both Badari, (W, 35) and Ganji (W, 45) explained that their husbands took care of the money and spending. Amala (W, 45) also noted that there was a similar arrangement in her household when she stated "My husband only takes care of everything. He will not ask me anything. When he takes care of everything, why will he ask me?" At times, women participants appeared to lack confidence to take care of such matter. For instance, Tanuja (W, 65) said "he takes care of all those things. What do I know to take care of all those expenses?"

A few women participants mentioned that they had power and control over money and day to day household expenses. This was either because they were living alone, they were the head of a family without a husband or male figure present or their husband was not able to make such decisions. Anathi (W, 65) and her husband were surviving on an extremely small sum of monthly income from a government pension (Rs. 200) and she explained how she was managing,

> Interviewer: Who looks after the financial affairs in your house?
>
> Anathi: I take care of all those things doing certain odd jobs. I don't have any means of living.
>
> Interviewer: If you have to go and buy something from market, do you ask your husband?

Anathi: I don't ask anybody. If I have money, I will go and get them, otherwise I will stay quiet.

Interviewer: Why don't you ask your husband and go?

Anathi: I don't want to trouble him for money and worry how he will get money. So if I have money, I get the [items] myself.

Kamala (W, 50) and Kavya (W, 75) and Deena (W, 60) explained that they looked after money and household matters because they were alone.

While it was fairly uncommon, a few male participants mentioned that they provided their wages to their wives who took care of the household expenses. As a result, their wives had privilege to be the decision makers in relation to daily expenses. Rajive (M, 48) stated, "I will give my wage daily to her and she will look after [it]." Kapil (M, 70) said, "my wife takes of those things [household expenses/money/finances]." Some women participants described a similar situation in stating that their husbands provided them with money and they [wives] took care of household expenses. The male members of their families (e.g., husband) played inactive and non-participating roles in the decision making process related to household expenses and finances. The men were the providers of income and the women had greater control and power over decision making related to spending. For example, Rani (W, 50) said, "I only take care of it. My husband does the labour work and gives me the money, whatever he earns, and I only take the responsibility and manage the household expenses."

It was uncommon for participants to describe circumstances where both husband and wife were jointly engaged in the decision making about household expenses. Yet Mahesh (M, 71), Mohan

(M, 82), Reddi (M, 70) and Rajive (M, 48) explained that financial matters pertaining to day to day expenses were managed jointly by themselves and their wives. Mohan (M, 82) asserted "Yes. I am 80 years old and she is 65 years old. We take care of all financial matters of the house." Similarly, Asha (W, 50) commented "My husband and I take care of our needs."

Some male and female participants were not able to undertake financial and household responsibilities due to vision loss, old age, illness, or disability. Hence, they gave their financial and household responsibilities to their son(s). Prabhu (M, 65) stated

> I am the head of the house. Until very recently, I used to take care of all things but as I was unable to do it, I handed over the responsibility to my son. After his marriage, just two to three months back, I asked him to take care of family affairs. Previously, I used to do it.

Similarly, Rao (M, 70), Sangeetha (W, 55) and Amita (W, 60) asserted that the finances were managed by their son. Anika (W, 60) commented that her son took care of the house rent, rice, and other expenses. On the other hand, Hema (W, 60) noted that her sons and her husband jointly took care of the finances and day to day expenses.

A small minority of women participants relied on their daughter(s) and daughters-in-law to take care of financial matters. Sarala (W, 55) mentioned, "My daughter takes care of all financial affairs of the house." Yet she further added that her son-in-law had more influence in such matters than her daughter. Hence, her daughter performed duties jointly with her husband [Sarala's son-in-law] to take care of Sarala's finances. In the same way, few male participants

mentioned that their daughter(s), daughters-in-law, or other female family members carried out financial responsibilities solely or jointly with the male members of family (e.g., son, son-in-law).

In rare instances, women participants described how they and their daughters jointly managed household expenses and finances. Hansa (W, 60) made it clear that she and her daughter jointly controlled finances and made decisions about expenses. Similarly, there were few women participants who mentioned that their husbands and their daughters managed household expenses and finances jointly. Yet Beena (W, 60) said, “My daughter and my husband look after those things.” Therefore, in some families, women held more decision-making power, even though it may have been power exercised by daughters rather than the woman participant herself.

4.2.3.3.4.2. Major domestic purchases

The results showed that there was a wide variation regarding who had the decision making power over the purchase of major household goods which referred to items that people did not buy on a daily basis . Many men and women participants admitted that they did not have sufficient money to purchase goods such as a television, refrigerator, stove, vehicle or decorations. Moreover, they often insisted that they really did not need such material possessions and preferred to spend their meager income on basic necessities (e.g., food, clothes) and routine household expenses (e.g., electricity bill). If they decided to buy such major items, there was a variation in the exercise of control and power in this domain.

Some male participants including Jagan (M, 65), Mandeep (M, 70) and Rudra (M, 62) made it apparent that they were the sole decision makers when it came to the purchase of major household items. For instance, Jagan (M, 65) stated, "I do not ask anybody, I buy by myself."

A small number of women participants mentioned that they needed permission from their husbands before buying any major household goods. Hence, the husband had decision making power in this matter. Also women participants commented that if they needed major household goods then they asked their husband to buy those things. Amla (W, 45) explained how decision-making rested with her husband, "I have to ask my husband and then only buy, he only takes the decision." Similarly, Padma, (W, 65), Charumati (W, 55), Badari (W, 35) and Ganji (W, 45) described similar patterns. Hansika (W, 50) explained

> Costly and big items like TV are bought by my husband. I used to buy smaller items like show pieces to put on the table… I don't buy anything bigger than those [items]. My husband brings all items. He brings everything for me.

On the other hand, several women participants reported that they themselves had decision making power regarding the purchase of major household goods. Anathi (W, 65) explained that she took out loans to purchase needed items. Udaya (W, 60) said, "If we planned to buy TV, I would have bought it sir. I am the one who bought bicycle for my husband. I would take the decision."

Similarly, a few male participants stated that their wives made decisions regarding the purchase of major household goods. Suraj (M, 40), Daman (M, 50), Lalit (M, 75), Prakash (M, 70), and

Dharma (M, 70) asserted that the decisions about major purchases were made by their wife. According to Dharma (M, 70), "whatever needs to be bought, she will take care of it. My wife decides on those things. She just informs me that she is buying such and such a thing." Sometimes male participants purchased major items to fulfill the wishes of their wives. Ranga (M, 60) said, "If my wife tells me, I buy it."

A small number of men and women participants revealed that both husband and wife jointly made decisions regarding the purchase of major household goods. Slightly more male participants than female participants acknowledged shared decision making power in this domain. Rajive (M, 48) explained "My wife and I together take the decision. If we have money then whatever we want, we purchase". Similarly Reddi (M, 70) and Mohan (M, 82) described the joint decision making authority over major expenses.

A few men and women participants explained that they consulted their family members before buying major household goods. Participants described family members as "they" in their narratives, hence, it was not clear which family members fell within the category of "they". Family members might include wife, husband, son, daughter, daughter-in-law, and son-in-law or combinations of family members. More male participants than female participants reported that they asked or consulted their family members. Banu (M, 65) mentioned, "I do not purchase those things…it is their wish because everything is brought by them only. We should follow as per their interest…we need to ask them only and need to take their suggestion."

At times, the participants mentioned that their family members consulted them before making a significant purchase. Raj (M, 70) said "They discuss with me and I tell them if they like, they

should buy it. They do the buying part but they ask me first." Similarly, Gopi (M, 50) mentioned that, "If they are small items, they buy it themselves. If they are bigger items, they take my advice and take me to buy them."

In certain families, participants were not consulted about major expenses and the decisions were made by other family members; although it is not clear who these family members were. For instance, Harish (M, 60) stated, "they don't tell me anything". Devendra (M, 74), Sarala, (W, 55), Tanav (M, 45) and Raghvan (M, 54) also made similar comments indicating that they were not involved in such financial matters.

In addition, a few men and women participants included their son in the decision making process with them. More male participants than female participants revealed that they included their son in the decision making process. For instance, Jayesh (M, 70) commented, "My wife, son, and I will decide on it." In a few cases, men and women participants noted that their sons solely were the decision makers regarding the purchase of major household goods. More women than men participants said that they were dependent on the decisions of their sons about the purchase of major household things. Amita (W, 60) mentioned that she did not have a television or refrigerator in her home and she required the permission of her elder son to make such purchases. Gulab (M, 58) commented, "I don't have anything to do with it" as his son made such decisions. Gaddu (W, 50) stated,

> My son decides on what to buy. They buy and tell me later. It is as per their wish. … If TV or fridge is to be brought, it is my son's decision. He himself buys them, I don't know about those things.

Godha (W, 58), Ekanath (M, 70), and Tanuja (M, 65) mentioned that their son and daughter-in-law jointly held the decision making power regarding the purchase of major household goods. Rarely, did the participants reveal that their daughter-in-law solely decided about the purchase of major household goods. In rare instances, women participants made the decisions about major purchases in conjunction with their daughter-in-laws. Similarly, men and women participants seldom mentioned that their daughter(s) made decisions about the purchase of major household goods but this was the case for Vama (M, 80) who mentioned, "My daughters do it." In rare cases, (e.g., Hansa, W, 60 and Beena, W, 60) decisions were jointly made by the daughter and son-in-law.

*4.2.3.3.5. Pre and post cataract surgery*

A majority of men and women participants reported that there was no change regarding the control and decision making power over the finances, day to day household spending and the purchase of major items post cataract surgery.

However, a small number of women and men participants described a shift in this domain post cataract surgery. For instance Rani (W, 50) mentioned that her husband had started taking care of household expenses and finances after cataract surgery instead of the previous pattern in which both husband and wife participated in this decision-making. On the other hand, Ramesh (M, 76) explained that earlier his wife used to manage finances alone; however, after the cataract surgery both husband and wife started managing household expenses and finances. Ekanath (M, 70) stated, "Until now I used to look after all those things but since I am unable to do any work now-

a-days, I gave total responsibility to my wife and son. My son and women of the house take the decisions."

A few women participants commented that they had begun to manage the household expenses and finances after cataract surgery instead of their husband and male members of family (e.g., father-in-law). Parvathi (W, 70) said, "My husband used to look after [that]. Now financial matters are looked after by me only… I myself look after those things." Similarly, Sarika (W, 60) commented, "My father-in-law took care of all things. Presently, I take care of those things."

#### *4.2.3.4. Mobility and personal autonomy*

This theme pertains to personal autonomy and decision-making power in relation to mobility before and after cataract surgery. Mobility referred to the participants' ability to visit various places outside of their home. These places included the homes of family members (e.g., sons and daughters), homes of other relatives and friends, local market and local health care centres. The participants described whether they had personal autonomy to visit the above places on their own or they were required to be accompanied by some other family member. In addition, participants noted if they required permission from specific family members to visit such places. The accounts of participants revealed an undercurrent of power and gender relationships as well as disability status in relation to mobility and personal autonomy.

##### *4.2.3.4.1. Mobility*

Culturally and socially, males were expected to go to local markets and purchase groceries, vegetables and household necessities. Rao (M, 70) mentioned, "I will get whatever they [female

members] ask me to get." Likewise, Raj (M, 70) said "[if] they need anything I ask them and go." A majority of men participants stated that they were able to go to the local markets or homes of family members and friends on their own when such places were in the vicinity. On the other hand, male participants were accompanied by individuals from their personal support networks whenever they had to attend appointments at the health care centres or hospital.

Women participants described mobility in terms of visits to family members, relatives and friends' homes, as well as visits to a health centre. Although the responsibility for visiting the local market for the purchase of household requirements fell upon the men in rural households, a small number of women stated that they performed this duty. These women went to the local market on their own, especially when the markets were in close proximity to their homes. Similarly, most women participants could visit the homes of family members, relatives and friends on their own. On the other hand, most of the women participants were not allowed to visit the health care centre on their own and were always accompanied by family member(s). This is evident from the following statement by Anika [W, 60).

> Yes I go, not to very far off places, but I go if it is little bit near, If I have to go to my daughter-in-law's house, I go alone. If I have to go and visit my sister, I go alone… [Yet] he [son] will never allow me to go alone to the hospital.

Similarly, Rani (W, 50) revealed that she needed assistance to go to medical center and was always accompanied by her husband. However, she added that she was able to go to local market and grocery store by herself. Nevertheless, a few women participants mentioned that they were

able to go to doctor's office, hospital, or health care center by themselves or with minimal help because those places were near their homes.

Some women participants felt that they needed assistance from family members to move around. Anathi (W, 65) commented that she needed help to go out. Some women explained that they needed help with mobility due to aging, physical condition, illness, injury, and emotional difficulties. Godha (W, 58) stated, "I can't go anywhere. My son has to catch my hand and help me to go to hospital. I have diabetes and tiredness too." Abha (W, 50) reported that she was not going anywhere because her body was burnt by a kerosene lamp prior to surgery. After the surgery she stated that was not going anywhere because her daughter had passed away

*4.2.3.4.2. Mobility decisions*

The findings showed that most of the male participants had personal autonomy in that they could decide for themselves if they needed or wanted to go outside of the home. They were not required to seek permission from any member of the family. Banu (M, 65) stated that he did not require anyone's permission; he said, "[I can go out] as per my wish." Similarly, Raj (M, 70) commented, "as the head of family, it is not needed for me to take their permission. I can tell or not tell too, they don't expect me to do that. I just tell them I am going out and go." Instead of asking for permission to go outside of home, male participants usually informed their family members about their intentions and decisions. For instance, Rajive (M, 48) explained,

> I tell my wife and go… I have to inform that I am going to so and so place, isn't it? I don't tell to my son or daughter-in-law but I tell my lady that I want to go to so and so place, so I will go.

There were various reasons given by male participants as to why they informed their family members before stepping out of the house. Some participants said that the family might get worried if they were unaware of the whereabouts of the participants. Others felt that they needed to inform family members so that they could bring required groceries and vegetables from the market. If male participants were going to distant places such as another city or village in the same state or another state, they made certain that family members were informed about their travel plans.

Some male participants mentioned that all family members, especially female members, needed permission from them to go outside, particularly if men headed up the family. Mohan (M, 82) commented, "All others will ask me." Similarly, Reddi (M, 70) stated, "No, I need not ask anybody's permission but, if anybody wants to go from my home, they will ask my permission to go." At times, husbands and wives informed each other; as opposed to asking for permission. Ramesh (M, 76) said "whom do we ask? We, both wife and husband, will tell each other. That's it."

Under rare circumstances, male participants asked permission from female members of family (i.e., daughters and daughter-in-laws) to go outside. Dharma (M, 70) explained, "I ask my daughter-in-law. I have two daughter-in-laws. Since this daughter-in-law is an Anganwadi teacher and is intelligent, we gave all responsibilities in house to her."

However, most women participants stated that they required permission from male members of the family—especially husbands and sons—to go outside of the home. Badari (W, 35) said, "I take permission from my husband and then go." Another woman participant stated "husband is god. If he allows me to go then I'll go." At times, women participants mentioned that they sought permission from male members other than their husband. Amita (W, 60) mentioned that she obtained permission from her son before venturing out of the home.

In the absence of male family members, women participants often informed female family members (e.g., daughters and daughter-in-law) about their intentions about going out. This was partly due to their financial dependence on these family members. Sarala (W, 55) made a comment about this, "…she will give me money for my expenses, so I have to ask my daughter and then only go."

A few female participants stated that they did not require permission from anyone to go outside. Nirmala made it clear that she could make this decision independently, "I go by myself. I don't ask anybody. I don't need to tell anyone." Similarly, Hema (W, 60) said, "I don't need to ask anybody, not even my husband." Furthermore, they said that they only informed their family members including husband, son, daughter, and daughter-in-law about their intentions and decisions to go outside. For example, Pooja commented "I need not take permission from anybody. I just inform my husband that I am going." Status in the home determined the decision to go outside. In particular, when an elderly woman was the head of the family, she was not required to obtain permission to step out of the home. Anika (W, 60) commented, "I need not take anybody's permission as I am the elder. I don't have to ask anybody and go."

*4.2.3.4.3. Pre and post cataract surgery*

Some participants stated that their mobility was restricted due to cataracts. For instance, Rajive (M, 48) stated, "since six months I am not able to go because my vision has come down." Devendra (M, 74) also commented, "I don't go anywhere from the past one year onwards, [as] my eyes deteriorated badly." As a result, family members accompanied these participants to various places due to concerns over their safety. Reddi (M, 70) stated, "one of my sons comes with me." In the same way, some participants felt that they needed assistance from family members to move around. Falungi (F, 50) explained in her first interview, "I am unable to go by myself. My grandson used to get me whatever I wanted. From the past 10 years, I am not going anywhere due to my poor eyesight." In her second interview, Falungi commented that she was able to go out on her own because of the improvements to her vision.

Yet others clarified that they had struggled to move about independently despite their vision loss. For example, Kamala (W, 50) stated, "It is because my vision is not clear now. Somehow I manage and go because there is no one else to go other than me."

At times, male participants stated that they were not permitted to go outside of home by female family members because of their illness, disability, and age. Moreover, a few male participants were not required to go outside of home due to these factors and they asserted that it was not necessary as all of their needs were met by the family members. Similarly, some of the women commented that they had other ailments which prevented them from going outside the home, as Deena (W, 60) explained in her post-surgery interview, "I am feeling tired. I am not well. I do go [to visit friends] if I am feeling well. If I am not well, I go to bed. I sleep whenever I am unwell."

Yet most of the participants observed an improvement in their physical mobility and autonomy after cataract surgery. Most said that they were able to move around by themselves. Rao (M, 70) stated, "…Yes, I am able to go alone. I can see" Rao further reinforced the improved mobility and independence, "Yes, I am able to go my own. Even at night I am going. Earlier I was unable to go in darkness but am able to go in darkness also." In her second interview, Asha (W, 50) mentioned that she was feeling happy that she was able to go anywhere by herself—to her children's homes, the hospital or the market. However, a small minority of male participants continued to be accompanied by family members after cataract surgery. Rajive (M, 48) said, "I need somebody to accompany me to go out. I can't go alone." In addition, some participants stayed at home or near to their home. Ekanath (M, 70) said, "I am not going anywhere alone. Either I stay at home or at a temple nearby my home." A majority of women participants acknowledged that they needed less assistance from their family members after cataract surgery. For example, Kajol (W, 65) commented that she was able to go alone after the surgery without the help of her granddaughter.

#### *4.2.3.5. Synthesis of the thematic analysis*

For the most part, family composition and living arrangements did not change much as a result of cataract surgery. These matters were largely determined by customs and norms. However, the case of Paravathi is particularly germaine to the understanding of gender and power relations in the context of cataract surgery. Her circumstances changed for the better as she began to live with her daughter, rather than her son after her surgery. This change enabled her to escape the physical abuse she had suffered from her son's wife. Her improved vision allowed her to interact with her daughter's children and to perform household duties. It seems possible that her renewed

ability to contribute to the performance of the daily tasks in her daughter's home following her cataract surgery was a factor in this positive change in her life.

Indeed, many of the participants described how they were able to perform various tasks once again due to improvements in their vision. Both men and women spoke about their ability to engage in household work after the surgery. However, as women performed most of this work, the cataract surgery had a greater impact on this aspect of life for women. Decision-making about meal preparation was often linked to the socio-economic conditions in which individuals were living and to gendered patterns of life. Some women had the freedom to decide what food was to be prepared but, in many cases, it was men who provided the food (e.g., through their work in the fields or by going to a market) and hence they determined what was to be cooked and how much food was available to be consumed. Cataract surgery and improved vision did not have a substantial impact on gender and power relations within the context of intra-household matters as broader gender roles were more influential in this domain. The negative comments of some men about women (e.g. Ramesh) revealed dimensions of patriarchal attitudes that affected patterns of family life.

With regard to employment, the participants' ability to perform work outside the home was enhanced following cataract surgery. However, it was primarily men who were engaged in external employment. The qualitative analysis revealed many instances in which men described improvements in their ability to do work outside the home. However, the contact with the SIO appeared to have an impact on the perspectives of some women with regard to outside employment. This was most evident in the comments of a young woman, in the post-surgery interview, who revealed her aspirations to learn sewing and craftwork. This woman, Badari, had

reiterated the view, in her first interview, that taking outside work was limited to men. A project of the SIO focussing on teaching women how to do sewing and craftwork as a means to earn outside income may have broadened Badari's thinking about the appropriateness of taking outside work. Such a change in thinking could lead to alterations in her relationships. Indeed, within the short time (90 days) between her first and second interviews, she had already made a shift toward regularly performing outside work with the family's buffaloes.

Material and financial matters were strongly connected to the extreme poverty of the participants. The analysis showed that most participants were struggling with the basics of subsistence; challenges were linked to keeping a roof over their heads and obtaining sufficient food for two meals per day. In a number of interviews, participants spoke of the need to take out loans in order to fulfil essential needs. A recurring theme was that, even though they did not have enough income to provide them with two meals per day, they somehow managed to get by. The preoccupation with basic survival meant that many participants did not elaborate on the nature of their relationships with others in their lives. They often appeared to accept the status quo with regard to the gendered nature of living circumstances in which men and women had differing roles and responsibilities. Yet a woman participant reflected upon the notion that husbands and wives *should* help each other. In her interview, she mused about this more than once; however, when describing her own circumstances, it was clear that her relationship with her husband was far from egalitarian.

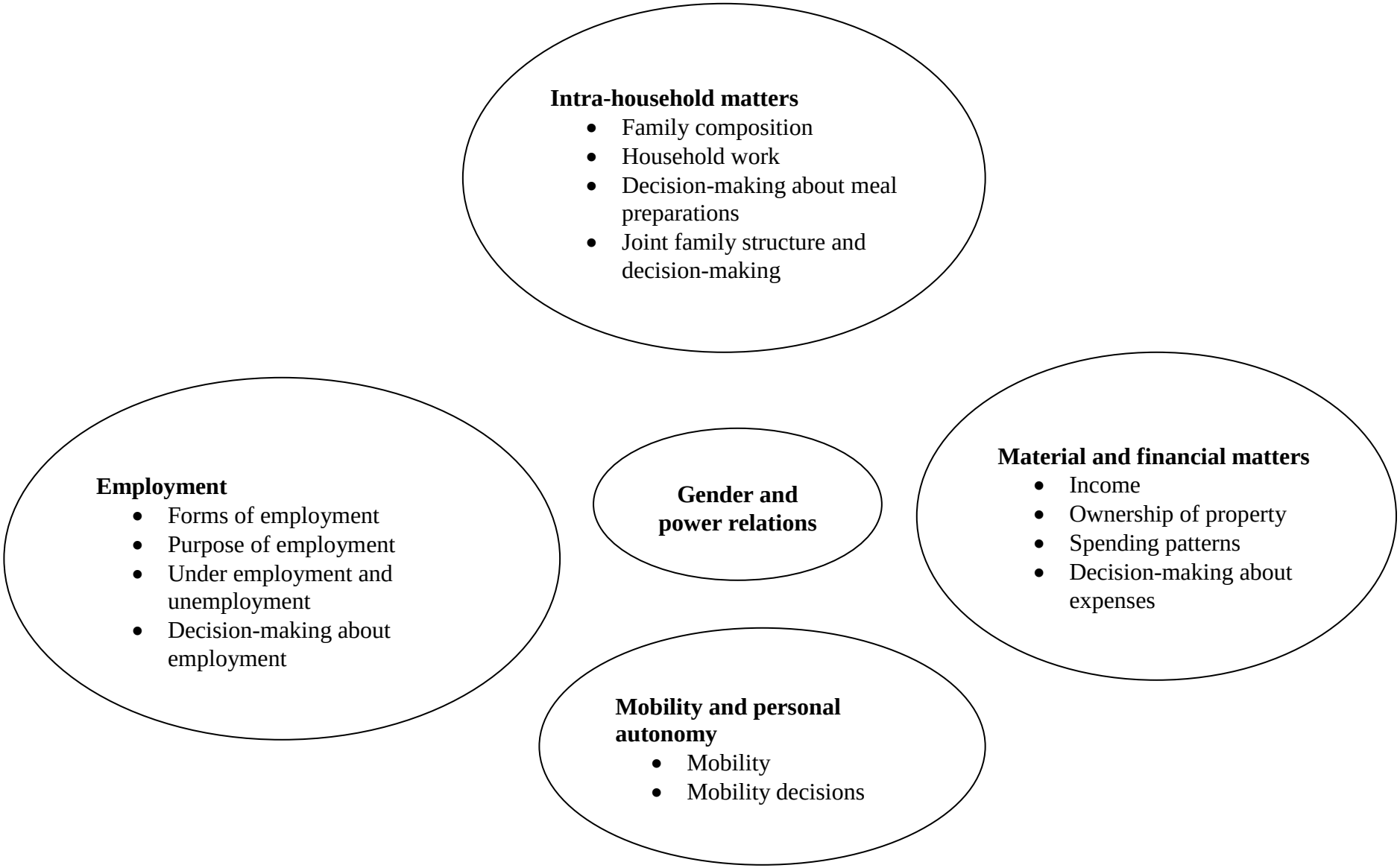
Mobility was another area in which there was a substantial change following the cataract surgery. It was clear that both men and women were able to move about more freely as a result of their improved vision. Having better vision led to the most dramatic changes in men's lives

but women also benefitted from it in that they were now able to visit relatives and friends more easily. The renewed connection with others in their social networks was a positive change for them. While this change may not have directly impacted on power relations within the family, it may have had an indirect influence on this aspect of life through the reduction in social isolation.

### 4.3. QUANTITATIVE FINDINGS

The operationalization of 11 variables to create scores for each of the 11 concepts was explained in Chapter 3 Methods. These variables are indicators of the four domains of gender and power relations discussed in the qualitative sections above and summarized in Figure 4-6.

**Figure 4–6. Dimensions of gender and power relations**



The findings presented in this section show, firstly, the results of a descriptive analysis of the pre- and post-tests for women and men (see Tables 4-2 and 4-3). Secondly, in Table 4-4 the results of analysis of variance tests (ANOVA) are shown in which the pre-test and post-test scores are compared. This analysis focuses on a comparison of groups based on gender examining any differences between men's and women's scores on the 11 variables. This analysis provides for an examination of the areas in which gender-based patterns were evident before cataract surgery and any changes 90 days after the surgery. Thirdly, the results of paired samples *t*-tests on the 11 variables are shown in Tables 4-5 and 4-6. This analysis compares pre-and post-test scores for men and then separately for women in order to gain an understanding of changes within the groups of male and female participants following cataract surgery. Fourthly, an overview (Table 4-7) is provided to summarize the significant results from tables 4-5 and 4-6.

### 4.3.1. Results

The descriptive results show that the mean scores, for both the pre- and post-surgery data, were slightly higher for women compared to men on financial/economic power, receipt of financial support, working inside the home and outside the home for others (see Tables 4-2 and 4-3). The means on the pre- and post-surgery data for the remaining variables were slightly higher for men or the same for women and men. It is important to note that the means for men and women on the 11 variables were quite similar, particularly when taking into account the standard deviations.

**Table 4-2. Descriptive results for men and women, pre-surgery**

| | Men | | Women | |
|---|---|---|---|---|
| **Variable** | **Mean** | **SD** | **Mean** | **SD** |
| Financial and economic power | 1.31 | 1.10 | 1.49 | 1.12 |
| Personal power and autonomy | 9.16 | 2.04 | 7.87 | 2.68 |
| Power within the household—decisions about meals/help for tasks | 0.94 | 0.58 | 0.80 | 0.54 |
| Socio-economic status—ownership of property/income for meals | 1.75 | 1.11 | 1.13 | 0.83 |
| Socio-economic status—receipt of financial support | 5.18 | 0.93 | 5.21 | 1.37 |
| Individual income | 91.44 | 93.85 | 45.80 | 90.63 |
| Physical mobility | 1.63 | 1.30 | 1.60 | 1.25 |
| Contribution to the household economy—working inside the home | 0.78 | 1.56 | 2.55 | 2.13 |
| Contribution to the household economy—working outside the home for others | 1.06 | 2.53 | 1.09 | 3.06 |
| Contribution to the household economy—working outside the home for own use | 1.28 | 2.79 | 0.22 | 0.85 |
| Participation in social activities | 1.06 | 1.60 | 1.06 | 1.83 |

**Table 4-3. Descriptive results for men and women, post-surgery**

| | Men | | Women | |
|---|---|---|---|---|
| **Variable** | **Mean** | **SD** | **Mean** | **SD** |
| Financial and economic power | 1.43 | 1.12 | 1.46 | 1.07 |
| Personal power and autonomy | 7.39 | 2.59 | 7.20 | 2.96 |
| Power within the household—decisions about meals/help for tasks | 1.11 | 0.68 | 1.11 | 0.67 |
| Socio-economic status—ownership of property/income for meals | 1.75 | 1.11 | 1.285 | 0.72 |
| Socio-economic status—receiving financial support | 5.18 | 0.93 | 5.34 | 1.24 |
| Individual income | 43.43 | 93.14 | 38.12 | 80.32 |
| Physical mobility | 2.49 | 1.12 | 2.20 | 1.25 |
| Contribution to the household economy—working inside the home | 0.64 | 1.01 | 2.44 | 1.80 |
| Contribution to the household economy—working outside the home for others | 1.18 | 2.54 | 1.38 | 2.87 |
| Contribution to the household economy—working outside the home for own use | 0.68 | 1.99 | 0.18 | 0.38 |
| Participation in social activities | 1.35 | 1.96 | 1.26 | 1.54 |

Group differences between men and women were statistically significant, across the pre- and post-surgery scores, in two areas as indicated by the ANOVA tests (Table 4.4). On both the pre- and post-surgery scores, socio-economic status measured in terms of the ownership of property as well as contribution to the household economy through work inside the home were statistically significant on both the pre- and post-surgery scores. The direction of the mean scores was consistent for the variables on which these significant gender differences were found. The pre- and post-values of male participants were higher on the variables indicating SES as measured by the ownership of property and income sufficient for two meals per day. However, women's scores were higher on the contribution to the household economy through work inside the home. Social and cultural norms are vital contributing factors that may account for these results as men were more likely to own property and women were more likely to do the inside work such as cooking, cleaning and laundry.

On three variables, the ANOVA tests indicated that scores significantly differed between women and men but only on the pre-surgery data. These differences were evident for personal power/autonomy, individual income and contribution to the household economy through work outside the home for own use. Men's scores were higher on these three variables—personal power/autonomy, individual income and contribution to the household economy through work outside the home.

**Table 4-4. Pre- and post-surgery comparison of scores for men and women using ANOVA**

| | Pre-surgery | | | Post-surgery | | |
|---|---|---|---|---|---|---|
| **Variable** | ***df*** | ***F*** | **Significance** | ***df*** | ***F*** | **Significance** |
| Financial and economic power | 97 | 0.61 | 0.437 | 96 | 0.01 | 0.910 |
| Personal power and autonomy | 97 | 7.18 | 0.009* | 96 | 0.12 | 0.728 |
| Power within the household—decisions about meals/help for tasks | 96 | 1.43 | 0.235 | 96 | 0.04 | 0.948 |
| Socio-economic status—ownership of property/income for meals | 96 | 9.34 | 0.003* | 96 | 4.80 | 0.031* |
| Socio-economic status—receiving financial support | 97 | 0.02. | 0.877 | 94 | 0.64 | 0.425 |
| Individual income | 94 | 5.79 | 0.018* | 95 | 0.12 | 0.735 |
| Physical mobility | 95 | 0.01 | 0.916 | 92 | 1.35 | 0.249 |
| Contribution to the household economy—working inside the home | 97 | 22.12 | 0.000* | 97 | 38.14 | 0.0001* |
| Contribution to the household economy—working outside the home for others | 97 | 0.002 | 0.963 | 97 | 0.14 | 0.707 |
| Contribution to the household economy—working outside the home for own use | 97 | 6.33 | 0.014* | 97 | 2.89 | 0.092 |
| Participation in social activities | 97 | 0.000 | 0.985 | 97 | 0.06 | 0.802 |

* Statistically significant at the 95% confidence interval, $p < 0.05$

It is notable that, cataract surgery improved the visual acuity of the participants as was shown above based on self-reports of improved vision. The ANOVA tests, based on the scores on physical mobility in the pre-and post-test phases of the study, did not show statistically significant differences when comparing men and women. Thus men and women did not appear to differ in this regard. However, the mean scores on mobility were higher for both men and women on post-surgery scores compared with pre-surgery scores. In addition, the improvement in physical mobility may be reflected in increased participation in social activities. The scores for both men and women increased on the latter variable in the post-surgery data. In addition, the findings from the qualitative data (reported above) revealed that there is some improvement in mobility in post-cataract circumstances.

The comparison of means for men and women did not show statistically significant differences either at pre- or post-surgery on several variables. These were financial and economic power, SES measured through household decisions about meals/help for tasks, receipt of financial support, physical mobility, contribution to the household economy—working outside the homes for others, and participation in social activities.

However, there were some small changes in these areas. As noted above, both men and women reported increases in participation in social activities three months after their surgery. In addition, men reported a slight increase in financial and economic power after the cataract surgery. Both men and women also reported slight increases in contributions to the household economy through work outside the home for others.

On two variables for which there were no gender differences in pre-surgery and post-surgery scores, the mean scores showed some inconsistency in that there was a slight increase amongst women and little change among men from pre-surgery to post-surgery. On SES measured in terms of ownership of property/household income sufficient for two meals per day, and SES measured in terms of the receipt of financial support remained largely same for men while women's scores increased slightly across the two data collection periods.

### 4.3.2. Comparison of changes between pre-surgery and post-surgery scores for men and women

The comparison of mean scores for men using paired t-tests to examine change in responses three months after the cataract surgery showed that there were three variables on which there were significant differences (see Table 4-5). This test was used to examine differences by subtracting the pre-values from the post-values. The variables on which there were significant differences for men were personal power/autonomy, individual income and physical mobility. Examination of the mean scores shows that personal power/autonomy as well as income decreased while physical mobility increased significantly for men between the pre- and post-surgery interviews.

Amongst women, there were significant increases on two variables: power within the household through decisions about meals and help for household work as well as mobility (see Table 4-6). The mean scores for women on both these variables were higher in the post-surgery interviews.

**Table 4-5. Paired *t*-tests examining changes[†] in pre- and post-surgery scores for men**

| -Variable | *df* | *t* | Significance (2 tailed) |
|---|---|---|---|
| Financial and economic power | 50 | 0.85 | 0.701 |
| Personal power and autonomy | 50 | -3.56 | 0.001* |
| Power within the household—decisions about meals/help for tasks | 50 | 1.39 | 0.172 |
| Socio-economic status—ownership of property/income for meals | 50 | -0.44 | 0.659 |
| Socio-economic status—receiving financial support | 50 | -0.18 | 0.860 |
| Individual income | 49 | -3.41 | 0.001* |
| Physical mobility | 48 | 4.16 | 0.0001* |
| Contribution to the household economy—working inside the home | 50 | -0.78 | 0.437 |
| Contribution to the household economy—working outside the home for others | 50 | 0.27 | 0.788 |
| Contribution to the household economy—working outside the home for own use | 50 | -1.31 | 0.195 |
| Participation in social activities | 50 | 0.83 | 0.410 |

[†] Consistent with conventions for examining changes in variables within the pre-post study design, the pre-surgery values have been subtracted from the post-surgery values.
* Statistically significant at the 95% confidence interval, $p < 0.05$

**Table 4-6. Paired *t*-tests examining changes[†] in pre- and post-surgery scores for women**

| Variable | *df* | *t* | Significance (2 tailed) |
|---|---|---|---|
| Financial and economic power | 45 | 0.000 | 1.000 |
| Personal power and autonomy | 45 | -1.47 | .0149 |
| Power within the household—decisions about meals/help for tasks | 44 | 2.91 | 0.006* |
| Socio-economic status—ownership of property/income for meals | 44 | 0.98 | .0333 |
| Socio-economic status—receiving financial support | 43 | 0.69 | 0.497 |
| Individual income | 44 | -0.45 | .656 |
| Physical mobility | 41 | 2.31 | .0.026* |
| Contribution to the household economy—working inside the home | 46 | -0.28 | 0.781 |
| Contribution to the household economy—working outside the home for others | 46 | 0.59 | 0.560 |
| Contribution to the household economy—working outside the home for own use | 46 | -0.29 | 0.773 |
| Participation in social activities | 46 | 0.59 | 0.558 |

[†] Consistent with conventions for examining changes in variables within the pre-post study design, the pre-surgery values have been subtracted from the post-surgery values.

* Statistically significant at the 95% confidence interval, $p < 0.05$

A comparison of the results for men and women indicates that, while men's scores showed a significant increase in personal power and autonomy and mobility, there was either no significant change or a significant decrease on other variables measured in the study. Similarly, the comparison of women's scores across the two interviews shows that they experienced some increase in help for household work and mobility but there was no significant change on other variables. The decreases in income, especially for men, are reflective of the general finding that, overall, few participants tended to work outside after cataract surgery.

The qualitative analysis showed that a government pension was an important source of income amongst elderly participants. This source of income did not increase but some participants struggled to continue working outside the home (e.g. by selling products). This may provide an explanation for the decreased level of income from the pre- to the post-surgery interviews. While the cataract surgery did not appear to contribute to change in these areas, the qualitative results showed that there was some improvement in the quality of life and in mobility and involvement in social activities as noted previously. Yet men and women engage in different activities and social and cultural norms mainly contributed to those differences. Men's and women's tasks are highly gender segregated in rural India.

On most variables listed in Tables 4-4 to 4-6—seven of eleven variables—there were significant gender differences based on the ANOVAs or on the t-tests for men and/or women (see Table 4-7). As suggested by the pattern in the overview of significant results indicated in Table 4-7, traditionally men have more personal power and autonomy and are primarily those who work outside the home to obtain external income used to support the family. It has been mainly women who have looked after the household work. Cataract surgery was not found to be

associated with any differences between men and women for the variables financial and economic power, socio economic status through ownership of property, socio economic status in terms of receiving financial support, working outside the home for others, or participation in social activities. Cultural norms are important contributory factors to the results obtained when examining these variables.

### 4.3.3. Descriptive analysis on variables indicating gender differences

The sections below provide further descriptive analysis of the seven variables shown in Table 4-7 on which there were statistically significant gender differences. Descriptive analyses are presented by exploring responses to the individual questions asked for each of the eleven variables operationalized in this study in order to examine the underlying patterns, as well as additional information that provides for a better understanding of the social context of the participants.

**Table 4-7. Overview of significant differences**

| Variable | ANOVA | | t-test | | Further analysis |
|---|---|---|---|---|---|
| | Significance | | Significance | | |
| | Pre-surgery | Post-surgery | Men | Women | |
| Financial and economic power | – | – | – | – | – |
| Personal power and autonomy | .05 | – | .01 | – | ✓ |
| Power within the household—decisions about meals/help for tasks | .01 | .05 | – | – | ✓ |
| Socio-economic status—ownership of property/income for meals | .01 | .05 | – | – | ✓ |
| Socio-economic status—receiving financial support | – | – | – | – | – |
| Individual income | .05 | – | .001 | – | ✓ |
| Physical mobility | – | – | .01 | .05 | ✓ |
| Contribution to the household economy—working inside the home | .05 | – | – | – | ✓ |
| Contribution to the household economy—working outside the home for others | – | – | – | – | – |
| Contribution to the household economy—working outside the home for own use | .0001 | .0001 | – | – | ✓ |
| Participation in social activities | – | – | – | – | – |

#### *4.2.3.1. Intra household matters*

Intra household matters include family composition, the distribution of household work, decision-making about meal preparations, and decision-making within the context of a joint family structure. The family setting in a rural household may differ from that in urban contexts and the allocation of household work reflects the rural context for the current study. The joint family structure/intergenerational structure of rural family members also influences decision making. However, any changes in intra household matters following the cataract surgery were investigated in order to better understand gender and power relations in rural households.

##### *4.2.3.1.1. Personal power and autonomy*

The concept of personal power and autonomy was measured by asking the following questions: "Do you have to ask for permission to go: (a) to the home of relatives or friends in the village; (b) to the local health centre or to seek medical advice; (c) to the local market?" The majority of the participants, both men and women, were over 55 years of age, and mainly stayed in their home due to their visual impairment (cataracts). As noted above, many participants lived with their spouses or other family members. The requirement to ask for permission to go out to visit friends, the local health centre or market was decreased for men and women between pre- and post-surgery interviews (see Figures 4-7a and 4-7b). Elderly men and women had increased ability to move around their village and their personal autonomy increased following cataract surgery. However, since a majority were elderly persons, other family members had some concerns about their safety as they went about their day-to-day activities when they were travelling alone. However, it is notable that in both the first and second interviews, a larger proportion of the women had to ask for permission to go out.

**Figure 4-7a. Personal power and autonomy: Need to ask for permission, pre-surgery**

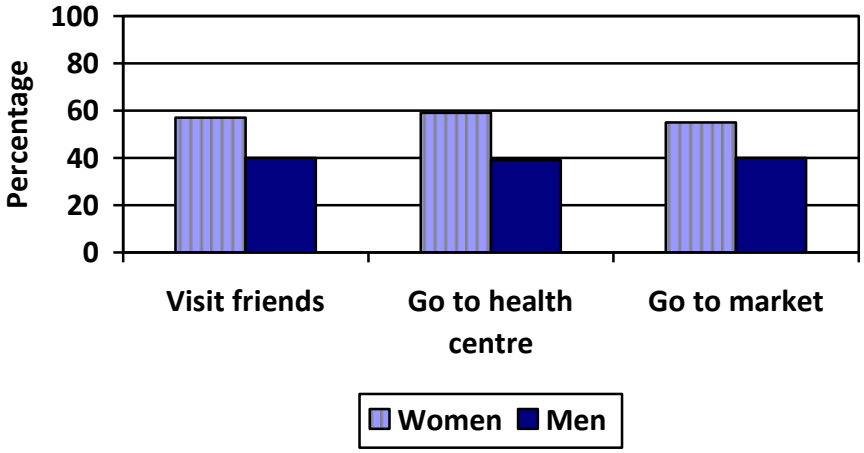



**Figure 4-7b. Personal power and autonomy: Need to ask for permission, post-surgery**

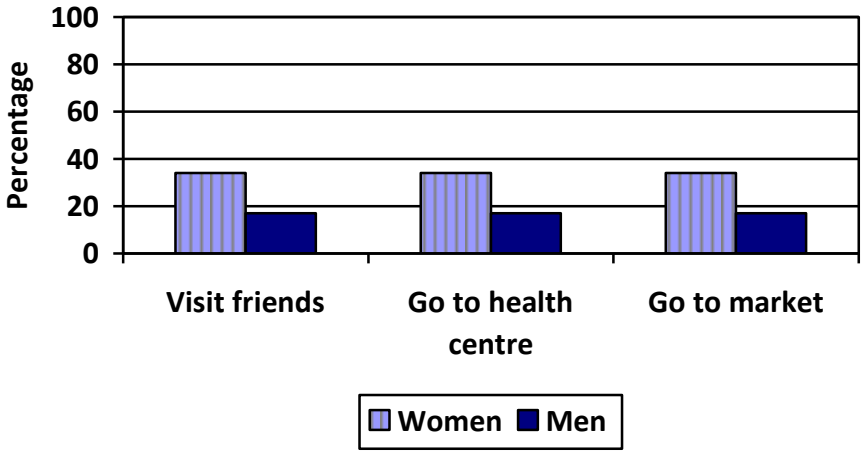
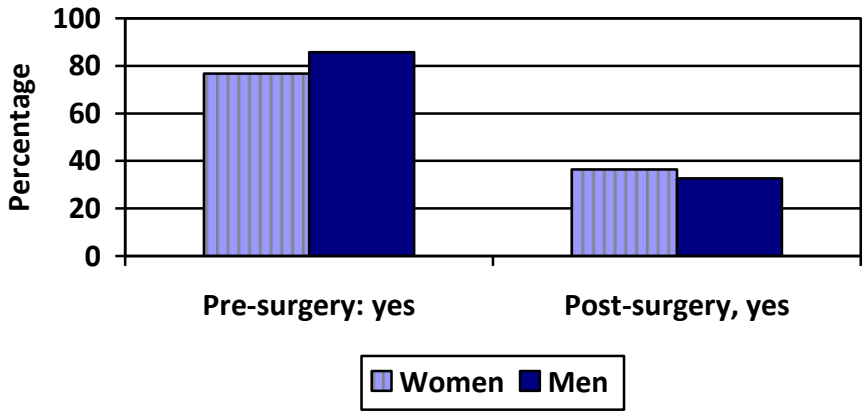


**Figure 4-8. Personal power and autonomy: Influence over work outside the home, pre- and post-surgery**




The participants were also asked whether they had any influence over the decision about working outside the home for income. While both men and women indicated greater autonomy in their ability to go out within the local community without asking for permission, when it came to working outside the home to earn income, both women and men perceived that they had less influence over this decision in the post-surgery interview (see Figure 4-8). Considering the results of the qualitative analysis, it is possible that this reduction in personal autonomy was due to a greater perception among some participants of their increased capacity to do outside work in the face of concerns from other family members about their well-being.

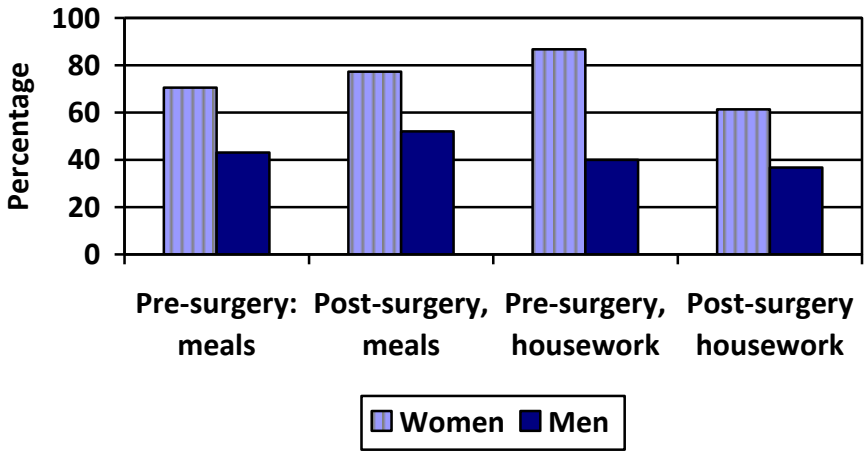
The results obtained from analyzing the variable "personal power and autonomy" may be further supported by the changes in the participants' mobility (discussed further below). Cataract surgery effectively removed a visual impairment and thus resulted in greater "mobility" for both men and women. There was an improvement in autonomy, as measured through the need to ask

for permission to go out. Yet it is surprising that such a change did not appear to provide greater autonomy with regard to their influence over decisions about outside work activities.

*4.2.3.1.2. Power within the household: decisions about meals and housework*

As is shown in Figure 4-9, the pattern in decisions about meals and housework was similar for men and women participants. Slightly more women and men perceived that they could make decisions about meals after the cataract surgery as decision-making power increased in this area for both men and women. However, a different pattern was evident regarding the completion of household work such as cleaning and doing laundry. Both women and men believed that they had less power over these decisions after the surgery. As these are tasks that are seen as being within the domain over which women have primary responsibility, the women participants indicated that they had greater decision-making authority over decisions about these matters.

**Figure 4-9. Power within the household: Decisions about meals and tasks, pre- and post-surgery**



#### *4.2.3.1. Ownership of property and level of income, pre- and post-cataract surgery*

##### *4.2.3.1.1. Socio-economic status—sufficiency of household income for meals*

Socio economic status provides insight into gender differences and relationships in rural households. The ownership of property was categorized into three types: house, agricultural land, and other real estate. In general, property ownership is gendered and men have more authority to own real estate property. For example, in the context of marriage, the dowry system is still practiced in rural villages; property is given to the groom by the bride's parents. In some cases, property is given to women. These societal norms and practices cannot be changed over a few months.

A larger proportion of men than women stated in the pre-surgery and the post-surgery interviews that they owned their home, agricultural land or other property (see Figures 4-10a and 4-10b). Overall, fewer participants reported that they owned property following the cataract surgery. In the qualitative analysis, it was reported that a practice was to sign over ownership of property, notably to their children but sometimes to in-laws. The results showing that fewer participants in the post-surgery interviews owned their homes indicate that about 15 percent of the men and 7 percent of the women had transferred ownership between the pre- and post-surgery interviews. The decrease in property ownership among men and women is puzzling; it may raise the question as to whether the participants' responses reflected a true change in the ownership of property or a change in occupancy of a particular piece of property. Such changes were not expected within the short period of time between the pre-surgery and the post-surgery interviews.

**Figure 4-10a. SES: Ownership of property, pre-surgery**

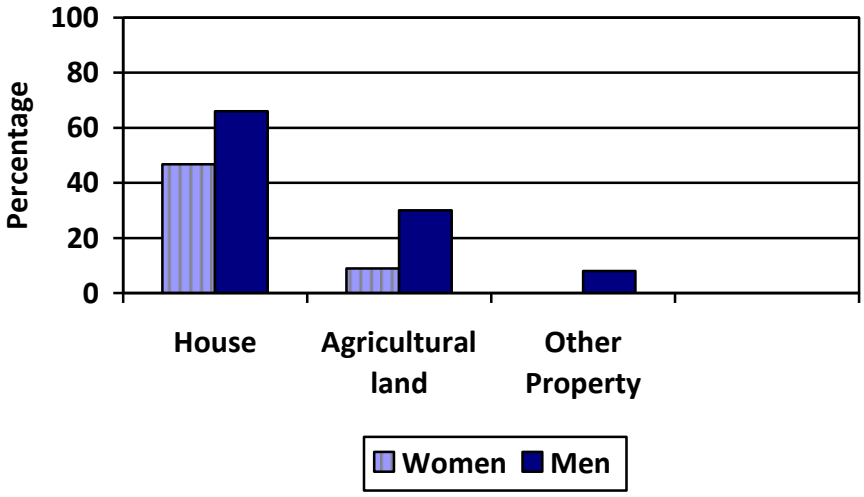
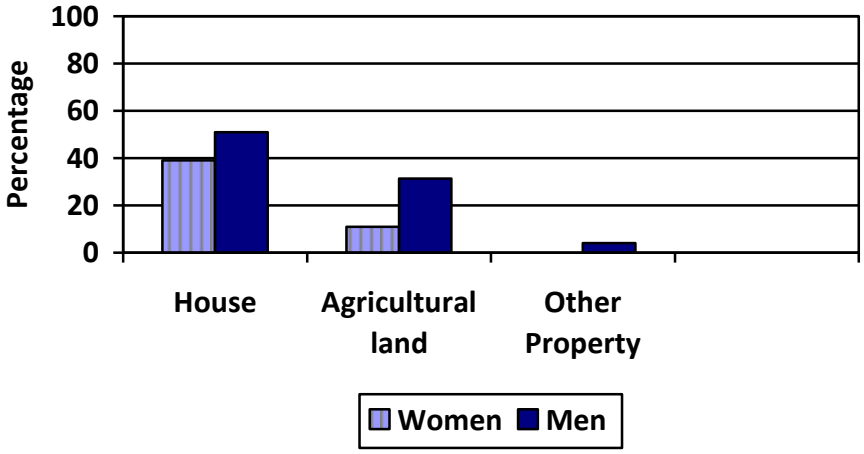


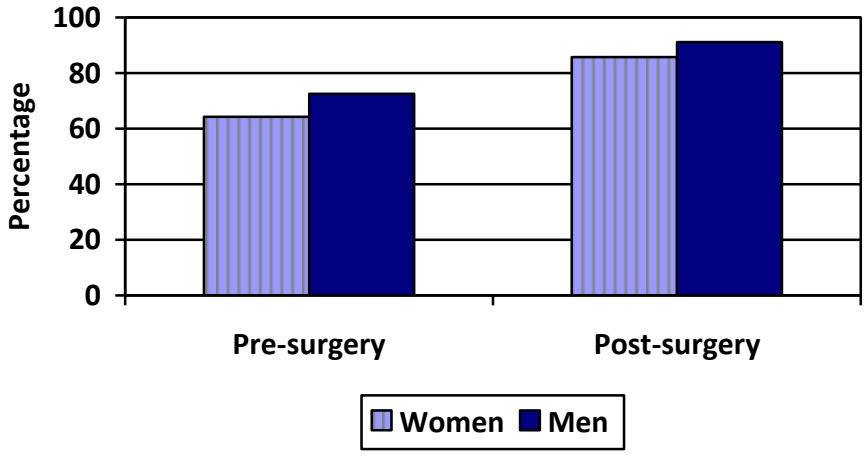

**Figure 4-10b. SES: Ownership of property, post-surgery**




An indicator of socio-economic status in the household was measured through the question: "Is your household income sufficient to provide two meals per day? Having income sufficient for two meals each day is a good indicator of the adequacy of income to meet the most basic needs of the participants. The results indicated that income sufficiency for meals increased both for

men and women. As is shown in Figure 4-11, a slightly larger number of male participants indicated that their income was sufficient to provide for two meals each day. However, in the pre-surgery interviews, over a third of the women and a quarter of the men stated that they did not have enough income for two meals. This proportion had decreased by 90 days after their cataract surgery so that less than ten percent of the men and fifteen percent of the women did not have enough income to allow them to eat two meals per day. It is possible that improved vision, which was associated with increased mobility after their surgery for both men and women, also improved the participants' ability to become more involved in income generating activities, therefore increasing their income sufficiency to have two meals a day.

**Figure 4-11. Income sufficient for two meals per day, pre- and post-surgery**




*4.2.3.1.2. Individual Income*

Participants reported on the level of income they earned working outside the home by answering the question, "How much money do you earn working outside the household?" It must be noted

that, in the rural Indian context, payment in goods is equally valued along with payment in money. As was reported above, men earned more income than women at both pre-surgery and post-surgery interviews. In the pre-surgery interview, 26 percent of the men and 53 percent of the women stated that they had no income. At the post-surgery interview, the proportions had increased to 63 percent of the men and 69 percent of the women. The individual income of both men and women decreased after their surgery. This finding is similar to that reported above regarding the ownership of property. Following their surgery, both men and women owned less property and had less income compared to their pre-surgery situation. These findings may be linked to a shift among the participants to greater dependence upon other family members. While these findings are counter-intuitive given the improvement in their vision following the cataract surgery, they may reflect qualitative findings reported above indicating that some older participants became reunited with their children after their surgery after a period of separation and distance. Thus greater financial dependence on others may be linked to enhanced social ties.

#### *4.2.3.2. Mobility*

Many factors are linked to an individual's mobility. Age and social dynamics play a significant role. All participants were from rural areas and they faced common challenges in travelling to the local market, the health centre and to the homes of friends and relatives in the same village or nearby villages. Social dynamics and the costs associated with the transportation system in the rural village influenced the mobility of the individual. For example, in the qualitative analysis, it was found that some participants did not access health services as often as they wanted due to the cost associated with paying for transportation via auto rickshaw.

Yet Figures 4-12a and 4-12b show that most men and women reported that they were able to go out on their own to visit friends, go to the local health centre and/or go to the local market. Prior to their surgery, many participants stated that they were going out alone, despite their vision loss, even though some reported that it was dangerous for them or took a long time to travel to a destination. The improvement in vision following the cataract surgery allowed a larger percentage of the male and female participants to go out alone. After their surgery, their mobility and personal autonomy increased, and (as is reported below) some were involved in farming and animal rearing. Importantly, while their non-cash contributions to the household increased, the amount of cash that they managed or kept declined (as reported below). The findings on these indicators underscore the importance of recognizing the interconnections between these factors which, together, help to explain the decrease in monetary contributions to the household.

**Figure 4-12a. Mobility and ability to go out alone, pre-surgery**

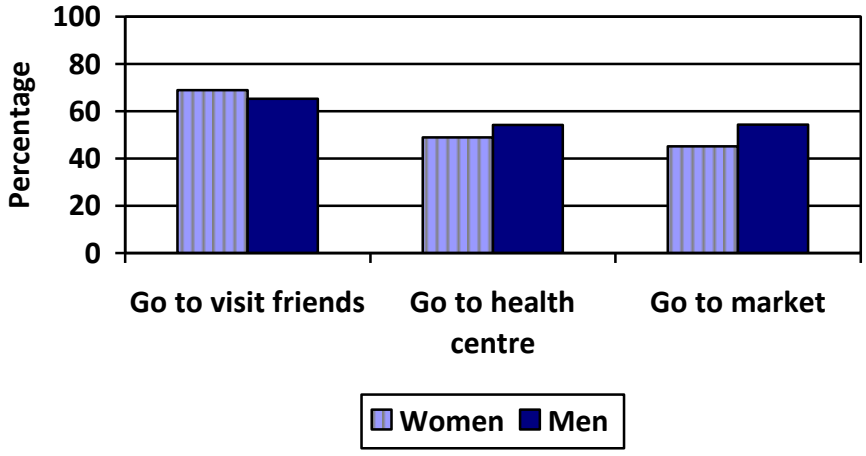
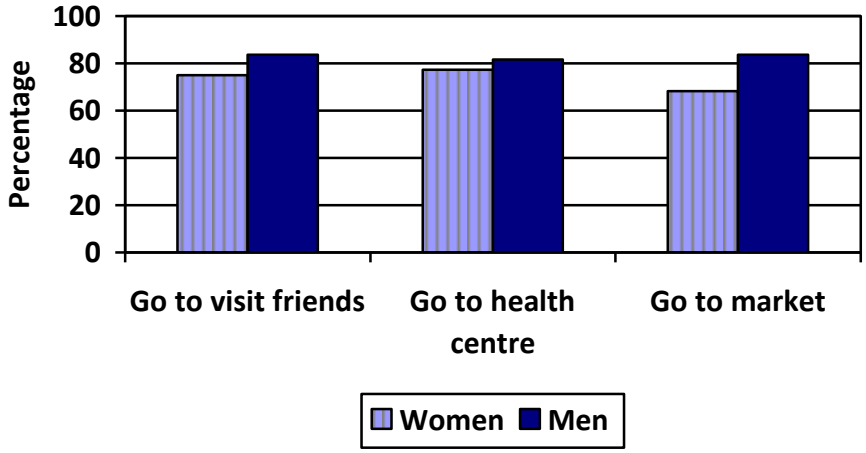


**Figure 4-12b. Mobility and ability to go out alone, post-surgery**




### *4.2.3.3. Contribution to the Household Economy through Tasks*

The contribution to the household economy was measured using a 24 hour time scale. The time-use data collection was based on the stylized activity list used by the World Bank Living Standards Measurement Survey (LSMS) (Harvey and Taylor, 2000). The activity categories were modified slightly so they were more relevant to the target group for the current study. The contribution to household economy was measured in three areas: (1) working inside the house, (2) working outside the house for others, and (3) working outside the house for one's own use. Activities in these areas were measured on a 24 hour time scale. The contribution to household economy (activities performed while working inside the household) was categorised as cooking, cleaning the house, washing up and going to the local market.

As is shown in Figures 4-13a and 4-13b, with the exception of cooking tasks, women reportedly increased their contributions to their households as of the post-surgery interview. They reported

increases in the amount of time they spent on washing dishes, cleaning the house and grocery shopping in the market. In the post-surgery interview, men reported that they spent more time cooking and going to the market compared with their first interview. The data show the extent to which women assume more responsibility for these household tasks. While, in the pre-surgery interview, men in the sample were doing slightly more of the grocery shopping in the market compared with the women, at the post-surgery interview, nearly twice as many women compared to men reported that they were doing this work.

In rural India, women are engaged mainly in managing household work such as cooking and cleaning. Women usually work inside the home and provide domestic labour; yet, many perform some outside tasks, notably fetching firewood and water. Some also work in their own fields. The cultural phenomena pertaining to the gendered division of labour were reflected in the results.

**Figure 4-13a: Contribution to household tasks, pre-surgery**

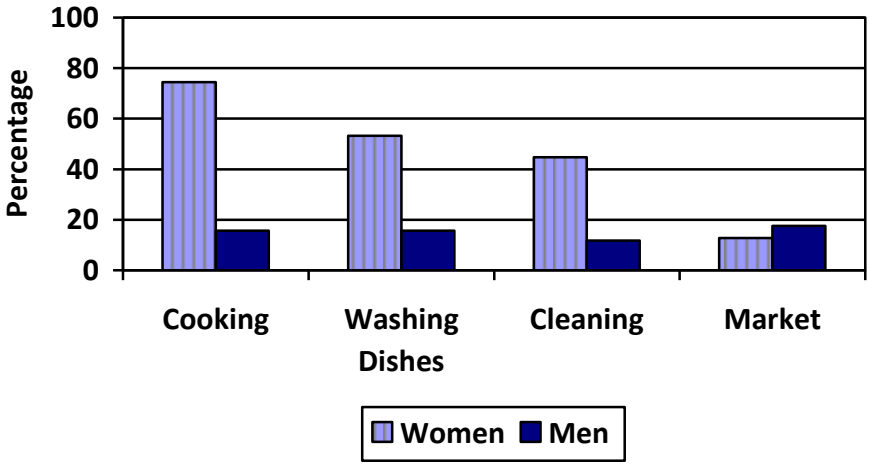
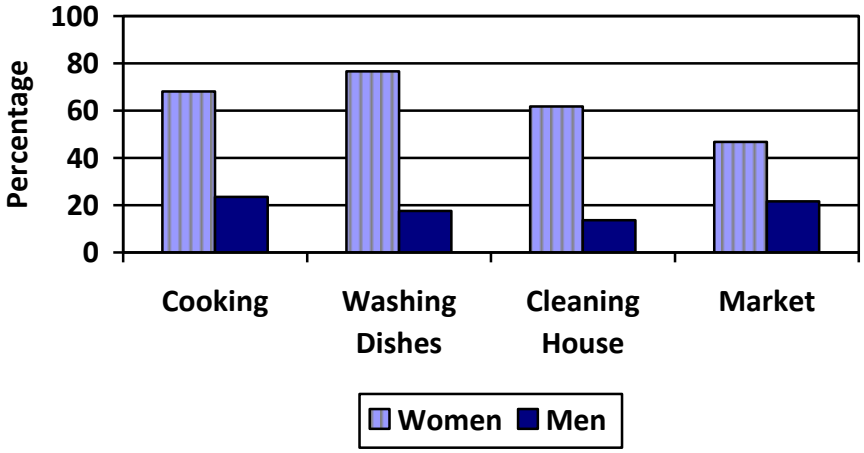


**Figure 4-13b. Contribution to household tasks, post-surgery**




**Contributions to the Household through Work Outdoors (Unpaid Labour)**

Various types of labour within the household and external to the household are critically important, especially since many elderly persons stay in the home without any financial support or help from their children and relatives. In some cases, the qualitative results showed that parents live in the home with children but lead their lives separately.

Measuring income solely in terms of the monetary value does not provide for an understanding of all ways in which people survive within rural contexts. It must be recognized that the exchange of labour and goods plays a significant role in a rural economy and functions in a similar way as money or cash income as a means of economic support. In rural India, it is still the case that goods are often used to barter for other goods in many transactions (rather than relying on a cash economy). Subsistence farming is a major source of food generation for most rural communities.

Rather than being restricted to work within the home, a small percentage of the women participants were actively engaged in farming activities and this reduced the amount of money required for daily expenditures. An increase in external activities may pertain to the exchange of goods such as fruits, vegetables, chickens and eggs. Among the activities mentioned by participants when working outside the house for their own use were agricultural farming, rearing animals such as buffalo, goats and, chickens, fetching firewood and water, processing agricultural products such as mango drying, juice making, and bee keeping.

As noted above, the mobility of both female and male participants increased. Due to better vision, participants were able to be more engaged in activities external to the home such as agricultural work, tending animals and collecting or fetching firewood and water. In the pre-surgery interview, few of the men or women participants were doing any outside work, whether it was farming or agricultural work, caring for animals or fetching firewood or water (see Figure 4-14a). However, more men were doing this work compared to women. The pattern was similar at the post-surgery interview, except that fewer women were doing farming or agricultural work, including caring for animals (see Figure 4-14b). However, more than twice as many of the women reported that they were fetching firewood or water at the second interview.

**Figure 4-14a. Contribution to household, outside work, pre-surgery**

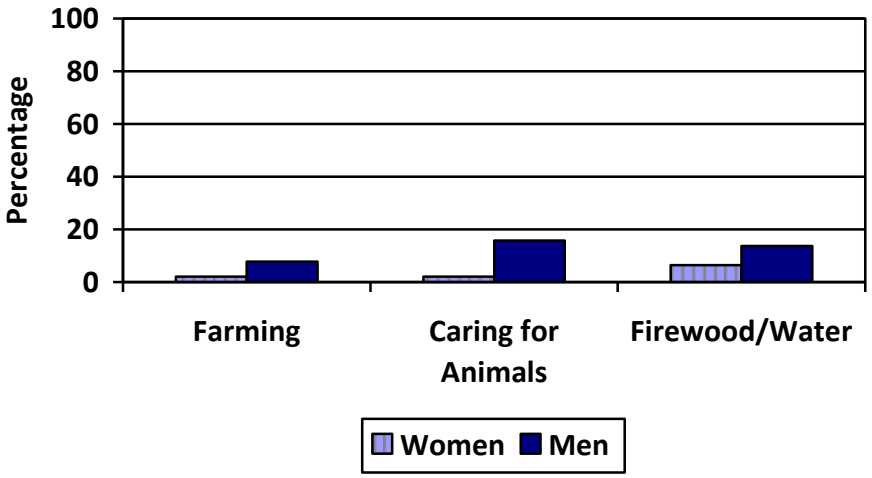
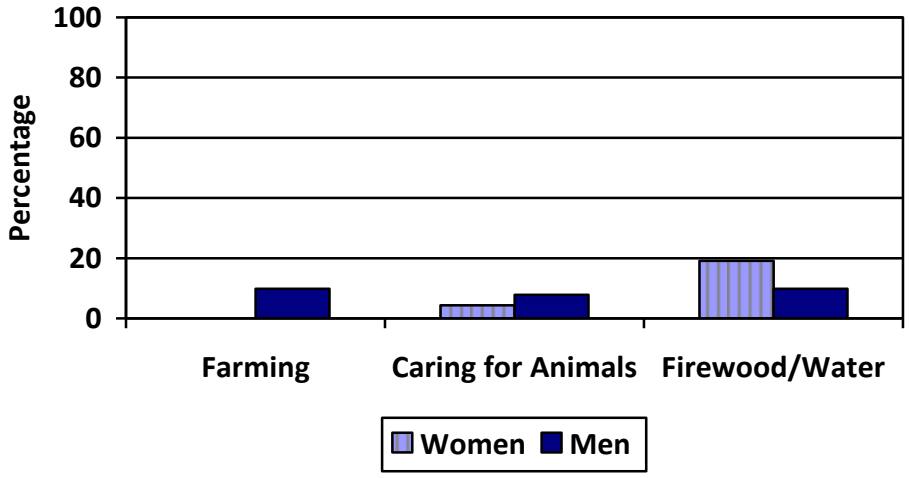



**Figure 4-14b. Contribution to household, outside work, post-surgery**




In the rural Indian context, many villagers are involved in farming activities. Many work their families' own agricultural land and manage their own livestock. These activities are a critical part of the livelihood of rural Indians. The findings show that, even though most of the

participants were elderly, some were still involved in sustainable income producing or expense reducing activities to help manage their day-to-day expenses.

Nevertheless, overall, there was not much change after cataract surgery for both men and women with regard to the time spent working outside on their own agricultural land. Even after their visual impairment was corrected, their activities involving working outside the house for one's own use did not significantly increase. Since their mobility and personal autonomy had increased, men and women were able to move about. The support that they received for daily living was enhanced. But perhaps due to their advanced age, there was a reduction in their other activities such as agricultural work.

# CHAPTER 5

# DISCUSSION

The main focus of this research study was to explore the impact of cataract surgery on power relations associated with any changes in the household linked to cataract surgery, as well as in the activities of the formerly visually impaired person. In this chapter, first, I will discuss my findings in relation to the major themes identified in the literature review and exposed in the methodology. In the second part of this chapter, I will examine the findings from other studies on cataract surgery in relation to my findings. The last part will examine strengths and limitations of the study as well as a particular challenge, the translation of the participant interviews.

## 5.1. DISCUSSION OF FINDINGS PERTAINING TO MAJOR THEMES

### 5.1.1. Intra household matters

#### *5.1.1.1. Power within the household—receiving help for cooking and cleaning*

Comments of participants indicate that the conjugal relationship is strengthened in old age for both the husband and the wife as they share work in the household. Also the gender disparity in household work such as cooking and cleaning was reduced after cataract surgery for some participants but, for the most part, the dominant patterns in domestic labour were not altered—once vision was restored, the gendered nature of the traditional division of labour was also evident.

Due to rapid urbanization, the children of many participants, seeking better economic prospects have moved away from their rural villages to urban areas. Elderly participants must manage their day-to-day issues on their own and their conjugal relationship is a key instrument in their survival. Some women commented that they were getting support from their husbands for cooking and cleaning in the household and others stated that both of them worked together to make ends meet. These findings are not to be interpreted as support that changes are occurring in the dominant Hindu culture in rural India. Instead, first, these are indications of survival strategies adopted by the participants. Secondly, they are an indication that the participants were able to manage the work in the household by themselves.

#### *5.1.1.2. Power within the household—decisions about meal preparation*

Meal preparation has a strong relation to conjugal authority and it is clearly visible in statements provided by the participants. A male participant's statement strongly shows the collaboration between husbands and wives: "It does not matter if my wife decides or I decide. We both will eat what is prepared." Women provide domestic labour and cooking is a traditional part of their household activities. This is also clearly highlighted in their statements. From the narratives of the participants, it appears that cooking is part of household work allocated to women. However, an interesting discovery is that adding flavour to meals was often accomplished through a conversation between spouses and with the input of the men in the household.

In the Indian context, women are the direct providers of the meals. In the very popular epic story of Ramayana, the king and queen were banished from the kingdom and the queen started to cook and prepare meals. In Mahabarata, Draupadi cooked for her five husbands. Mother Kunti, who

was a princess, cooked for the men when she was in the forest. One of the Rishis (a person who has extraordinary power) provides some power to Draupadi. Once she had done the cooking, her vessels never became empty, no matter how many people she had to feed. The food that she cooked multiplied until she ate (Devasahayam, 2005). In addition to these epic stories, gender features prominently in food preparation. Cooking is often coded as feminine because women have a strong relationship with food preparation (Counihan, 1989). DeVault (1997) claims that cooking is service work that women perform, not for themselves, but to meet the needs of others, notably men. Devasahayam (2005) noted in her study that, in urban Malaysia, Hindu women exercised power and achieved pleasure in the everyday ritual of cooking, while they created for themselves a gendered identity specific to their class status. The rural Indian population is fragmented according to class, caste, language and religion, and women express their identity in their family based on their social identity.

### 5.1.2. Employment: Individual income

In support of the interpretation that there was increased mobility and personal autonomy following cataract surgery, one of the male participants said: “I don’t get any money for working in the field. I raise crops.” This statement points to one reason why cash income declined after surgery; the activity does not generate any cash income. On the other hand, some participants were elderly and said that their lack of physical strength due to old age made it difficult to work for cash. In rural India, most men and women provide unskilled labour in exchange for cash income. With increased mobility, they were now able to visit their children and neighbours and this enhanced their living support. But, as a consequence, their cash income declined.

### 5.1.3. Material and financial matters

#### *5.1.3.1. Financial and economic power*

Women participants explained how they managed household expenses and decisions about meals, firstly, “My husband earns and gives it to me; I only take care of the household expenses” and secondly, “My husband brings some rice and oil from the social distribution system, and I will take care of our daily requirements.” These comments and those of men that were consistent with them, indicate how women, after surgery, are more often managing the available goods required for day-to-day life. It seems that the issue of “who controls the money” was not answered in the context of cash value, but in the context of goods that are generally used in rural households. Men were generally involved with earning money or goods and women were mainly involved in managing them. Yet these findings do not fully address who controls the money and who makes the decisions about how to spend the money.

Most of the participants were elderly and tended to stay with their children. These social dynamics also were a significant influence when measuring financial and economic power within the household. In addition, some of the participants stated that they owned land. Some of these participants explained that a lack of sight had forced the sale of the family’s buffalos. Following the surgery and the recovery of eye sight, some participants revealed that they once again had animals and/or were working land allowing them to earn money. These findings provide insight the manner in which participants were able to make increased contributions to the household economic activities following cataract surgery.

Across the developing world, 30 to 50% of rural landless residents are involved in non-farming activities for their survival (Hoggblade et al., 2009). The rural Indian economy is transforming itself from a traditional agrarian economy to a non-farming economy. The growing number of marginal farmers and the lack of agricultural performance among rural villagers become serious matters when dealing with social issues such as poverty. The Indian economy is shifting from agrarian production economy to other sectors, such as industry, services and finance. In rural households, activities are based on the possibility of generating income. Yet participants' answers provided a limited explanation to the question pertaining to financial and economic power. The rural non-farm economy can productively absorb many agricultural workers and small farmers are being squeezed out of agriculture by increasingly commercialized and capital intensive modes of farming. This is reflected in many statements made by participants. Because of this transformation in the agricultural milieu, their income was reduced, but they were still able to perform farming and non-farming activities at the local level since their visual impairment was removed. Many external factors are influencing financial and economic power. Can the rural non-farm economy indeed grow rapidly enough to productively absorb a growing rural labor force? In doing so, can it, in fact, provide a pathway out of poverty for the rural poor? These questions cannot be addressed in this study, yet it was observed that, once the visual impartment was removed, the physical capability of the participants to reintegrate themselves into economic activities also increased.

#### *5.1.3.2. Socio-economic status—receiving financial support*

The men and women in this study who received financial support elaborated on this topic in various ways. They indicated the level of support that they received from either government

programs or their children. The participants are mainly rural poor and they previously had very limited financial support. Their family and children are also facing similar economic challenges and providing financial support to their elderly parents would be a difficult task. In the absence of a well developed social security system, most elderly participants tended to live with their children. Ownership of property and other financial assets tended to enhance their livelihood as was also noted in the literature (Pal, 2004). Yet, in the pre-surgery interviews, their physical mobility was often reduced due to their visual impairment. The data supports the finding that physical mobility is enhanced after surgery.

Despite their improvement in physical mobility, based on the quantitative analysis, the change in financial income was not significant after cataract surgery. There was some evidence that economically active children provided a little support for their elderly parents. This finding is summarized in the comment of a male participant who acknowledged receiving financial support, "I don't have any other source of income; my children will send me some Rs. 50 (CDN $0.88) or 100 (CDN $1.75). I manage with that." This reveals the situation of participants who were receiving very limited financial support and their children were often not able to provide enough support for their elderly parents. These results draw attention to the problems of caring for the elderly, especially when they do not have wealth, health or both (Pal, 2004). In contrast to these findings, Hoddinott (1992) found that, in Kenya, children may provide both the inheritable assets of the parents (i.e., from children who can provide financial assistance) as well as other types of support that children give to their parents. However the present study did not focus on the patterns of living arrangements and the retention of assets among visually impaired elderly in rural India. The present study showed that elderly people in poor rural households face great vulnerability. The majority of the rural elderly neither own financial assets and property nor have regular income.

However this situation is not limited to the elderly. It is common to find it among all rural poor. Because everybody is poor, elderly visually impaired participants are not likely to receive financial support either before or after surgery. The economy of the family is affected by a complex web of social and economic factors.

These findings provide insights into the challenge of altering the nature of gender and power relations in rural households in India. The financial component is a key to understanding the balance of power in the household. Most of the participants were elderly and they were sharing benefits for survival. In this circumstance, receiving or not receiving financial support does not change the nature of the gender and power relations in rural households after cataract surgery.

#### *5.1.3.3. Socio-economic status—property ownership*

Asset ownership and a woman's status in rural India have been studied by many researchers. Agarwal (1994) noted that, in Rajasthan, widows who owned land had a relatively better status when compared to those who were landless. Married Gujarat women who participated in credit programs insisted on joint title to land with their husband. They were able to gain considerable security from joint title because the land could not be sold without their permission. Moreover, they did not have to fear being expulsed from a jointly held house (Unni, 1999). Panda and Agarwal (2005) observed that in Kerala, women who owned land or houses were significantly less likely to experience domestic violence. The World Bank report (2008) noted that the power of women with regard to their participation in economic activities depends on their asset endowment (including human capital) and their access to household assets. These findings suggest that the ownership of productive assets has an impact on a woman's bargaining power in

the household. Many studies have been carried out to examine the impact of the feminisation of the agricultural labour market on women's empowerment. However, no research appears to have been done on the power of women in the household who own land, and consequently their ability to wield household power in the context of land ownership. According to the findings of the present study, home ownership declined for both men and women. The question became whether this was a real reduction in land ownership or a change in occupancy. It was also found that mobility and personal autonomy of both men and women increased after cataract surgery. This reveals that participants were more able to come and go as they wished after cataract surgery. Comments made by participants during the interviews after their surgery support these findings, and that consequently the changes reported in property ownership may well have been changes in occupancy.

A number of women and some men stated that they had changed their place of residence after the surgery. This seems to indicate that their answers pertaining to ownership of property did not truly address ownership but rather a sense of occupancy. The participants were elderly and their mobility and personal autonomy was increased; it seems, therefore, that they were more welcomed in their children's homes. Thus, it is possible that these changes were not truly changes of property ownership. After surgery both men and women tended to move out and stay with their children and relatives. This could be considered as a change in occupancy.

### 5.1.4. Mobility and personal autonomy

#### *5.1.4.1. Personal power and autonomy*

Participants could move about freely due to improved vision after their cataract surgery. The answers received from both men and women during the post-surgery interview indicate that many participants, rather than obtaining permission, intended to inform their conjugal partner or family member about where they intend to go, out of courtesy. This can be considered a safety issue for elderly persons who travel alone in rural villages. The lack of infrastructure, transportation and communication facilities, as well as changes in the joint family system in rural villages have created safety concerns for elderly people when they travel alone. Nevertheless, the data clearly support a finding of increased personal autonomy for both men and women.

Personal autonomy is centred on individual self-determination and the ability to fulfill personal wants and needs. It is also strongly related to interpersonal relations and the responsibility to meet the wants and needs of others (Neff, 2001). Gilligan (1982) proposed that males had a moral orientation that favoured autonomy, rights and justice, whereas females focused on connection, care and responsibility. Cultural influences on social development play a significant role with regards to autonomy. In Western cultures, personal autonomy is individualistic, while non-Western cultures are collectivistic, with a moral orientation towards connectedness, social duty and interpersonal responsibility (Markus and Kitayama, 1991). Turiel and Wainryb (1994) examined gender and culture simultaneously, as well as the connectedness between personal autonomy, on the one hand, and gender and culture, on the other hand. The present study, particularly in the qualitative analyses provides a brief cross-sectional view of how gender, culture, and hierarchy interact with the personal autonomy of the members in the context of the

household. The above findings reflect the collectivist culture of India compared to the individualistic culture of Western society. Gender hierarchy seems to play a particular role in social reasoning with regards to autonomy. The hierarchical gender systems, hierarchical personal rights and hierarchical interpersonal responsibilities are connected to the subordination of women and their responsibility to fulfill men's needs and desires.

In Israel, the Druze communities have a traditional, patriarchal family structure which can be classified as collectivistic (Neff, 2001). Judgments about who should make decisions when the opinions of family members are opposed to one another differed according to social role (Wainryb and Turiel, 1994). Smetana, Killen, and Turiel, (1991) noted that that males and females from many different cultures have developed a multifaceted orientation towards the social world that includes concerns with personal autonomy and interpersonal connectedness. There are similarities between these findings and the findings in the current study with regards to personal power and autonomy. Many Western social scientists have referred to Hindu culture as an example of collectivism when compared to Western individualism (Markus and Kitayama, 1991). Indian Hindu religious based culture is typically described as a hierarchical, duty-oriented society in which individuals subordinate personal goals to the needs of others, especially within the family (Triandis, 1990).

Nevertheless, it seems that the subordination of personal goals is not necessarily mutual among spouses in India. As several female Indian scholars have noted, Hindu Indian husbands do not always give their wives the freedom to make decisions and to determine their needs; husbands often retain their status and authority even if they neglect or abuse their spouses (Kumar, 1993). According to the Hindu religious ideology of *pativratya,* a wife's duty is to see her husband as a

Lord regardless of how he treats her (Dhruvarajan, 1990). Girls are also trained to be of service (*sewa*) through practices such as serving food to males first, with females eating the remains only afterwards (Dube, 1988). Jain and Banerjee (1985) noted that adult married women are obliged to cook and clean, to provide domestic labour and to care for their husband and children. Monteiro (1994) also noted that Hindu women were responsible for fulfilling their husbands' wishes, and that they could only look after their own needs and desires once their husbands' personal needs and desires had been met. However, in India men have a reciprocal responsibility to their wives to provide them with the necessaries of life—that is food and shelter.

In the research findings for this thesis, female participants seemed to accept that males—husbands, fathers, and sons—had the right to do what they chose, emphasizing their autonomy. They also accepted that females—wives and daughters—had an obligation to obey their husbands or fathers, emphasizing their responsibility and connectedness to male authorities. These findings are consistent with a large body of data gathered by Turiel and his researchers in both western and non-western countries (Neff, 2001). However a significant limitation is that the current study was focused on changes in personal power and autonomy in the household in the context of cataract surgery.

#### *5.1.4.2. Mobility*

142 Following their cataract surgery, participants made statements such as the following: "Yes, I am able to go. I can see." Many participants explained that, prior to the operation, they had experienced difficulty going out; but after the operation, they were able to walk alone. Mobility also depends on social dynamics. A woman explained how a change in her social network altered

her ability to go out in her community: “I used to go previously with my daughter, but I am not going now. Since my daughter has died, I am not going anywhere.” While some women were accustomed to going out to work or to complete shopping tasks in the market, others stated that they were not comfortable in going to the market or health centre alone. In general, it was observed that women were reluctant to travel alone. This indicates that, even though the vision of participants has improved, they were not able to move about freely due to various social and cultural reasons. Nevertheless, a majority of men and women were able to manage their work independently, and their mobility and personal autonomy increased.

Aging has become a gender issue in India because more women are surviving into old age; they are vulnerable and disadvantaged in many ways. India is expected to have around 76 million people in the age 60+ category. It was estimated that one out of seven older persons in the world in the year 2001 was from India (Sharma and Agarwal, 1996). Such demographic changes have alarmed policy makers and health care providers since older populations are more susceptible to various health related issues. Cataracts also mainly affect the older population. It is common to associate disability with older people. As people age, their sensory, motor, and cognitive capacities may also decline. Age-related physical deterioration, impairment, and decreased cognitive functioning have been well-documented (Cockerham, 1997). However the current study did not focus on motor and cognitive capacities of the participants. Rather, it was assumed their pre-existing conditions remained the same except for changes to their visual impairment after surgery.

### 5.1.5. Impact on activities and time use

#### *5.1.5.1. Contributions to the household economy—working inside the household*

The situation pertaining to the gendered nature of household work sometimes changed after the participants had undergone their surgery for removal of their cataracts. According to the self-reported data, men were more helpful to women about activities in the house. Answers found in the interviews after the surgery further support this. For example, some women stated that their husbands helped them to do household work like cooking and cleaning. These participants clearly stated that the household work after the surgery was shared between them.

Yet household tasks are gender biased and traditionally cooking and cleaning are mainly carried out in the home by women. Stuhlmacher and Walters (1999) conducted a detailed analysis of gender relations in the context of gender and negotiation. According to them all women negotiated but had significantly lower outcomes than men. However there is a counter argument that these results or lower outcomes are due to different negotiating styles between men and women. According to Smeltzer and Watson (1986), the communication patterns of women differ from the communication patterns of men. After cataract surgery, men provided support to their counterpart by doing household work. Since those who receive cataract surgery are mainly elderly persons, it is necessary that they share the household work. This can be explained as a mutual attempt for survival in their old age and this diminishes the gender disparity in the distribution of household work.

#### *5.1.5.2. Contribution to the household economy—working outside the house for others*

Many participants said that they earned little income working outside the household for others. Many of them were landless and not able to do their own farming activities, but they were not asset-less. They used their physical labour to exchange for cash and work in others fields. When the visual impairment was removed, their physical mobility improved. Participants tended to search for income in their villages and they were successful in obtaining a reasonable income. These statements were a clear indication of enhanced activity after the surgery. Both men and women reported an increase in their cash income while working outside the household.

#### *5.1.5.3. Contribution to the household economy—working outside the house for one's own use*

It is not reasonable to expect that the findings of the current study will show that changes have occurred in complex social dynamics in a short period of time—that is from pre- to post-surgery. Most unpaid and low status household work is mainly categorized as women's work. This work gives women little power or little access to a household's productive resources and they are unable to challenge their subordinate position (da Corta and Venkateshwarlu, 1999). This results in a greater workload for women as well as their exclusion from ownership of the productive assets belonging to the household, as well as working with those productive assets. The limited power that women have within the household considerably diminishes their power to bargain for better working conditions and wages (Rogaly, 1997). Indian women lack control over assets, especially land, and their situation is not any different from that of women in many other parts of the world. Sachs (1996) estimates that women own only one to two percent of the land worldwide. Agarwal (1994) noted that access to land is limited for women in India due to

unfavourable inheritance laws, family and community norms, and unequal access to markets. This situation is not limited to India. The World Bank (2005) reported that women in Uganda own only five percent of the land and often have insecure tenure rights on the land that they use. The lack of productive assets limits women's ability to access resources for their livelihood. In southern Ghana, women were much less likely to plant pineapples, which were more profitable, than the subsistence crops that women cultivated (Goldstein and Udry, 2006). These complex issues were not addressed in the research for this thesis. It was assumed that the other social and cultural dynamics remained the same before and after surgery. It was also thought that it was reasonable to assume that there would not be any changes in these other social and cultural dynamics in the 90 days between the pre- and post-surgery interviews.

#### *5.1.5.4. Participation in social activities*

Participation in social activities is important for networking. Norms and networks can, on the one hand, bond individuals into mutually exclusionary, divisive, small social groups and, on the other hand, provide links between social groups and individuals within the wider society. Putnam (2000) argued that personal connections and networks of trust are the basis of activities in civil society. Informal social interactions and their networks are heavily dependent on both social events and causal encounters (Motiram and Osberg, 2010). Trust and mutual contact are aspects of interpersonal attitudes and relationships. Both trust and social association are important for norms and networks. However it is almost impossible to measure norms and networks since complex social matrixes are embedded together in their formation. The various types of social interaction such as community work, group activities, social activities, and casual conversation have a common influence on mistrust. In the present study, the average time spent for social

activities did not increase after cataract surgery. Even with their visual impairment, participants continued to engage in social activities with other individuals in the village.

The slightly lower participation of women than men in social activities is due to social dynamics, such as the fact that a woman is not supposed to travel alone. It was considered that other factors influencing social dynamics were the same before and after surgery. It is also reasonable to assume that those social dynamics had not changed within the 90 day period between the pre- and post-surgery interviews. Quantitative analyses indicated that the social activities for men and women are not normally distributed. This indicates that cultural boundaries exist between men and women. In most cases, women stayed inside the house and were involved with domestic labour without participating in social activities. Even if a woman wanted to participate in these activities, cultural barriers may not have allowed her to do so on her own. In fact, it is a common practice that women accompany each other when going to public events. Therefore, these cultural barriers play a role among women when determining their participation in social activities.

### 5.2 COMPARISON WITH OTHER STUDIES ON CATARACT SURGERY

While searching the literature, I was unable to find any research on cataract surgery directly related to its impact on changes in gender and power relations. However much previously conducted research surrounded cataract surgery examined other social aspects of cataract surgery. I will examine these and relate them to the findings of my study.

Cataract reporting rates can be a useful tool in the analysis of survey data in reports; however, they must be understood with care as the aim is often to measure the rate at which cataracts that cause blindness are treated with surgery; yet, it is difficult, if not impossible, to determine in a survey the state of the patient's vision prior to surgery. In a majority of prior surveys, patients were categorized into groups, a) patients with unilateral cataracts (one eye) without blindness in the other eye; and b) patients blind in the other eye (Li, et al., 1999, Zhao et al 1999, Pokharel et al., 1998, Limburg, ae al 1996, Limburg and Kumar, 1985). Hence individuals who were blind in the second eye (group b) might be considered cured of blindness through successful cataract surgery. In the current study, four individuals could be considered to be in the second group (b) as they had bilateral cataracts and the practice of the Srikiran Institute of Ophthalmology was to complete surgery on one eye at a time (with return scheduled for treatment of the second eye). Although not necessarily accurate, consideration of this issue can reduce the possibility of overstating the cataract surgical reporting rate for the successful treatment of blindness.

### 5.2.1. Barriers to receiving cataract surgery

#### *5.2.1.1. Socio-economic barriers*

Despite the increasing availability of cataract surgery in Nepal, many social barriers currently exist which prevent recovered individuals from engaging in meaningful participation in social activities (Snellingen et al., 1998). In that study, interviews were conducted to explore the quality of life, visual function and social economic variables on acceptance of cataract surgery. Furthermore, the questionnaire was adapted to the local settings. That study found that, even though free transportation and free surgery were available, the utilization of cataract surgery was below 60%. Novel medicine and medical practices have afforded technical advantages; however,

it was noticed that medical practices need to be developed using a more holistic approach when reaching out to the rural poor. Snellingen et al. (1998) found that many people who initially had requested to have free cataract surgery decided, at the last minute, to withdraw from the procedure. This prompted many researchers to question the reasoning behind the withdrawal, especially because the treatment was being offered for free. It was reported that many of the cataract patients feared the recovery period, rehabilitation and how it would affect them financially (Snellingen et al., 1998).

In order to overcome such obstacles, the Srikiran Institute of Ophthalmology (SIO) adopted a holistic approach towards cataract patients and provides many social programs to them. Free education for children, pre and post counselling service, free transportation, and free food are among the services provided. The institute's services also expanded to include final vision corrections while providing free spectacles which serve the purpose of promoting social inclusion. This approach has also improved participation rates for cataract surgery at the SIO.

Snellingen et al. (1998) found that free surgery alone is not a motivational factor for patients to have their surgery. In the current study, similar results emerged. Many participants noted that they were unable to participate in social activities due to social norms such as women not being permitted to travel alone and to a tendency to have a female companion accompany them when going to rural markets and health care facilities. It is critical that women be able to participate in making choices with regard to decisions that affect their mental and physical wellbeing. It is important that women have the freedom and the ability to move about in order to visit friends or relatives, go to a doctor or health centre, purchase food or other activities.

The dominance of men in rural India reinforces the power of men over women. There may well be real risks at present for women who travel alone; indeed, media reports in the West have recently described India's "rape culture" and its misogynist culture (Reese, 2014; Smith, 2015) Such cultural beliefs and norms may give men power over women in the name of security and protection. Patriarchal beliefs may perpetuate practices that pose challeges for women and affect the women's confidence and self-esteem.

Participants in the current study noted issues pertaining to the opportunity cost of being away from daily income-earning activities. It is, nevertheless, difficult for an eye care institution to address this issue. Snellingen et al. (1998) reported similar social boundaries when dealing with the rural poor. Such findings are not isolated and they arise in poverty alleviation programs. It seems that the cost of being away from daily activities is greater than the perceived value of visual rehabilitation. Vision loss and poverty are closely associated because visual impairment can lead to unemployment and poverty. This connection in turn can prevent people from being aware of resources and utilizing services, for example, due to restrictions in mobility and poor access to transportation.

Visual impairment is considered to be a disability which is perceived to be a vulnerable trait. People who have vision loss through cataracts may feel that they are a burden for their family, friends and their community. In the current study, a substantial number of participants perceived limitations in their daily activities. The impairment of visual and psycho-social functions limited their activities in the household. A large number of people struggled with daily activities prior to surgery such as traveling independently, getting dressed, eating, and sanitary regiments. Surgery could improve their quality of life and time management in activities related to housework,

income generation, and social events. However, participants were apprehensive to receive surgery because of limited social acceptance and the impact on their emotional and mental state.

Moreover, numerous definitions of cataract are used. Due to this variation, it becomes impossible to compare rates of cataract surgery definitively between surveys. Notwithstanding this obstacle, the ability to compare reporting rates for men and women within a survey is unaffected and retains its legitimacy. In the present study, the World Bank classification for blindness was used. The "sight restoration rate", defined as the number of cataract operations that restore vision in bilaterally cataract blind people (Limburg et al., 1996), has been suggested as a method to measure the cataract reporting rate. This is, however, impractical as the coverage rates do not take into account the surgery outcomes. Furthermore, the majority of the studies analyzed did not report whether sight was successfully restored, but merely whether the surgery was performed. Considering this lack of information, it is understandable how some individuals with cataracts may fear a poor outcome from the surgery and refuse treatment as a result. This is clearly another aspect that should be examined if, as set out below, the goal of improving cataract surgery rates for women is to be attained.

#### *5.2.1.2. Gender barriers*

Nationally representative surveys have been used to address the role of women in the decision making process concerning healthcare (Senerath and Gunawardena, 2009). Furthermore, Senerath and Gunawardena (2009) examined autonomy in the context of health services in three south Asian countries. Part of what was considered a determinant on women's freedom in decision making was judged based on the level of participation of the woman in household

decisions concerning her health care. Further consideration was given to determining whether participation was solely by women or in collaboration with others in the household. In Nepal, 72.7 percent of the decisions concerning women's health care made within a household were made without the woman's participation. In Bangladesh it amounted to slightly more than half at 54.3 percent and in India the percentage was 48.5.Conversely, in Sri Lanka, 79.7 percent of decision making surrounding the health issue of contraceptive use was shared mutually. The autonomy of women in decision making demonstrated an increase with the number of children, age and level of education. Another determinant in this autonomy concerned employment, in that women who worked in exchange for money had more influence on the decision making process than those who either did not work, or worked without monetary compensation. As a result, women living in urban areas, as well as rich women, were more likely to participate in household decision making than poor women and those living in rural areas.

Nirmalan et al. (2003) reported that women were less likely to receive operations for cataracts (i.e., adjusted OR 0.71, 95% CI: 0.57 to 0.87) even though the burden from cataract blindness was greater for females ($p<0.001$). These results can be neither confirmed nor rejected with the findings of the research for this thesis. The sample size is not large enough to draw any conclusions. Nirmalan et al. (2003) examined 15,265 patients compared to my study of 98 patients.

The perception of cataract surgery as gender biased (Fletcher et al., 1999) is reflected in the current study. Similar findings were reported in Malawi. There, research showed that widowed women were more likely to have cataract surgery than married women (Courtright et al., 1995). Cataract programs should thus not assume that women have equal access to cataract surgery

compared to men. In Nepal, men aged 65-74 years received 40% more surgery than women, while men older than 75 years of age received 70% more surgery than women (Marseille and Brand, 1997). While the current study was not designed to enable a comparison with results with Nepal, as the sample size is not large enough, the issues identified by women in the qualitative analysis reveal similar patterns with regard to the disadvantages and inequalities faced by women in rural India. My study has also determined that there is a discrepancy in gender use of cataract surgery; women were less likely to receive cataract surgery than were men. Aside from the many other possibilities for this gap by gender, one major reason that could be contributing to the perception of the importance for both men and women to receive cataract surgery is differences in rates for surgical reporting and costs. This may sometimes be mistaken for socio-economic factors, for instance, literacy, marital status and socio-economic status.

The following are examples of reported reasons—for the minimal use of services—which diverge from one location to another. Obstacles involving cost can be manifested in several ways including those of transportation to the hospital, the loss of income from taking time off from work for either or (or both) the patient and their accompanying person, and any costs of living throughout the tenure of the patient's hospital accommodation . It is important to note that men have more control over finances and have more income at their disposal than their poor, rural female counterparts (Brilliant and Brilliant, 1995). The discrimination between genders has restricted the amount of communication between men and women in many cases. For example, in the current study, some participants stated that women in the family did not speak with men in the family (much less men outside of the family). This communication barrier limits any access to finances which results in a decline in resources such as proper nutritious food options, trips to the market and the tools required to make a meal.  It was found that many households are

affected by patriarchal practices which contribute to the gender gap in access to treatment. This aspect also contributes to a reduction of the likelihood that women will travel outside of their village for services in comparison to men (Gupta and Murthy, 1995).

In Malawi, research indicated that married women were less likely to have the surgery than widowed ones, with the odds of a woman obtaining cataract surgery increasing when there was a person (such as a sibling or adult offspring) who could aid them in pursuing surgery. For men, it was the opposite as they were more likely to have the surgery when married than as widowers (Courtright et al., 1995). The research conducted for this thesis provides support for this as the same pattern was reported with regard to the living arrangements of the participants. A larger proportion of study participants were widows (40%) compared to men who had been widowed (25%).

The acceptance of surgery increases among women when they meet other women who have been through a successful cataract surgery themselves (Courtright et al., 1995). However, as things stand at this time, educational programmes are not generally gender-specific and do not cater to this aspect of female communication. There should be specific programs that address differences before and after visual treatment among men and women. Men and women are affected differently by the procedure and these differences should be examined. There are many male dominated treatment programs that do not target women because fewer of the latter group seek care and treatment. Many women are unaware of the severity of particular symptoms and believe that they are not worthy of seeking medical attention. Gender specific educational programs are important because it is crucial to establish these services which can provide new gender sensitive

approaches. This would potentially decrease the gap with regard to gender inequalities in treatment for cataract surgery.

An inquiry should therefore be carried out by cataract surgery programmes that have lower reporting rates for women than for men in order to evaluate other local barriers that may be currently in existence. Being illiterate and having limited ability to read and write are reoccurring components of low acceptance rates of cataract surgery in India. The approach to recruiting patients should be more comprehensive in order to enable them to understand the procedures. When complex medical language is used in the recruitment process, it may create fear and anxiety in agreeing to and receiving treatment. Since women have lower literacy rates than men in India, this may be a factor in explaining why they are more reluctant to receive surgery for their cataracts.

It was noticed that the acceptance and reception of cataract surgery among rural poor living in the surrounding areas of the SIO was much higher for both men and women. One possible explanation is the length of time that this program has been in Kakinada, over 20 years, and it seems that many rural poor trust the quality of care and the SIO in general.

The lack of a secure transportation system reduces the use of cataract services by women because they are less likely than men to travel outside of their village for services (Gupta and Murthy, 1995). In order to address the issues surrounding the receipt of cataract surgery, the SIO organized camps in rural areas within a 300 km radius of the eye hospital. As was previously noted, the SIO provided transportation to the hospital from the field camps. However, there remain many transportation difficulties in rural areas.

Another method by which to analyze surgery reporting rates is by categorizing individuals by taking into account their age, as surgery take-up rates vary depending on the age group. For example, among 65 to 74 year-old Nepalese males, cataract surgery was received 40 percent more often than among women. Similarly, but at a much higher rate, 70 percent more men aged 75 years or more had cataract compared to women (Marseille and Brand, 1997). Women and men over 34 years of age participated in my study. Even though the age gap was not studied in the same way in the current study, it was reported that women were younger, on average than men. Indeed, 84 percent of women in this study were under age 65 compared with 45 percent of men. The finding that younger women are obtaining cataract surgery and the general result that 48 percent of the participants in the current study were women suggests that the gender gap reported in the study from Nepal (Marseille and Brand, 1997) may be decreasing, at least in the region of India in which this study was conducted.

Yet it is important to recognize that gender disparities in access to cataract surgery may not be reflected accurately in statistics about the proportions of men and women who receive treatment. A finding that women receive approximately half of the surgeries performed does not imply that women have the same access to cataract surgery as men do. Cataract programmes must be careful in making that assumption. Due to rising life expectancy and the increased risk of cataracts in women, there is a higher prevalence of cataracts in women. As such, they have been found to comprise approximately 60 to70 percent of all cataract surgeries provided by institutions wherein reporting rates for men and women are equal (Abou-Gareeb et al., 2001). Although rates of reporting for this type of surgery have not been calculated for industrialized countries, some data from the United States, Great Britain, Sweden and Canada reveal that 60 to70 percent of cataract surgeries in these countries are performed on women (Klein, et al., 1997,

Javitt et al., 1995, Baratz et al., 1997, Meddings, 1997, Desai, 1999, Williams and Seward, 1993, Monestam and Wachtmeister, 1998). As can be seen from prior research (Snellingen et al., 1998), the closing of the gender gap in cataract surgery could significantly decrease the incidence of cataract blindness.

## 5.3. IMPACT OF CATARACT SURGERY

### 5.3.1. On quality of life

Ecosse et al. (2011) reviewed and summarized the recent literature on the impact of cataract surgery and quality of life. It was noted that cataract surgery unequivocally improves vision-specific functioning as well as several aspects of vision-specific quality of life. The results of the current study therefore clearly align with the conclusion of this review. Although I was unable to statistically measure the impact of surgery on power relations changes in the household, many participants were willing to discuss the resulting improvements in their lifestyle.

Improvements in visual acuity can be directly translated into gains in life activities and in emotional and social life components. The current advancements in medical technology, novel methods and instrumentation to combat cataract blindness can therefore be considered a useful approach to improving the quality of life since the removal of visual impairment is directly linked with health-related quality of life. The manner in which people perceive a challenge before and after surgery depends on social and cultural aspects of their lives. These elements can be linked to a positive or negative outlook on treatment which is important to recognize when conducting research. There is a correlation between quality of life and cataract surgery which

include improvements to mental, physical, social and cultural determinants upon receiving surgery. Cataract sufferers demonstrate being more satisfied with their life and the benefits after the surgery. Improvements in quality of life and in the activities of the participants are supported by my research findings.

### 5.3.2. On gender and power relations

Whilst cataract surgery does improve the quality of life, it does not aid in shifting the paradigm governing power relations within a household. If there was a choice between a man or a woman receiving cataract surgery, economically it would be more resourceful to choose the man. Since men are acknowledged to be the dominant care givers in the home in India, in terms of finances, an economic analysis may suggest that they would be the best candidates for the surgery. A man's vision could, from a purely economic standpoint, be considered to be more valuable than that of a woman.

Taking into account a woman's decision-making power within the household may be important. In the current study, women's empowerment was determined by their level of participation in household decisions, particularly decisions involving economic, domestic, mobility and health matters within the family (e.g., taking children to a hospital for treatment).

Overall though, in India, 72 percent of women make decisions in relation to cooking (Bharati, 1999). Furthermore, as mentioned above, the participation of women in household decisions, whether solely on her behalf or together with others, increases with age. This suggests a parallel in the increase of autonomy through age. It has also been found that while illiterate women

mostly take part in the decisions concerning cooking, the ratio of this type of decision making is much lower among women who are heads of household. A possible explanation for this phenomenon may be the nature of their activities which may take them outside of the home.

In general, when women partake in monetary matters, their access to money is affected, and as such, this access has been measured in terms of economic participation. Even though 62 percent of women have access to money, it does not imply that they are the sole entities exercising this power. Even when they spend money, they normally are required to consult with others including their husband. In this regard, the true representation of economic power that women possess can therefore be better evaluated through determining if she has the power to spend it without the need to consult with others. Although stages of development in any given location play an important role in the ratio of women who are able to spend their own money without consultation, there are also other elements that contribute to determining empowerment. Such elements can include socio-cultural and religious backgrounds, since they too play important roles in the household rules governing the expenditure of funds. When women are employed it gives them the feeling of importance because they contribute to and participate in the lifestyle of their family. Women workers may have more capacity to decide how their money is used compared to women who are not employed outside the home. Employment may give wives power to bargain, negotiate and offer ways to assist in family matters and events. When she is earning her own income, she may have more confidence to feel that she has control over her additional finances to the family. However, women's contributions to household income may depend on how much the family requires financial assistance.

As was found in the present study, amongst people living in rural villages in India, most families are surviving through circumstances involving a subsistence-level existence. Such extreme poverty could potentially increase women's power in the home if they make independent contributions to the family economy. Hence, if a family is living in extreme poverty, the women's autonomy may increase if she is providing a significant amount of income. Yet the superiority of the men may dictate whether women are able to generate any kind of income for the home. Husbands may feel that her work should focus on intra household matters such as cooking, cleaning, raising children and caring for household members.

With respect to the autonomy of women, self-health care is imperative as women look after the entire family. It would normally be presumed that mothers who work would be more conscious of healthcare and would, as a result, make decisions in relation to it as opposed to unemployed mothers who would have less power and knowledge on the subject. Surprisingly, however, in reality, it does not necessarily work this way although women who work and receive monetary compensation are more empowered than those who work without monetary compensation. This issue is strongly linked to socio-cultural factors such as location of residence and age in re-enforcing this self-decision-making power for women. It also leads to the consideration that the gender of other household members can play an important role in measuring healthcare. It is essential that women improve their decision making because it can have an effect on the health care of their children. One way to improve women's autonomy in healthcare services could be to promote higher education and employment outside the home for women, while taking into account the family and social structures that led to the existing injustices and inequalities between genders. If the educational system could introduce a curriculum that begins to change

gendered notions about women's roles as well as increasing knowledge of health care resources and services, it could potentially influence their decision making capacity.

Another key measure of the autonomy of women lies in their ability to be mobile and move about freely. If third parties are involved in deciding when a woman is able to leave her home, it can significantly affect her access to services being offered and participation in various aspects of social intercourse. Treatment for vision loss must include the provision of transportation to eye camps, hospitals and other services. Even with the availability of free transportation, this could pose a challenge for women who do not have support from their husbands or families to receive surgery. Restrictions to the mobility of women in India may impede the possibly for them to receive the operation. When husbands regularly make decisions for wives with regard to permission to leave the home for matters such as visiting family, friends or going to the market place to gather food, it seems likely that they may also influence the decision about seeking treatment and surgery for vision loss.

Factors that affect the mobility of women vary throughout the diverse regions of India. These may include residence, age, literacy, working status, household standard of living and gender of the head of the household. However, the husband's field of work does not necessarily have influence on the empowerment of women. In terms of education, however, the husband's level of attainment affects female empowerment. Yet among the above factors influencing women's empowerment, age has the most influence on all aspects.

The present study explored the autonomy of women through their ability to make decisions (either solely or collaboratively) on different aspects of life including usual household decisions,

those concerning access to money, self-health, and the ability to move freely outside the home. The study also points out socio-cultural and socio-economic variations in the level of empowerment.

It was reported that rural women have less autonomy than those from urban areas; however those with paid employment, with better nutritional status, with a better standard of living index, as well those women who are the heads of the household have greater autonomy. The greater women's external income, the better off they are and this provides them with more power in household decision-making, as well as decision making in health care and in their mobility. Other factors that also aid in the increase of their autonomy are their age and educational attainment. Ironically, though, domestic female workers have greater decision making power than paid female workers. In this scenario, household wealth may not necessarily enhance women's autonomy, but rather affect it negatively. Educational attainment may also increase women's knowledge about their freedom which may also increase the probability of divorce depending on situations within the family. Another important factor is the beliefs and practices among the diverse areas in India along with their varying corresponding religious groups and castes, which may account for different results.

According to the findings from the qualitative analysis, intra household matters influence family composition, household work, and decision making concerning meal preparation. The joint family structure is well connected with intra household matters. These findings are consistent with those of Antman (2012) and Bobonis (2009). Both researchers explored the allocation of resources in the household as well as women's bargaining power within the household.

However, in the Indian situation, it is still unclear how effective bargaining power can be in explaining the socio-economic status of wives within their family.

According to the findings of the present study, the socio economic status of women in the household and their customary and social relationships in India provide little opportunity for the application of bargaining power in the family. Gender relations within the household are culturally determined and also imply that they are relatively insensitive to changes in the socio-economic status of women (Cain, 1982). According to Cain et al. (1979), Cain (1982), Conklin (1979), and Hartmann (1976), the social customs or patriarchal structure largely determine the status of the wife in the household. Once cataract surgery has been performed, men and women in the household within low income settings were more likely have taken up their traditional role. In most cases men and women were not able to provide sufficient financial support from external employment. They were very effective in the participation in household activities such as cleaning and cooking, rearing animals and (limited) agricultural work.

Cain (1979; 1982), Conklin (1979 and Hartman (1976) argue that a lack of communication between husband and wife may bring about many of the inequalities in the household. This limits access to household finances which results in a decline in resources for such things as proper nutritious food options, trips to the market and the tools required to make a meal. In the present study, it was found that many households are affected by patriarchal methods which create a larger gap between men and women. The male is superior in decision making for matters such as meal preparation because he can decide what kind of food the women must prepare for the family.

The household decision-making process is a subject of study in both economics and sociology. The study conducted for this thesis focused mainly on gender and power relations changes following cataract surgery. Even though the data collection for this study spanned a 90-day period, observations were made about gender and power relations by using thematic qualitative analyses and comparing them with a quantitative analysis. The results show that the household financial decision-making process does not stand alone as it is embedded within a web of social norms.

The cataract surgeries were performed on mainly elderly men and women 34 years of age or more. It was observed that the time-use patterns for both men and women were similar to those in their pre-surgery interview. The time spent on productive activities that contributed to household economy increased by an average one (1) hour for men and two (2) hours for women. Time use patterns varied, however, due to external factors such as environmental conditions. Weather patterns such as rain and daytime temperature contribute for changes in the activities practiced and time-use. However, this study did not examine seasonal changes or their effects in the post-surgery situation. Nevertheless, a reduction in the need for assistance in their day to day activities for both men and women in their post-surgery situation was clearly observed.

Many cultural and personal factors therefore influence activities and time use. In order to mitigate the issue, I specifically focused on the activities embedded in measuring gender and power relations. The interview/questionnaire was designed considering these factors. This helped to mitigate external factors affecting time-use and activities. However, non-paid activities in the household are also important for household economy. Child-care undertaken by elderly persons, for instance, may free up time for other household members to engage in income generating

activities. Even if it has little impact, it is argued here that improved participation in varied productive activities provides some evidence of a mechanism by which cataract surgery may contribute to improve economic activities.

Resource allocation in the household does not have a direct relation to the income of household members. It may be independent of who earns the income in the household. Specifically, the Indian joint family structure influences the sharing of resources. This economic survival mechanism is common in rural households and was observed in the present study. Power within the household is not changed by cataract surgery. Rather, it derives from social and cultural norms (Manser & Brown, 1980; McElroy & Horney, 1981). In this context I considered the household decision making process as a bargaining process. Therefore gender and power relations could be measured by exploring changes in the decision making process. I included themes about decision making such as meal preparation, employment, expenditures, and mobility.

Relative to access to income, paid work outside the home, working outside for personal use, property ownership and personal autonomy would all be expected to increase the bargaining power of a household member (Bernaseki and Bajtelsmitii, 2002). Yet the findings of the current study, especially the quantitative findings, did not reveal processes of increased power following cataract surgery. Yet, in another sense, the findings are consistent in with the results obtained by previous researchers. The removal of cataract visual impairment enhances patterns in individual functioning but it did not change social and cultural norms that govern power and gender relations.

The household bargaining literature, both the cooperative and non-cooperative models (Bernaseki and Bajtelsmitii, 2002) were examined in the literature review. It can be seen that access to income by individuals is important in determining their power relations in the bargaining process. If women's income is higher relative to their husband's, theoretically we could expect greater participation by her in that decision-making process. However, my findings do not support these expectations. I observed that there was an increase in power within the household primarily for men. Nevertheless, the qualitative analyses showed that there were other ways in which women showed strengths that parallel the gains made by men. As discussed earlier, social and cultural norms heavily influence these factors.

Findings from the qualitative analysis are not consistent with those of Blood and Wolfe (1960) who argued that decision making power within the household was determined by the conjugal partner's command over financial resources. It did not elaborate on the nature of power within the household. Yet from an economists' point of view; the key factor in influencing household decision-making is providing opportunity for conjugal partners to have different preferences with regards to spending the household income.

Oppong (1974) submitted a different view about power within the household. He explained power in terms of a spouse or partner's behaviour to conform, or to demand and pressure how the use of money for objects and interests would be executed. This definition cannot directly be applied in my study. The study conducted for this thesis is focused on low-income settings and the participants were from joint family structures. The joint family members shared, to some extent, their resources as they could not demand money for material goods. Questions in the interviews that focussed on decisions about major household purchases were nearly always

answered with a statement indicating that such purchases were outside the realm of the possible due to the need to spend available funds on food required for survival.

This study provides evidence of increased time-use and activities following cataract surgery among older adults in low income settings. The qualitative analyses showed that women and men were able to benefit from improvements to their vision. Some women found ways to improve their circumstances through a change in the dynamics of gender and power relations. Cataract surgeries also provide positive implications for well-being and social inclusion; this supports the argument of social and economic gains due to sight restoration by cataract surgery.

## 5.4. STRENGTHS AND LIMITATIONS OF THE STUDY

### 5.4.1. Limitations of the study

The interview/questionnaire utilized the World Bank Living Standard measurement survey (LSMS) tool in measuring time-use and activities. Since the two questionnaires were administered within a three month gap, the data collection tool did not consider environmental factors which could have affected participant's activities. It is also difficult to measure how personal preferences can affect activities. The discussed literature supports the idea that gender and power relations are highly influenced by social and cultural norms. Therefore it was difficult to measure changes in gender and power relations within households and their direct impacts after the removal of the visual impartment due to cataracts.

The study succeeded in tracking participants who had undergone cataract surgery for the post-surgery interview. However, for various reasons some participants may not have provided full or complete answers. Qualitative data gathered by enabling participants to elaborate on their answers through open-ended questions helped to mitigate the challenges inherent in a study involving poor, rural residents in India. All interviews were voice recorded and later transcribed verbatim and translated into English. It is possible that, during the translation and transcription process some information may not have been noted accurately. This could potentially affect the data, analysis of the final results along with their interpretation, despite the procedures devised to implement quality control. The method might be described as a convenience sampling method. Nevertheless, nearly all participants were recruited who had attended the screening camps and were later determined their suitability for cataract surgery. Due to the relatively small sample size (n=98), the findings of this study cannot be generalized as they do not reflect the whole situation in India or even in the region studied. The results and interpretations are limited to cataract patients associated with the Srikiran Institute of Ophthalmology who participated in the study.

### 5.4.2. Strengths of the study

As the literature suggests, social and cultural norms heavily influence gender and power relations in rural households in India. In order to mitigate the issue and to obtain in-depth results, quantitative and qualitative data were collected. The approach to the interviews incorporated open ended questions for the participants which, encouraged them to share their experiences. The extensive narrative and thematic qualitative analyses became the dominant method that guided this study. The findings from the quantitative analysis have been informed by the qualitative

results. As a result, I was able to obtain a better understanding of the challenges in studying changes in gender and power relations. The extensive narrative and thematic analyses also increased the validity of the results.

### 5.4.3. Translation issues

The issue of validity is significant in that its definition changes according to the context in which this term it is used. While quantitative research has low validity and high reliability (cf., Creswell, 2014), the reverse is the case for qualitative research as it generally has high validity and low reliability. In order to be able to assess the validity of the answers to the research questions, the interview/questionnaire included open-ended questions and allowed participants to express their views. Audio recording and verbatim transcription allowed for the participant perspectives to be explored.

Examination of the transcripts indicates that, for the most part, the participants heard and comprehended the intended questions because they provided answers that made sense. The implication is that, if the translation is well done, the answers that the participants provide will make sense and the questions will be indeed answered. However, if questions are not accurately addressed by the answers, then it implies the translation was improperly done and therefore invalid.

Examining the method used is a way to ensure validity; for instance, in translation, there should be a method of verification of the translation performed. There are several ways to verify the translation. One way is to implement a procedure in which every tenth translation is verified by

an independent individual. Another strategy is to use the already translated answer (i.e., in the intended language or study language) and to translate it back into its language of origin. If, when utilizing the procedure of back-translation, the translated answer has lost its meaning, or in other words, it cannot be transferred from the study language to its original, then the validity of the translation is invalid and it should be rectified so that the concepts translate seamlessly and understandably. However, there are practical and theoretical problems with the approach of back-translation.

Ensuring the validity of translation can be expensive and may be too costly for a study to undertake; the project is then not financially feasible. This cost can present itself in various ways. Firstly, once the text has been translated from its original language to the intended language, having it translated back into its original language would inevitably increase translation costs. Additional costs would also be incurred in the verification of the back translation with the document that was originally written in the language of origin. If this verification reveals that the back translation does not perfectly match with the original content, the translated version will need to be modified until it does. This also adds to the cost of the study as well as to the time required to verify the translation.

Secondly, the effectiveness of translation in ensuring the determination of the true meaning of the original language is in question. When the term “true meaning” is used, it refers to the assumption that an objective meaning can be achieved and determined by use of an independent observer. Language however, is not as simple as is implied by this conception; its meaning is contextual, whether representing the individual speaking or the one listening. A third party listener, therefore, would be unable to fully capture the context of either of the two parties as all

they are left with is their own interpretation of what they think someone else's interpretation means. In this way, completely avoiding variation from what was said in the original language would be impossible as at least some variation would inevitably occur after translation. This is due to the fact that language does not have an objective meaning. Translation back into the original language will thus often fail to exhibit a completely accurate reproduction of the content in the original text. Language cannot be categorized nor utilized as a scientific equation, as it is heavily dependent on perceptions and thus extremely subjective. In this way, a translator cannot possibly capture exactly or precisely the original content equivalence, technical equivalence, criterion equivalence, semantic equivalence and conceptual equivalence. If translation itself cannot capture these equivalencies—due to the subjective nature of language—then translation back cannot possibly capture them either (Pallard, 2007).

In order to address the possible issues present from translation, tests were carried out to ensure the questions were culturally sound. According to Bernard (2013) a questionnaire which is culturally sound in nature enables the participants to comprehend and therefore respond to the questions without hesitation. Initially, the questionnaire was prepared in English and had a bilingual (Telegu and English) person translate it. The translator was a native speaker of Telegu with direct ties to the SIO; as a result, this individual had direct knowledge about cataract surgery procedures as well as about the social and cultural lifestyle of this area. After the translation, a second native bilingual individual was recruited to translate the content back into English. This was done to ensure the accuracy and validity of the translation. The pre and post questionnaires were then given to eight (8) participants to determine whether they understood the questions and to ensure that they were able to subsequently respond correctly. Their answers were translated into English by one of the aforementioned bilingual translators to ensure the

questionnaire was properly translated. Then the pre and post interviews were administered by trained staff.

The extensive cost of this study, however, hindered the ability to translate all answers back to the Telegu language in order to verify the accuracy further. What was done in compensation was a cross-check one in every ten (10) transcripts with a one of the bilingual translators. Finally, establishing the trustworthiness of this study, as referred to on Lincoln et al (2011), was achieved through the assurance of credibility, transferability, conformability, dependability, and authenticity.

### 5.5. Conclusion

In short, cataract surgery improves quality of life but not women's autonomy and does not transform gender and power relations.

As previously discussed, cataract surgical programmes must consider gender when conducting an evaluation of their programmes. The intended targets for coverage for each gender should be analyzed separately followed by their new, respective, and appropriately set goals. That is, women and men should be targeted differently according to each gender group's needs, and a focus should be concentrating on targeting women. Such an approach is reasonable given the higher occurrence of cataracts in women and the greater obstacles they face in receiving treatment in comparison to men. By conducting an analysis of the separate goals for each gender, the local barriers that prevent women from taking advantage of the surgery will naturally come

to light during the investigation, and programmes to facilitate overcoming these barriers can be subsequently broached.

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