The Intersections Between Female Autonomy and Maternal Health in the Urban Slums in Pune, India

Eva Warner
Department of Sociology

Primary Thesis Advisor
Jennifer Bair, Department of Sociology

Committee Members
Penny Bennett, Department of Integrative Physiology
Liam Downey, Department of Sociology

University of Colorado at Boulder May 2013

ABSTRACT

There are various trajectories of research that attempt to explain the causes of the maternal health situation in India. Within the research on socio-cultural determinants of maternal health, female autonomy has been shown to affect maternal health. I conducted twenty-five qualitative interviews with pregnant women that had reported symptoms of morbidities or complications in their pregnancy from six different slums located in Pune, India. There were five patterns of lack of female autonomy: (1) education, (2) marriage, (3) social interaction, (4) control of resources, and (5) family planning decision-making. These patterns affect physical health directly and indirectly. Female autonomy is also an important indicator of social health. Development programs and philosophies need to incorporate social contributors, including female autonomy, in their tools and schemes for improving maternal health, and subsequently national wellbeing.

TABLE OF CONTENTS

Section Introduction	Page Number
Context of India	9
Literature Review	14
Methods	19
Findings	22
Education	22
Marriage	26
Social Interaction	30
Control of Resources	34
Decision-Making Regarding Family Planning	37
Discussion	42
Conclusion	53
References	55

INTRODUCTION

India: a subcontinent thirteen times larger (km²) than Britain, inhabited by one billion people, who speak over 400 different languages. Its diversity is expansive; its population is throbbing; and its health is devastating. The national maternal mortality rate in 2010 was 212 maternal deaths per 100,000 live births, as compared to 21 maternal deaths per 100,000 live births reported in the United States (WHO 2012). In fact, there are more maternal deaths in India in just one day than there are in the affluent world in one whole month (Bour et al. 2004). This report summarizes research with pregnant women in six urban slums in Pune, India. First, I will give operative definitions of reproductive health and female autonomy. Then, I will describe the backdrop of Indian healthcare and the various institutional, geographic, and socio-cultural impacts on maternal health. Later, I will cover female autonomy as a sector of socio-cultural factors influencing health. Next, I will present my own findings and the patterns of female autonomy (and lack thereof) in the data. Last, I will suggest how these patterns could affect health and development campaigns.

This study began as an attempt to study how social components of women's lives could be causal factors of specific maternal morbidity. However, in its execution, it evolved into the study of how female autonomy contributes to maternal physical and social health, and the associated health-seeking behaviors. In other words, how does female autonomy influence physical health in terms of morbidity? And, how does female autonomy affect other, more social, dimensions of health? How is female autonomy, in and of itself, an indicator of social health? How are these relationships executed in the particular social context? How does the relationship between female autonomy and health (both physical and social) impact the larger communities and global development campaigns? Such questions are the basis of this report.

Why should we care about maternal health?

The effects of maternal mortality not only infect women and their families, but also the community, the country, and the world. Surviving children of maternal mortality face an increased risk of death within the first six months by 17-fold (Bhattacharyya et al. 2008). Orphans are also less likely to eat well, get an education and get recommended vaccinations (UNICEF 2007). In a study conducted in China, the hospitalization and funeral costs related to maternal mortality were found to have a catastrophic economic effect on household finances (Ye et al. 2012). After a mother's death, the community becomes responsible for the care of a child. On a global scale, maternal and child deaths represent a loss of potential productivity summing to \$15 billion in annual global financial loss (USAID 2001).

While maternal mortality refers to the rate of death related to pregnancy, maternal morbidity refers to the rate of pregnancy-related illness. The most common maternal morbidities worldwide include hemorrhage, infection, high blood pressure, unsafe abortion, and obstructed labor (WHO 2012). Even though the impact of maternal morbidity is not as dramatic as that of mortality, its effects still reach far and wide. Families have an increased economic burden with pharmaceutical and hospital costs. Women who are seriously ill may not be able to work, further contributing to the family's privation. Needless to say, decreasing maternal morbidity will decrease maternal mortality, reducing the extensive impacts of maternal mortality. For these reasons, the World Health Organization has established maternal health as a Millennium Development Goal (WHO 2012).

What is the operative definition of maternal health used for this study?

The various ways that research define reproductive health and maternal health is

integral to how studies are designed and what is discovered¹. Maternal mortality rates are often the core metrics used to establish a nation's maternal health situation and overall national wellbeing. In the early 1960s, women's health movements to reduce fertility rates were primarily executed through birth control campaigns. Because of the convincing effect of contraception on fertility rates, development programs began to use the technique to reduce global fertility rates, and subsequently improve maternal health worldwide. However, in 1994, experts at the United Nations International Conference of Population and Demographics (I.C.P.D.) decided to expand the definition of reproductive health. The I.C.P.D. definition suggests that while maternal mortality and morbidity are important (and obvious) components of maternal health, physical health alone is an insufficient definition of reproductive health. As such, reproductive health incorporated not only the limited definition of women's health as physical health (i.e. fertility rates, morbidity rates), but also the social components of health.

Social wellbeing may seem like an arbitrary phenomenon, though it is a critical addition to the definition of health. I argue that some of the social elements that contribute to maternal health are important indicators of social health. Social wellbeing/health is vital because it describes and includes elements of the social world that can influence physical health. Therefore, by including social health into the definition, I argue that social elements are influential to physical health, must be addressed as health concerns, and are intrinsically valuable indicators of social wellbeing.

The definition of reproductive health as used in this research project is as follows:

Maternal health is a state of complete physical, mental and social wellbeing in all matters relating to the reproductive system and to its functions and processes during pregnancy,

¹ I use reproductive health and maternal health interchangeably. However, it is important to understand the distinction. Reproductive health refers to health across the lifespan; maternal health is one dimension of reproductive health and refers to the health during pregnancy, childbirth and the postpartum period.

childbirth and the postpartum period (ICPD 1994).

What is the operative definition of female autonomy?

In the literature on the social determinants of health, female autonomy has been discussed as a factor affecting women's physical and emotional wellbeing or health. Brunson et al. (2009, p.56) describe female autonomy as "the ability to make decisions on one's own, to control one's own body, and to determine how resources will be used without needing to consult with or ask permission from another person." Jejeebhoy (1995) describes a handful of evaluative dimensions of female autonomy such as economic autonomy (access to financial resources), physical autonomy (freedom of movement), decision-making autonomy (inclusion in decisions with family members), emotional autonomy (closeness between the husband and wife), and knowledge autonomy (access to knowledge). Benchmarks for female autonomy are also culturally bound. As such, different cultures will have different ranges of socially acceptable female autonomy. However, beneath the surface, there are central human capabilities, that are considered intrinsically good cross-culturally, that are the primary ingredients of female autonomy. I argue that female autonomy has a significant impact on maternal health and is also an indicator of social health.

The definition of female autonomy for the purpose of this study is as follows:

Female autonomy is a woman's ability to make decisions for herself regarding her body, her life path, and her control of resources. Female autonomy represents various capabilities that are considered universally good, and as such can be used as an indicator of social health.

Why is female autonomy important and how is it related to social health?

In order to understand the importance of female autonomy, I look to the role of female autonomy in development philosophies. Sen (2000) and Nussbaum (2000) introduced the capabilities approach, as a response to the shortcomings of previous development indicators.

They argue that development should not only evaluate a woman's economic wealth (G.D.P.) or whether a woman is satisfied with what she does (utilitarian), but rather about *what* she does, and *what* she is in a position to do. All people have certain *functionings* that are integral to a human's *being* and, thus, mark the absence or presence of humanity². Most basic functions are widely accepted, such as the importance of nourishment. Accordingly, there are central *capabilities* necessary to achieving the essential *functionings* of human life. Essentially, "human beings are creatures such that, provided with educational and material support [and other capabilities], they can become fully capable of human functions" (Nussbaum 2000, p. 83). Nussbaum (2000) argues that *capabilities*, not *functionings*, are the appropriate political goal. By ensuring that everybody has access to central capabilities, people have the choice to choose *functionings*, thus addressing critics who argue that making universal lists of capabilities is paternalistic.

When a person has access to *capability* then they accumulate more freedom. Freedom is arguably intrinsically good, and therefore should be sought after. If freedom is synonymous with development, as Sen (2000) argues, then development is also an important goal. Female autonomy is inextricably linked with freedom, as freedom is an essential part of the definition of female autonomy. Nussbaum (2000) took Sen's ideas about capabilities and freedom one step further by creating a universal list of central capabilities that could be compared cross-nationally and could be used as a benchmark for political systems to navigate towards. Her list includes life; bodily health; bodily integrity; senses, imagination, and thought; emotions; practical reason; affiliation; other species; play; and control over one's political and material environments.

Female autonomy is woven through many of the central capabilities that Nussbaum establishes. *Control over one's political and material environment* is a core component of

² Nussbaum (2000, p. 72) attributes most of the discussion on human life versus animal life to Marxist and Aristotelian theory.

women's economic autonomy. *Bodily integrity* is being able to have one's bodily boundaries be treated as sovereign and is an integral part of decision-making autonomy. Being able to develop *senses, imagination and thought* is imperative for knowledge autonomy. *Practical reason* is critical for decision-making autonomy. As such, since Nussbaum argues that the central capabilities should be the goal of development, and female autonomy is contingent on central capabilities, then female autonomy is imperative to development and pursuit of equality between and within nations. Female autonomy reflects these universal capabilities. If having such capabilities are the ingredients to social health, and female autonomy reflects these capabilities, then female autonomy is a symptom of social health.

Therefore, female autonomy is important because (1) it is intrinsically good; (2) it promotes various aspects of the central capabilities as laid out by Nussbaum (2000); and (3) the pursuit of female autonomy is contingent on the pursuit of equality and of social health, which is also considered intrinsically valuable. Most important to this research, female autonomy is important to study because of the direct and indirect impacts it has on physical health. Therefore, by studying female autonomy, researchers can propose solutions to improve female autonomy for its intrinsic good, for its positive impacts in development campaigns and for its impact on improving physical and social health outcomes.

What does autonomy look like in India?

As autonomy is often rooted in socio-cultural norms, it is important to establish the context through which autonomy is produced in India. Because the role of women is often rooted in the domestic sphere, the main actors in establishing the perimeters of their autonomy are family and kinship (Das Gupta 1996, Dyson and Moor 1983, Jeffery and Jeffery 1993, Sharma 1980). When women marry out of their maternal home, they become a part of the social network

and social context of their husband's family. Her place in her husband's family is mainly defined by her reproductive capabilities, specifically her ability to produce a son. Further, women's autonomy is impacted by the household structure and her place in the hierarchy. Thus, in India, mothers-in-law have more autonomy than daughters-in-laws (Bloom et al. 2001, Gangoli et al. 2011). Also, there is an overall preference for sons because of the importance of males in taking care of future generations. (Self et al. 2012, Moursund et al. 2003). Autonomy in India will be discussed further in the findings section beginning on page 22.

CONTEXT OF INDIA

Table 1: Indian Statistics.

Gross Domestic Product	\$1.848 Trillion USD
Life Expectancy	65.4 years
Fertility Rate	2.62 children/ woman
Mortality Rate	212 deaths / 100,000 live births
Mean Household Size	5.3 people
Health Index	0.717, 142 nd out of 187 countries

Constructed by author with information from: World Bank, India Census 2010, and United Nations (UNDP).

By comparing countries with similar Gross Domestic Product (G.D.P.) as India, we see that their maternal mortality rates (number of maternal deaths per 100,000 live births) are much lower than India's maternal mortality rate: India (212), Honduras (100), Philippines (99), Cape Verde (79), Mongolia (63) [See Figure 1] (UNDP). Why does India's maternal mortality rate waver around 200 whereas Mongolia's maternal mortality rate is closer to 65, even though they

have the similar G.D.P.?³ Major research fields have focused on the institutional and geographic factors shaping India's maternal health outcomes, while less research has been geared towards the social determinants of India's health.

Figure 1: A Comparison Between the Maternal Mortality Ratios of Five Countries with Similar G.D.P.

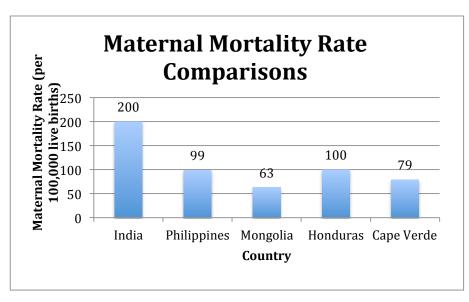


Figure constructed by the author with information from UNDP and WHO.

Many researchers implicate a weak health care system as a causal agent of high maternal mortality and morbidity (Paul et al. 2011, George 2007, Goldie 2010, Iyengar et al. 2009). The health system in India is under-developed, under-resourced, and under-performing. Health policy decisions made by political boards are supported by little technical leadership, resulting in the exclusion of crucial perspectives necessary to developing programs that improve maternal health. In other words, bureaucrats with little experience in public health or healthcare make decisions about reproductive and child health policies and programs, while people with technical expertise on the public health concerns are small in numbers and exert less power in the political decisions. Also, the leadership of government health boards changes frequently, causing

³ One obvious response to this question is that G.D.P. as an indicator for national wellbeing has many shortcomings. In the past decades, organizations have switched to more comprehensive metric systems. G.D.P. is the appropriate metric for the purpose of this comparison because it is an economic index of an entire country, allowing us to compare countries purely based on economics.

and divided by state, each state still serves an enormous population. The challenges to managing a large population in each state could contribute to health care delivery failures (Paul et al. 2011).

More specifically, healthcare delivery is plagued by weak informatics systems that fail to accurately report morbidity and mortality; discontinuity of care from community providers to emergency obstetric facilities; health workers that lack technical support (proper equipment, etc.) and training resources; and haphazard referral systems that create a delay in care leading to premature and preventable death (George 2007). When an individual does reach health care facilities, antenatal care is limited to distribution of iron tablets and tetanus shots (George 2007, Goldie et al. 2010, Iyengar et al. 2009). Antenatal visits frequently fail to screen or treat for illnesses unrelated to pregnancy, further contributing to high morbidity (Iyengar et al. 2009).

Research also focuses on geographic differences in maternal health, and discusses the potential reasons for such geographical associations with health. Compared with women living in an urban environment, women living in rural areas are subject to harsher conditions because of the scarcity of health care providers and facilities (Hazarika 2009). Even within urban environments, there are considerable differences between women residing in slum areas and non-slum areas; only 55% of slum dwellers have the recommended amount of antenatal care visits as compared to 74% of non-slum dwellers that have appropriate antenatal care (Hazarika 2009). These differences were attributed to employment patterns, traditional customs, and literacy levels, among other factors.

Urban India accommodates 31% of the national population (The Indian Express 2013).

Overflowing urban centers, characterized by urban slums, are a result of the recent migration

patterns from rural environments to urban environments. Population reports show that the total slum population in India has risen from 27.9 million in 1981 to 42.6 million in 2001 (Hazarika 2009). Internationally, slums have been recognized as neglected communities stricken with health problems. Hazarika (2009) argues that the urban slum itself is a constraint to health; they are characterized by poor infrastructure, high population density, lack of civic amenities such as water and electricity, and deficient access to sanitation. Such conditions are optimal for the transmission of vector-borne disease. For example, malaria in urban slums is twice as prevalent than in non-slum communities (Goli et al. 2011).

While there is abundant research on the institutional and geographic factors causing high maternal mortality and morbidity in India, there is less known about the social and cultural determinants of maternal health outcomes that are emphasized in the I.C.P.D. definition. The limited research on the socio-cultural determinants of maternal health explores factors along the axes of social class, gender, social interaction, and cultural beliefs and practices. Iyengar et al. (2009) outline the social context of maternal deaths within a rural region of India, highlighting that even though 37% of the population belonged to marginalized castes and tribes, 74% of the deaths in the region occurred among women belonging to these groups. In terms of health disparities rooted in gender inequality, Agarwal et al. (2007), who studied domestic violence during pregnancy, argue that a woman's well-being should not only be measured in terms of her absolute capabilities (physical access to health care facilities, availability of hospital care, etc.), but also in terms of the woman's relative capabilities within families and households.

Other social determinant researchers focus on social participation and social trust among members of a community as an important contributor to health. Social trust ensures instrumental, financial and emotional support among participants, which inextricably influences

the community members and the community's health (Giordano et al. 2012). Another important social determinant of health is the intersection of female autonomy, cultural norms and health. Female autonomy will be discussed further in the literature review section starting on page 14.

Each study of a social determinant must reflect and explore the cultural fabric from which the social determinants manifest. For example, there are cultural perceptions of the qualities of a "good wife" (Iyengar et al. 2009). Similarly, there are cultural practices about where the wife and husband should live after marriage, where the woman should deliver her first child, when the child should begin breastfeeding, who should deliver the child, etc. (Rahi et al. 2006, Sadgopal 2009, Iyengar et al. 2009). Organizations attempting to promote institutional delivery as a way to reduce maternal mortality have targeted the cultural use of dais, or traditional birth attendants, as a mechanism to fuse cultural traditions with allopathic medicine supported by epidemiologic research. In other cases, cultural beliefs about illness confine the extent to which allopathic, Western medicine can treat illness. Iyengar et al. (2009) recorded times when the family would assume the baby had died based on cultural perceptions (rather than the medical reality), preventing parents from seeking immediate medical care. For example, one family believed that their baby had died earlier than it actually had, and that the dead baby's poison had spread to the mother, causing maternal illness. Iyengar et al. (2009) also reported that decisions to seek further care in an obstetric emergency were often made by men, and frequently were based on the family's ability to pay. Cultural perceptions of the importance of the life of the dying mother and the attributes of a proper wife have been seen to affect male decision-making in various case studies (Iyengar et al. 2009).

Before continuing, it is important to remember that there is incredible inequality *within* India among different social groups (Iyengar et al. 2009). Understanding the means and forms of

stratification helps to shape how and what research is conducted. In terms of access to health care, those in the top economic quintile of India are receiving better care because they have better geographic access to such care; more financial freedom to spend funds on medical expenses; and connections with more, and different, social networks (otherwise known as social capital) that can be associated with increased communication about health concerns, and increased support. Social norms that could affect health are also different in different classes. Members of the upper class are less likely to have arranged marriages and more likely to encourage female participation and involvement in the workforce than the lower caste and class.

The malady of poor reproductive health in India is an important factor of national development, but the solution can be complicated. Through the matrix of institutional, biological, environmental, economic (and more) factors that contribute to the current maternal health situation in India, there are areas for further research and exploration where researchers can discover potential solutions.

LITERATURE REVIEW

Many researchers focus on social determinants of health to analyze current maternal health in India. Female autonomy, as a socio-cultural factor, will be discussed in detail.

How are female autonomy and maternal health outcomes measured?

Researchers (Moursund et al. 2003, Basu et al. 2004, Bloom et al. 2001, Self et al. 2012) usually use indicators like decision-making autonomy, permission to go out, financial autonomy, greater intrapersonal control, and independence in household structure to measure female autonomy. The female mortality/male mortality ratio (F.M.R.) is often an indicator of gender inequality in developing nations and can reflect the character of gender relations. A high F.M.R. can describe the relative survival chances of males vs. females, even after social

improvements. Such patterns often reflect gender relations: males are disproportionately benefiting from the social improvements (like medical care and living conditions), therefore their mortality rates are relatively low compared to their female counterparts. Therefore, even if economic progress improves social conditions, the character of gender relations can unevenly distribute the benefits, prohibiting women from "becoming developed" (Sen 1995).

Currently most indicators focus on health outcomes that are practical to measure under diverse conditions: pregnancy, sexually transmitted infections, reproductive tract infections, contraceptive use, abortion, proxies of social and economic conditions, family or desired family size, rates of child mortality, and health-seeking behaviors (Bloom et al. 2001, Hadley et al. 2011, Mistry et al. 2009, Self et al. 2012, Basu et al. 2004, Moursund et al. 2003). The current system of assessing health situations and developing programming uses the Burden of Disease (B.O.D.) mechanism, which measures ill health as justified by the disability adjusted life year (D.A.L.Y.) statistics. The B.O.D. methodology is based on the International Classification of Disease, thus it is primarily based in organ-tissue pathology. Because the programs designed for reproductive health and female autonomy are often preventative in nature, it is hard to measure the burden of disease because ideally the disease will not have emerged. For example, it is easy to measure how many maternal deaths were due to hemorrhaging⁴. It is harder to measure the number of maternal deaths due to hemorrhaging that were avoided because of preventative measures such as delivery with a skilled birth attendant or increasing the age of childbearing. Because the B.O.D. is not designed to measure non-health factors, it is difficult to measure the preventative or missing cases. Unfortunately, reproductive health spins in a vicious cycle: because measurement indicators are difficult and require innovative techniques, reproductive health is often marginalized in the discussions of development goals, which means that there are

⁴ *Hemorrhaging* is when there is excessive blood loss that leads to maternal death.

often no funds to go into developing a measurement technique (Kaufman 2009).

How is female autonomy related to health?

There are different explanations for the correlation between female autonomy and women's health. The psychosocial model suggests that an individual's perception about her relative place in society or in the family and the self-control over her condition produces stress. Stress, in turn, affects a woman's mental and physical health (Marmot et al. 2001). Marmot (2001, p.1304) and "failure to meet these needs [i.e. controlling one's situation] leads to metabolic and endocrine changes that in turn lead to increased risk of disease." Another, more material hypothesis about the effects of female autonomy suggest that as female autonomy increases, women have more access to resources, which in turn gives them access to better health. However, by increasing their autonomy, females are resisting idealized norms, which could lead to psychosocial stress that could abrade women's health (Hadley et al. 2010).

Since the International Conference on Population and Demographics (discussed on page 5), efforts to improve female autonomy have been considered imperative to increasing health-seeking behavior. (UN 2006). Studies have found that with an increase in female autonomy, there is a decrease in family size and fertility rates as a result of increased access to education (Balk 1994, Jejeebhoy 1991, Visaria 1993) and higher contraceptive prevalence (Khan 1997, Schuler and Hashemi 1994). Self et al. (2004) studied how son preference influences fertility before conception even happens. They note that if there are more sons in the family then the family is less likely to allocate financial funds to maternal care. Thus, son preference limits female's autonomy in health-seeking behavior. Basu et al. (2004) highlight education as the panacea for all ills. According to their study, female education had a greater impact on child mortality than family income or male education. Bloom et al. (2001) highlighted freedom of

physical movement as an important determinant of utilization of healthcare. Moursund et al. (2003) discussed autonomy as a community characteristic that impacts desired fertility.

Moursund et al. (2003) also observed that the women in their sample who had earnings were more likely to want fewer children and have more contraceptive use. Also, emotional autonomy was correlated with an increase in contraceptive use, perhaps because women were able to have conversations with their partners about their bodies and family planning preferences (Moursund et al. 2003).

Table 2: Summary of the Potential Impacts of Female Autonomy on Health Outcomes.

Autonomy	Health Outcome
Economic Autonomy	Women who have earnings have lower desired
	fertility and higher contraceptive use.
Physical Autonomy	Women with more freedom of movement have
	more prenatal care.
Decision-making Autonomy	Women with more decision-making tools have
	higher contraceptive use than those who do not.
Emotional Autonomy	Emotional autonomy is associated with higher rates
	of contraception.
Knowledge Autonomy	Education is often considered one of the main
	contributors to female autonomy.

Constructed by the author with information from Dharmalingam et al. 1996, Moursund et al. 2003, Self et al. 2012

How can female autonomy be improved?

Organizations that lead the public discussion regarding women empowerment and health continuously emphasize the importance of education. The benefit of education is, of course, intrinsic in itself; however, the downstream effect of female education has exponential results worth discussing. Female education affects literacy rates, literacy rates, in turn, can affect agency, and agency can affect female voice in family affairs and in public discourse, which can ultimately promote social change. There has been ample empirical evidence of the relationship between female literacy and fertility (Ghose 2007, Kothari et al. 2011, Mohanty 2012). Educated women are more resistant to continuous child rearing as their horizons expand and they realize

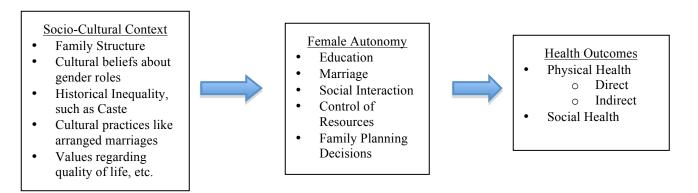
their potential. They have greater freedom to exercise their agency in family decisions. Also, information about health management and family planning is easily disseminated (Sen 2000, p. 199). Kerala, one of India's richest states, prides itself on the high rates of female education, which researchers believe is a contributing factor to its status as one of the lowest fertility rates in all of India, with a fertility rate wavering at 1.7 in 2000 (Sen 2000). Murthi et al. noted the powerful effect of female literacy on child mortality. As compared to other instruments of child mortality reduction, such as male literacy or general poverty reduction, increasing female literacy reduced child mortality from 156 per thousand to 110 per thousand (as opposed to 141 per thousand from 169 per thousand in the case of male literacy, and 153 per thousand from 156 per thousand in the case of general poverty reduction). (Murthi et al. cited in Sen 2000, p. 198). In these examples, education has a direct effect on quantitative health outcomes: fertility and child mortality.

Education is arguably one of the main forces influencing autonomy (Dharmalingam et al. 1996). Education is necessary for a certain level of gender equality, although cultural norms regarding gender equality are also important. Basu et al. (2004) found that education does not increase a woman's knowledge about diseases, but rather improves a woman's ability to understand information that is de-contextualized. Thus, education is important because it teaches women how to critically think. Basu et al. (2004) emphasize the importance of secondary education, arguing that primary education is not usually enough to result in increased female autonomy and empowerment. In their analysis of Indian school systems, they discovered that primary school mostly teaches people to obey and recognize authority. While obedience and authority are both helpful qualities for the doctor-patient relationship, in the context of the family, women can also be obedient and recognize authority in her husband or other members of

her community, yet this may have negative impacts on her autonomy.

Aim of the Research

The aim of this research is to further explore how female autonomy influences health outcomes (both physical and social, as measured by morbidities, health-seeking behavior and female autonomy), and understand the social context in which these patterns exist. The discussion provides insight on how these relationships may fit into human development strategies.



METHODS

At the beginning of this study, I thought that I would investigate how maternal morbidities are affected by social determinants of women in the urban slums. Throughout the course of the project, I realized that the complexity of this issue makes statistically significant conclusions about causal relationships difficult. As described in my literature review, I am interested in the definitions of reproductive health that included social wellbeing as well as physical wellbeing. As the project progressed, it evolved into theorizing about how social dimensions of women's life, specifically female autonomy, could affect their physical health and reflect their social health.

Most research on the relationship between female autonomy and maternal health outcomes discussed in the literature review focused on quantitative measurements as reported in

national surveys. However, as the literature suggests, there are important socio-cultural factors that contribute to maternal health that are not necessarily accessible in quantitative surveys. Bandyopadhyay (2011) argues that often highly structured interviews and surveys do not allow enough space to truly explore underlying, seemingly invisible, answers to *why* the maternal health situation is the way it is. Qualitative research not only allows the respondent to generate the parameters of the discussion (rather than the scope of the interview tool), but it also fosters a space to discover topics that may not surface in a quantitative survey.

This study focuses on maternal morbidity rather than maternal mortality. Participants were selected from an urban health database provided by the Institute of Health Management, Pune (I.H.M.P.)⁵. I.H.M.P. trains community health workers from local communities to work in their communities. Women who are pregnant register themselves with the community health worker, and the community health worker tracks the woman's health by conducting health questionnaires during their monthly visits to the woman's home. In the questionnaires, the community health workers inquire about any illness or complaint that could be a risk factor or symptom for a complication. Because morbidity reflects physical health, which is a health outcome that could be affected by social determinants, the women in my sample reported at least one complaint or illness to their community health worker. The women's social health was discussed in the interview. Twenty-five pregnant women were interviewed for this study. The women ranged from age 19 to 32, according to their self-reports. Their gestational age ranged from three months to nine months. Their complaints included dizziness, headaches, acidity, weakness, vaginal discharge, abdominal pain, and other things.

This study was conducted in six slums in the city of Pune, Maharashtra, India. The

⁵ Institute of Health Management, Pune is a non-governmental organization that is funded through grants from organizations like the Oxfam. The Pune site focuses on urban health and serves a population of 30,000. (I.H.M.P.).

slums included in this study were selected for the I.H.M.P. urban health program (that trained the community health workers) because of their proximity to the N.G.O. site, and because of their health situation. The participants were interviewed in their neighborhoods. Depending on convenience and finding a space that would maintain the utmost confidentiality of the participants, occasionally the interviews were conducted in a neighbor's or family member's home rather than the participant's home. All of the women gave informed consent via signature or thumbprint. All women's names have been changed in this report to protect their identities.

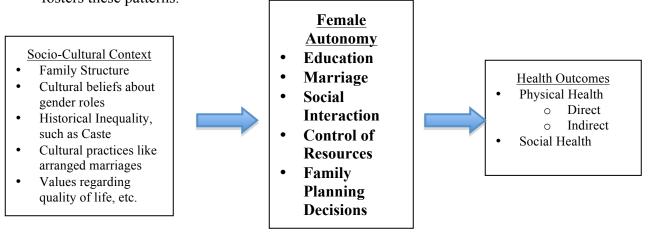
A loosely structured interview tool was designed to collect information about the social and cultural determinants of morbidity among women who have complained of an antenatal danger sign. The interview tool was checked for cultural competency, and pre-tested by the I.H.M.P. staff. Based on the suggestions of the I.H.M.P. staff, appropriate modifications were made to ensure cultural sensitivity and quality assurance. An interpreter was used during the interviews. She was fluent in Marathi, Hindi and English (the languages used in the interviews). Though she had never worked with I.H.M.P. before, she had experience interviewing women and was aware of health concerns in urban slums. The interpreter and I maintained open communication throughout the interview process about any necessary changes to the interview tool to promote better understanding of the questions and yield more rich and comprehensive data. The interview tool included information about: demographics of the women and household; daily life of the women; the woman's role in the community, in the house, as a wife and as a mother; education; communalism; and the cultural practices and perception of the illness and treatment of the illness. The interviews were recorded (when consent was given) and transcribed.

During the transcription process, the data was coded, grouped and analyzed for significant patterns. Because this method of data analysis can be subjective, it is important to be

transparent about my position and values that could influence the data interpretation. As a Western female student, the analysis was done through a Eurocentric lens. However, I was aware of this position and attempted to be as objective as possible.

FINDINGS

There were five patterns of limited or curtailed female autonomy in the sample: education, marriage, social interaction, control of resources and family planning decision-making. Within the description of the patterns of female autonomy, I discuss the socio-cultural context that fosters these patterns.



Education: Community (caste) norms levied by historical and religious roots, social norms of marriage, and gender roles in the household thwarted women's education.

As discussed on page 17, education efforts are usually at the forefront of development philosophies. Most commonly the women in the sample did not complete enough schooling to have an effect on their fertility reduction.⁶

⁶ Basu (2004) argues that primary education is often not enough to have significant effects on a woman's fertility behaviors.

Table 3: Data Regarding Education

Level of Education	Number of Participants (n=25)
Average Education	6.8 years
No School	7
1-8 years of School	5
9-10 years of school	7
10-12 years of school (JR college)	6
>12 years of school (college), did not graduate	2
College Degree	2

The most commonly stated reasons for curtailing education were norms about marriage, gender and caste. Though the caste system was legally eradicated in the Indian constitution created in 1950, the social structure and identity still lingers in employment, education and health patterns. Historically, old Hindu laws prevented Untouchables from reading the religious scriptures. Since Independence, there have been various education reforms to promote the education of the Dalit, or Untouchable, community, including a quota system in schools and in government positions⁷. However, in reality, the Dalits face segregation and discrimination that leads to low enrollment and high dropout rates (Vijapur 2013).

In some cases, participants were indifferent to their education prospects.

"Nobody is educated in my house, so I was not educated." Caste: Wadari

"I just didn't continue and I got married." Caste: Mathang

"I was never educated because my mother never admitted me to school." Caste: Wadari

⁷ Dalit refers to the Untouchable castes, but is considered to be more politically correct than Untouchable.

"I have never even gone. I was admitted but I never went there. I like to play with my friends around." Caste: Wadari

"I left school after the 5th or 6th standard because I was only interested in playing." Caste: Mahar In all five cases, the women belonged to an "Untouchable caste", according to their self-report. Though the participants did not explicitly attribute their decisions regarding education to their caste, their sense of normality about their education experience alluded to the idea that perhaps certain communities, or castes, do not participate in education because of the historical patterns of caste stratification and education opportunities.

In other cases, the participant's education was truncated because of marriage. As discussed in detail later, the timing of marriage can be fueled by financial stress of the family or by social concerns. Beena's dreams were cut short because of the social implications of marriage. Growing up in West Bengal, Beena enjoyed school, played sports, and was a part of the national cadet corps. She aspired to join the police force. However, her mother's sickly status hastened her marriage, as it was her mother's wishes to see her daughter married before she died. The marriage proposal came through someone who knew her family, and her parents accepted with no input from the bride-to-be. Because the marriage of her daughter was an important social function that Beena's mother wanted to experience, Beena only completed the eighth grade.

Unlike Beena, Anjali completed her first year of a commerce degree at a local college⁸.

Anjali, who rolled *chapati*⁹ dough as she spoke, stopped her education because her father decided to get her married. Anjali explained, "I had many younger sisters and he had to get them married after me. But, actually, I wanted to continue my studies. I wanted to be a graduate and work at a bank." Both Beena's case and Anajli's case reflect the social impetus behind decisions

⁸ The Indian education system is set up so that there are 10 years of primary and secondary education. Then there are three years where an individual will select a track (usually science, social science or business). And then they will attend college that will be for a specific course of study (commerce, social work, medicine, engineering, etc.).

⁹ *Chapati* is a staple food that is like a tortilla.

about education. Because of the social importance of marriage, Beena's mother encouraged her to expedite her marriage plans and stop her education. Because of the social roles of the bride's family in marriage ceremonies and correlating financial burdens, Anjali's father decided to stop Anjali's education. In both cases, the decision was made by someone other than the participant, despite her wishes to continue and to be a part of the workforce.

The education of the participants was also affected by the financial situation of the house. Almas, the only Muslim in the sample, talked about her mismatched clothes and her family's privation. Her father was a vegetable vendor and moved around from place to place when his sale profits weren't sufficient. He was the only earning member for a family of five children. "I was so poor that I never had shoes. If I had a knicker, I did not have a *salwar*. If I had a *salwar*, I did not have a knicker. I never had everything together. What could I do?" Almas went to school for a few months, before her parents pulled her out because of financial reasons. "I used to love to go to school with my friends, but I was too poor."

Like Almas, many women cited financial troubles as the reason their education was cut short. Poverty, in terms of financial access, is certainly a determinant of education. However, some effects of poverty are unevenly distributed between males and females. When financial situations demand more household help from daughters, the women's educations often get thwarted before those of their male counterparts.

"I stopped because I had four sisters and my mother thought that I should be home to help her. I wanted to continue my education but because of the financial condition of the house, I could not continue."

"I stopped because my father expired, we were only mother and brother in the house so we got the responsibility so I stopped."

¹⁰ An Indian tunic that is commonly worn by women.

"Because there were other siblings, my mother required my help."

"I left school because of the financial condition and also to help my mother. I have two brothers and I am the only daughter, so my mother needed my help. I was poor and I had to leave school."

In these four statements, the women divulge the gender roles that lurk beneath the surface. Their education (perhaps rather than their siblings' education) was stopped because of the social roles of a woman, especially during times of burden. Rajushree says that "naturally" she had the responsibility of taking care of the house after her mother passed away. Rajushree had internalized the socialized gender roles of men and women, which negatively impacted her educational prospects.

Education, in and of itself could be considered female autonomy because it gives women the space to foster the senses, imagination and thought (one of Nussbaum's central capabilities). Education also paves the way for the development of other dimensions of female autonomy. For that reason, understanding the participant's level of education helps to understand their accumulated female autonomy. Understanding *why* the participant's education was encouraged or curtailed (the caste, marriage and gendered reasons discussed) explores the social context that produces and contributes to female autonomy.

Marriage: Family members are key decision makers about marriage arrangements in order to maintain family ties and a strong identity.

Table 4: Data Regarding Marriage

Marriage Behaviors	Number of Participants (n=25)
Arranged Marriage	24
Non-Arranged Marriage ("Love Marriage")	1
Early Marriage (<18 years old)	11
Marriage Above 18 years old	14

Dimly lit by the light coming in from the open doorway, Kalpana leaned on one hand as she spoke with her other hand, her leg comfortably bent beside her. The ruffles of her pink sari toppled over her belly that barreled out of her small-framed body. She spoke about her first years of marriage with her husband who worked as a day laborer. It was an arranged marriage and she says, "I had no choice. It is up the parents to decide. Even at this age, we don't open our mouths in front of our parents. Whatever they do is good for us."

Her father and stepmother sought out a known family to ask for her hand in marriage when she was 17. The beginning moments of her marriage were tainted with confusion and secrecy. When she first saw her husband, he was talking to his cousin in a language that she had never heard. "Where am I being married off to?" she thought fearfully since at the time she only spoke her native tongue. Kalpana soon realized that her mother-in-law was from Maharashtra, not from Kalpana's native place, Utter Pradesh. Stricken by the news, she put her foot down. She told her father that she was not going to stay with her husband and she remained in her native land. "In my culture," she explains, "someone from Utter Pradesh is not allowed to married someone from Maharashtra." Her father pacified her saying, "what can you do now that you are married, now you will have to cope up with whatever it is." However the secrecies of the wedding proposals did not stop at the geographical identity: after moving back with her husband, she also realized that he was of the Untouchable caste, "the lowest class that my community never marries." In order to staunch the deterioration of the family reputation she did not inform people at home. Now her father and stepmother are aware of the situation, but she says, "After you have children, what can you do and where can you go? You have to continue like this." She explained, "In our community, if the boy is not married after that age of 22 then nobody marries him. So because of this fear, he wanted to marry fast. [His family] hid everything and got [him]

married."

Kalpana's story demonstrates two important socio-cultural phenomena. First, she had no voice in the decision of when her marriage would be and to whom. Second, marriage is an important social structure in India. Out of fear that the boy would not be married and face social disgrace, her mother-in-law kept certain facts a secret in order to hasten his marriage. Part of the social function of marriage is identity. Once you are married, you are a part of your husband's family. While all of the women were still in touch with their birth families, their identity had changed. Also, the people who determined the perimeters of the women's autonomy shifted. After marriage, a participant's birth parents were no longer drawing the lines around her autonomy by making-decisions for her; as her new family, her parents-in-law absorbed that role. Like education, marriage is controlled by family decision-making.

In all but one of the cases, the women had arranged marriages. The women nonchalantly discuss the cultural norm.

"Everybody said that you should get married, so I got married."

"I had not given any thought to it, just that my parents said that I had to get married so I got married. I had no opinion of my own. I don't go against the wishes of the elders in the house."

"We had not seen each other at all. It had come through relations, and the elders decided."

Even in Anita's story, the single case of a "love marriage", the final decision was in the hands of her family members. "My mother initially thought that he has nobody here, he has no house so how can I get her married to him? But then later on she thought again and she said if everybody is going to get married to a person who is well settled and who has a family, then what happens to the person that doesn't have any body?" Despite allowing her to marry somebody that she loved rather than deciding someone for her, her mother was still the final decision maker. It is also important to note that Anita came from a household with only her

mother, grandmother and sister. It begs the researcher to ponder whether Anita's marriage decision would have been different if there had been a man in the home.

Family is not only involved in the arrangement of marriage, but the engagements are made *within* a family. Sixteen of the participants were married to a distant relative: "husband's brother's wife", a "cousin", "among her relations", "*mama's* son", "father's sister's son", "father's cousin's sister", "brother's sister's son". Untangling the complicated family trees was futile since the vernacular is different. A father's sister could actually be the father's sister, or it could be the father's wife's sister. The most common was marrying a cousin from the maternal family. According to the interpreter, marrying a maternal cousin is desirable, while marrying a paternal cousin is unacceptable or looked down upon. Because the mother married out of her family, her identity is rooted in her husband's family. Therefore, a maternal cousin would not be considered family in terms of social identity, even though it is family in terms of genetic similarity. Marriage changes identity in such a way that it reflects the importance of family in one's identity.

While a shift in identity from one family to another may seem abstract, the financial changes after marriage are concrete. Several of the respondents said that their parents arranged their marriage because there were too many mouths to feed or because there were younger sisters who were also of marriageable age. As discussed in subsequent sections, the woman (in most cases) is entirely dependent on the husband and his family for provisions and pocket money. Because of the financial shift after marriage, several of the respondents said that they were married under the age of eighteen. Several of the respondents that were married under the age of 18 mentioned the financial situation at home as a catalyst for marriage.

Put simply, female autonomy is restricted in marriage decisions because their elders

¹¹ *Mama* is the Marathi word for maternal uncle.

arrange their marriages. It is important to note that associating arranged marriages with the lack of female autonomy is a highly Westernized perspective. In Indian culture, arranged marriages are genuinely perceived as an extension of the parents care for their children. As Kalpana explains, "whatever [the parents] do is good for us [the children]." In some ways, arranged marriages are just another example of the familial identity. Families act as a unit; there are no independent parts. In the Indian perspective, arranged marriage is not ignoring the woman's voice, but rather, using the family's voice to make a decision in the woman's best interests. When I asked Rajushree if she was going to arrange her daughter's marriages she said, "they will be married according to our wish." And then later adds, "Whatever my husband says, they will do". As it seems, patriarchy lurks beneath the surface of the ancient tradition. However, as discussed further in detail in subsequent sections, it is not only male-female power relations that affect women's autonomy, but also female-female hierarchies within the family.

With the exception of early marriage (under 18), which occurred in eleven of the cases, marriage may not directly affect a woman's health during pregnancy. However, the patterns of identity and family cohesion are the foundation on which other social norms are based.

Therefore, it is important to understand the institution of marriage in India, to understand how the relationships within marriage are like a social web that affects health.

The women's biological families influence (if not make) decisions about education and marriage. In those situations, the birth family is the limiting factor of the participant's autonomy. However, after marriage, the women shift to a new family, and thus the perimeters of their autonomy shift to whatever is dictated by their new family. Therefore, in the following patterns, the notion of family refers to the husband's kin.

Social Interaction: Social interaction is both gendered and managed by family members, perhaps in order to preserve family boundaries.

Table 5: Data Regarding Social Interaction

Social Interaction Behavior	Number of Participants (n=25)
Do NOT interact with the community beyond hi/hello relationship	17
Report they see no need to interact with outside community because they are happy with their family members	8
Mothers-in-law prohibit them from social interaction	4

The narrow paths of the slum are often a hustle of activity. In the backdrop of the traffic clamor from noisy streets nearby, the sounds of the slums are a chorus of children playing, scrubbing sponges, neighbors yelling, TVs and radios blaring, and pots clanging. After many field visits, the socio-geographical pattern of the slums became evident. There were large groups of men seeking shade under a drooping tree, in a space under a stage constructed for religious festivities, or in an empty shack. Many groups were playing cards, sitting in large circles.

Couples of men, with arms draped over each other, lean on the feeble corrugated tin walls, chatting and laughing. The women of the slum, on the other hand, were found squatting on their stoops with a pile of soapy dishes, a heap of clothes to wash, or a squirming, naked child trying to escape his mother's soapy hands. The women were rarely in groups. The most would be a group of women, most likely from the same house or family, cooking together. The women's conversations were separated by the spaces between their workstations outside of the homes—as if the social tasks create a boundary about where conversations could take place.

Anjana, one of the few participants who completed her university degree, sat on the floor

and proudly displayed the folder from the doctor, with the sonographic photos and the pregnancy progress reports. She explained that she had only married two years ago, so she had not had time to make friends in the neighborhood (despite her desire to have friends); besides, she was busy with her one-year old daughter and her household chores. Her husband on the other hand was a "spend thief. He spends his money on his own clothes and he has a lot of friends and they go out." I asked if he ever invited her along, she said no, explaining "he is with *his* friends." She said that one of her expectations of her husband was "to carry himself nicely in the outside world." She tells him to spend less money, and "he listens for the time being, but then he goes back to it," she explains, chuckling. The patterns on the streets and stories like Anjana's demonstrate that communalism and social interaction is different for men and women.

Many of the participants, like Anjana, did not interact with the community outside of their families. For some, the participants claimed that they simply did not like to engage with others, as if it were just a part of their personality.

"I have no friends. I don't like to move around and visit, I like to be in the house. Sometimes I go and chat with my sister-in-law next door."

"I am not so much in touch with other people around me because I myself do not like to go and mix up with people outside."

"I don't visit anybody and I don't talk to anybody around."

Others claimed that there were restrictions that prohibited them from community engagement beyond hi/hello interactions. The boundaries that help to create and maintain a family identity are not only created through arranged marriages, but also through the social lifestyles of a married couple.

"I do not chat with my neighbors much because I am busy with my daily routine. I feel lonely sometimes. My real aunt [blood relative] lives nearby, but my mother-in-law doesn't even allow me

to go there. My mother-in-law will ask why do you need to go there so often? Only if there is some occasion then I can go. I feel very much like going and seeing them but I can't."

"I cannot go out and talk because my mother-in-law says no. I also do not like it. I just say hi, hello to people."

"I am not introduced to anybody outside, because I have no time. Also, the in laws will not appreciate that I go and sit with people. I talk only to my neighbor- just a hi, hello relation."

"I am not allowed because my mother-in-law says so"

Even if the parents-in-law don't mandate the women to stay at home, many still said that they are content with the people in the house, so there is no reason to seek social support from outside their home.

"I don't visit nor does anyone visit me, so there is no chit chatting with the neighborhood. I am very happy with the people in my house so I do not feel the necessity of having friends or going and meeting with anybody."

Thus, the family boundaries that were created during the arranged marriages are maintained through social interaction, sometimes forcefully. However, the social interaction patterns are gendered. Men are free to interact with the male community members outside of their home, whereas women are constrained to the walls of their social roles. While none of the participants explained this in their own words, the interpreter claims that the restrictions sprout from a mother-in-law's fear of gossip that could harm the family reputation.

Rajushree says that she doesn't like to talk to anybody in her slum "because they are all unclean." Rajushree's daughters attend an N.G.O.-funded preschool just a narrow alley away.

Twenty-five coughing, giggling, crying youngsters sit on a mat on the floor and draw with chalk on individual black boards that are scratched and chipped. In the afternoon, when Rajushree goes to pick up her daughters from the pre-school, she "brings them home, washes their hands and

feet thoroughly and puts them in the house". Thus, the boundaries can be created because of social differences that are often demonstrated in physical conditions.

Just like decisions about education and marriage, family is integral in decisions about monitoring women's social interaction, perhaps to maintain family identity. Decision-making about movement, particularly prohibiting movement, was associated with less contraceptive use and less health-seeking behavior, as discussed in the literature review (Basu et al. 2004, Moursund et al. 2003, Bloom et al. 2001). With the exception of the handful of women who said they did not interact with others simply because they did not like it, all of the women said that there was some restriction to their movement.

Prohibiting social interaction is perhaps one of the most obvious constraints on a woman's physical autonomy; however, it is often rooted in social norms of what female autonomy should look like, and how and why it should be restricted or promoted. Social interaction is the core of physical autonomy (one of Jejeebhoy's five types of female autonomy discussed on page 6).

Contributions and Control of Resources: Most women are not in control of the resources, though they have access when they ask. The control of resources reflects a division in the cohesive family unit that is rooted in prized-males and the gendered roles of daughter-in-laws in the household work.

Table 6: Data Regarding Control of Resources

Control of Resources Behavior	Number of Participants (n=25)
Mother-in-law is in control of resources	14
Husband is in control of resources	3
Participant is in charge of resources	4
Other family member is in control of the resources	4
(brother-in-law, father-in-law, grandparents-in-law)	

G.D.P., and even the Human Development Index, focus on incomes as the material basis of our wellbeing. However, our material wellbeing is based on contingent circumstances, such as distribution of income within a family. An income of one family member is often shared with other family members; thus, the capabilities and wellbeing of the individuals depend on interfamilial distribution (Sen 2000). According to a report released in 2012, only 40% of women have access to family incomes (Sinha 2012). Not only does this suggest that income is a circumscribed proxy for quality of life, such patterns indicate the need for improved efforts of gender equality. The patterns of interfamilial distribution of finances are mechanisms that curtail women's autonomy, and therefore affect health.

Essentially, being a housewife consumes enough time and energy to be considered a job. However, the daily long hours at home do not account for any contribution into the family earnings because there is no actual salary. Twenty women in the sample said that they did not work outside of their household duties that were expected of them by their parents-in-law or their husband. Five women had jobs outside of the house, but were also required to do the household maintenance when they returned from their jobs.

Aditi wakes up every morning around six and heads to the toilet built by the municipality. Because there are only six or seven stalls for the entire slum population, she often retreats to a field nearby to relieve herself. She comes home and washes the dishes from the night before. In the corner of the kitchen there is a waist-high cement slab that divides the kitchen from the four-square-foot area with a drain on the floor. She warms water collected from a tap outside of her house and then bathes in the designated area of the kitchen. She feeds her father-in-law breakfast before he goes to work, and then starts on the meal preparations for the rest of the day.

Between her mother-in-law and herself, they complete the vegetable dish and the *chapatis*¹² for lunch. Then she cleans all of the dishes, sweeps and mops the floor, and then does the laundry outside, all the while taking care of her two-year-old daughter. "The whole routine keeps me very busy," she claims. Like all of the women in the sample, Aditi's repeats her routine day after day.

Unless there was no other woman in the house, the participants did not have access to the finances unless they asked. In a majority of the cases, the mothers in laws were in charge of the money.

"My father-in-law and my husband both give both of their pay and bonus to my mother-in-law."

"Three people contribute- my husband, my brother-in-law and my father-in-law. All of the money is with my mother-in-law."

"There are three people earning. My father-in-law is in government service, my husband is working privately, and my brother-in-law is working in an Information Technology company. The entire money in the household belongs to the mother-in-law. She runs the house, she buys the groceries, she buys the vegetables and I never have money with me."

"The grandmother is in charge of the house. Both of the husbands give all of the money to her."

"My mother-in-law runs the house; whenever I need something for my personal use, my mother-inlaw never says no."

"The whole entire household is in the hands of my mother-in-law. They all give money to her. My mother-in-law buys things, like the groceries or whatever and she spends."

In families without a mother-in-law present, the participant's husband or brother-in-law usually handles the finances.

"My husband is the only provider. He brings all of the provisions including the baji¹³, and he gives

¹² Chapatis are a tortilla-like staple food.

¹³ Vegetables for the vegetable dinner dish.

me money that I can use to shop. He provides everything."

"My brother-in-law has all the money, and he is in control and he does all of the shopping for the grocery and vegetables, whatever. [My husband] gives his money to the elder one [his brother]."

It is important to note that there were no cases where the woman did not have access to money: either they had control of the money or they were given money whenever they asked.

Again, families act as a unit, even though they often have a leader in the financial decision-making. Except for a handful of cases, the women did not have the control of financial resources. The participants' contribution in the household was limited to the cooking, cleaning, child bearing and child rearing. Interestingly, the "control of resources" role did not seem to be gendered, but rather prescribed to another familial hierarchy. As mentioned, in most of the cases, the mothers-in-law were in charge of the money and were pestering the daughters-in-law to complete their household work in a timely and specific manner. Gagoli et al. (2011) describe the recent feminist work on domestic violence that emphasizes women as not only victims, but also perpetrators, especially in cases between mothers-in-law and daughters-in-law. Though most of the domestic violence cases regard dowry arguments, mother-in-law and daughter-in-law conflict and role distinction is a common example of the divisions within families. Derne (2006) suggests that because sons are highly prized (as discussed further in the next section), the daughter-in-laws could be a threat to the precious maternal-son relationship.

Although in previous examples, family has been a cohesive unit and an integral part in decision-making, the patterns of control of resources reveal some of the hierarchies within families. As discussed in the marriage section, female oppression is often attributed to patriarchy. However, the patterns of resource distribution and control of social interaction suggest that hierarchies within the family that are often same-sex are also, if not more so, the controlling forces restricting the women's autonomy. In the familial hierarchy, mothers-in-law retain a

higher status compared to the daughters-in-law.

Decisions about Family Planning: In India, the most common means of contraception is a sterilizing operation usually performed on women. Free condoms and contraceptive pills are available through the I.H.M.P. community health workers, though they are rarely utilized. Accordingly, often decisions regarding family planning mean deciding when a woman will undergo the sterilization operation. Families are not only a part of decisions about family planning, but the gendered composition of future families is often the reasons for family planning decisions. The generational shifts in family planning mark a transition in Indian female agency.

Table 7: Data Regarding Family Planning

Family Planning Behavior	Number of Participants (n=25)
Mother-in-law is a Key Decision-Maker	12
Family Members Wanted Something Different than the Participant	9
Out of the participants who said their wishes differed from their families, the number that did what their family wanted, not what they wanted	9 (out of 9)

When I asked Aditi how many children she wanted including her two-year old daughter, she hesitantly said three. Then, firmly said "That will be enough." She explains "For me and my husband, we want only two even if it is a second girl also. But my mother-in-law insists that she wants a boy, so my mother-in-law says that if I get a girl then I should take a third chance for a boy. If the third child is a girl, then [my husband and I] won't ask her, we will talk among ourselves." Aditi says that she didn't even want the current pregnancy to happen so soon.

She thought it would be better to space out her pregnancies, especially since her mother-in-law made her continue the housework immediately after her first delivery causing Aditi to become exhausted 14. She says, "I only had two months rest until I was brought back [from my native place with my birth family] and they made me start working so I did not have any rest. It was very painful." Her husband, who works at a pharmacy and also thought the pregnancies should be spaced out, brought home condoms that they used once or twice after the first pregnancy but her "mother-in-law found the packet somewhere and asked 'Why have you used this? Let it be as it is. We [my generation] have never used this so why do you use it?""

Aditi's story not only demonstrates the family involvement in decisions about family planning, but also shows the intergenerational change in attitudes. Many of the participants understood the health benefits of spacing pregnancies and reducing the number of pregnancies. Nevertheless, the older generation dissuaded the younger generation from such trajectories by making the decisions for the younger generation. For Aditi, her mother-in-law's decisions were made by a desire to have a son. Aditi describes, "My mother-in-law wants a son because they want someone to carry on the family. Also, my husband does not have a brother, he only has sisters, so my mother-in-law argues 'he does not have a brother so at least let him have a son." Aditi is not the only case where fetal gender is the deciding factor. In fact, because of the risk of sex-biased abortions and health consequences of risky abortions, sex-determining ultrasounds are illegal. 15

Jasmeet, who graduated from college with a commerce degree, and her husband agree

¹⁴ In some communities and castes, pregnant women traditionally travel to their mother's house for the delivery of their first child. Participants typically went during the 7th month of pregnancy and stayed 6 weeks to 3 months after the delivery before returning to their husband's family.

¹⁵ Despite the ban on sex-determination, there is a black market of doctors perform sex-determining sonography. In January 2012, the Central Supervisory Board banned all mobile ultrasounds beyond hospitals and clinics because of the misuse for sex-determination in rural areas where the sex ratio was dipping (Dhar 2012).

that they only want two children. Even if it is a girl again, she "won't mind but the people in the house want a boy so they may not allow [her] to operate until [she] produce[s a boy]."

Anjali, who lived many hours away from her mother-in-law, "[wanted] to get operated, but [her] mother-in-law would not allow that. Two times [she] said that [she] was going to get an operation and [her] mother-in-law [came] to their house to see if she was lying or telling the truth." When asked why her mother-in-law prohibited the operation, Anjali explained, "she wants a boy." Before this pregnancy, Anjali had started taking oral contraception without her mother-in-law's approval, but she found it hard to be consistent and ended up with the current unplanned pregnancy.

Meena explained, "My in laws at least now they are saying that you should get operated but I cannot guarantee what they will say after the delivery if it is not a boy," as if the decision teeters on the decision of the in-laws.

Divya, who barely showed her first pregnancy under the folds of her *kameez*, said, "any sex was fine with [her], but [her] mother-in-law would definitely want a boy because [her] sister-in-law has two girls." Divya was married less than a year at the time of interview, so she was still navigating her husband's family system, but she suspected that her sister-in-law, who was also pregnant, was taking the chance to have a boy to please her mother-in-law.

Rohini stared blankly as she sat on the floor next to her swaddled newborn niece and responded to our questions over the ruckus of her two daughters and two nieces hitting all of the pots and pans, and spilling rice on the floor. She was straightforward when she stated "until the boy comes [she] will continue to have pregnancies." When I asked if, hypothetically speaking, she had seven or eight daughters, then would the son be worth it. She responded flatly and unemotionally. "It depends on my husband." Rohini's blunt and indifferent responses rouse the

stark realization of the deeply ingrained social role of pregnancy of Indian mothers in the urban slums, and its impact on how the women make decisions about their bodies.

"It is my husband's decision, that we will have this child. He thought that he should have one more son. Even if it is not a son, it is ok. We think three is enough and I will get operated. He proposed the plan and I accepted it."

"If it were my choice then I would like one son and one daughter, but I don't know what my mother-in-law's decision is. Whatever number the mother-in-law says, I will have to go through."

It is important to discuss that hoping for a male or female sex is not always problematic. Couples around the world make joint decisions with their partners that are sex-biased in the pursuit of a certain family composition. Decision-making behavior *is* problematic when it restricts women's voice in the discussion; promotes excessive pregnancies or too little spacing between pregnancies, which has potential harm to maternal-fetal health; or produces secondhand impacts such as economic distress to other children because of large family sizes (Paul et al. 2011, Bour et al. 2004).

Even though a majority of the participants were hoping for a boy, there were also cases were the women were trying for a girl. During her last pregnancy, the doctors told Kalpana's husband that they could only save one life, the mother or the baby, because Kalpana's "blood was low". By some chance, both mother and baby survived, but the doctors recommended the sterilization surgery to avoid the risk of subsequent pregnancies. Despite this, she is pregnant for the third time, in the hopes of having a baby girl.

In other cases, women and their partners made the decision excluding sex-bias and focusing on economic reasons. Anjana, who was five months into her second pregnancy, explained, "Whatever the sex now, this will be the last and then I will get operated. This we have decided together, and even the people in the house feel the same. We think two is enough

because we should be able to bear the expenditure."

Even when gender isn't the dominant factor, family members are often key players in the decision. Vanita explained, "when my husband realized that I was carrying for the third time, he wanted to abort it. He said, 'come I will take you to the dispensary and we will abort it.' But he didn't find time; he was so busy that he didn't come on time and then he thought now it is too late so let us continue. He made the decision about the abortion." Once he decided that they had missed their chance to abort, they decided that it would be the last pregnancy.

Vanita says, "Even my mother-in-law decided that whether it is a girl or a boy, I will get the surgery. My mother-in-law decided that because you have a girl and a boy, now lets have the last one and we will operate."

Even when the females have more autonomy in the decisions, they mention that family is still included in the decision process.

"Two is enough, according to everybody and to my husband and I."

"This is the last one. I will get operated. I feel and my husband feels that. My mother-in-law agrees. The sex doesn't matter."

"Whatever the sex I will have the operation, everybody has decided that."

"We both have decided that this is the last child. Then I will get the operation."

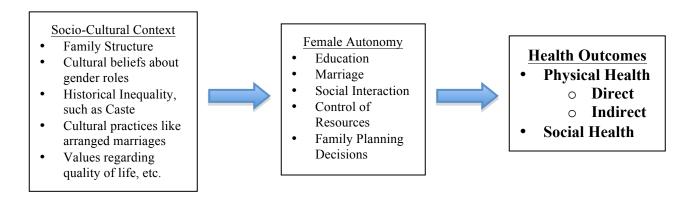
All of the women said that their husbands were a part of their decisions regarding family planning and the reasons for continuing or discontinuing reproduction. Twelve participants mention their mother-in-law as a key player in the family planning decisions. In nine of the cases, the family members' (husband, in laws, etc) wishes were not the same as hers. In all of these cases, the woman did what the family wanted, not what she wanted. Family desires for a certain sex in order to achieve a certain family composition is a global norm and does not always lead to a restriction of women's autonomy. Therefore, family involvement in family planning

decisions as a constraint to female autonomy is not as clear-cut as parents thwarting education or making rules about socialization within the community; decisions about the future of the family are family decisions in the end. However, in certain situations, the family involvement crosses the line and begins to impact women's health outcomes.

DISCUSSION

Education, marriage, social interaction, control of resources, and family planning decision-making all refer to a woman's range of decision-making and emphasize the influence of family on individual autonomy. Because of the scope and scale of this study, this research cannot establish a causal relationship between female autonomy and health during pregnancy. Still, the data supports the literature that suggests that there is a significant relationship between various dimensions of autonomy and various women's health outcomes, specifically physical and social outcomes. The discussion analyzes how the patterns of female autonomy could affect physical and social health outcomes, further elaborates on the socio-cultural context for the patterns, and discusses how these relationships fit into bigger development schemes.

Connection to Physical and Social Health Outcomes



The patterns discussed in the findings all relate back to the lack of female autonomy.

Based on the empirical literature regarding the relationship between female autonomy and women's health, the lack of female autonomy of the women in this project would affect their physical health outcomes (sexually transmitted infections, reproductive tract infections, contraceptive use, health-seeking behaviors, etc). However, as explained earlier, this data set was not designed to produce and establish causal relationships. Therefore, the focus of this discussion will be on the indirect and hypothesized direct impact of the lack of female autonomy on maternal health outcomes.

First, there are situations where *female autonomy can directly impact women's physical health*. To start, all of the women in the sample had reported morbidity. While there is no evidence of a causal relationship, the social components that they discussed could have contributed to the morbidities that they reported. One participant explained that she was required to serve all of her family members before she could eat. She explained that, at times, this meant that she did not get enough food. Her autonomy to make decisions and control her body's food intake directly affects her nutrition, which is an important physical health component of pregnancy. Anemia is a common morbidity in developing countries and is characterized by a deficiency in the red blood cells that carry oxygen throughout the body (WHO 2012). Sufficient vitamins, minerals and nutrients are critical for the development of the red blood cells, so when a woman does not have sufficient nutritional intakes, she is at risk of anemia (PubMed Health 2013).

Another example of a direct impact on physical health is physical exhaustion. Aditi talked about how her mother-in-law required her to work almost immediately after her delivery. She says she was "exhausted". Seven women complained that they were on their feet the entire day and felt that they did not get enough rest. While pregnant women are capable of physical

work (and most certainly should not be observed as helpless and in need of constant bed rest), sufficient physical rest is an important part of pregnancy. Therefore, the woman's autonomy to decide when she wanted to rest and to have support with the household chores when she needs time off can directly affect her physical health.

Pregnancy demands a lot of resources from the mother's body. Too many pregnancies or too little time between pregnancies can be risky for maternal and fetal health. When external decision making about family planning impact the number or spacing of pregnancies due to fetal sex amongst other reasons, then maternal-fetal health is at risk. Despite her complicated and near fatal delivery with her youngest son, Kalpana and her husband decided that they would risk complications for a third pregnancy in the hopes of having a girl (unlike most families who were hoping for a boy). Even though none of the participants were pregnant under the age of 18, research suggests that being pregnant under the age of 18 can be harmful to maternal-fetal health (Santhya et al. 2010, Paul et al. 2011). Early marriage often leads to early childbearing, which can produce direct physical health outcomes. Therefore, if marriages are arranged at a young age, then maternal health could be impacted as a result.

Second, female autonomy can affect women's physical health indirectly. Social determinant research often uses health-seeking behaviors as a proxy for maternal health. Health-seeking behaviors are not physical health ailments that can be observed physiologically, but rather behaviors can prevent physical health ailments. The group-decision making in regard to family planning affects women's health-seeking behaviors, like buying condoms to space out pregnancies or having an operation after a second pregnancy. Too many pregnancies can lead to maternal and fetal complications like increased risk of hemorrhaging; prohibiting sterilization could lead a couple to seek unhealthy abortive services increasing risk of reproductive tract

infections. Prohibiting women from social interaction limits their access to social networks that could increase health communication pathways. The women that talked about using pregnancy tests or condoms had reported having more social interactions than those who didn't mention it.

Bodily integrity is one of Nussbaum's (2000) central capabilities and refers to "having one's bodily boundaries treated as sovereign" and "having opportunities for sexual satisfaction and for choice in matters of reproduction" (p. 78). Bodily integrity can be a measurement of social context that has an indirect impact on health outcomes. The group-decision making in regards to family planning affects women's ability to make decisions about her own body, and thus her body's boundaries are not treated as sovereign. If the women are not allowed space to make the final decisions about their bodies, than their bodily integrity is severely impacted. Bodily integrity also relates to the women's ability to move around the community both physically and socially. Through this perspective, the restrictions on the women's social interactions could be a reflection of lack of bodily integrity.

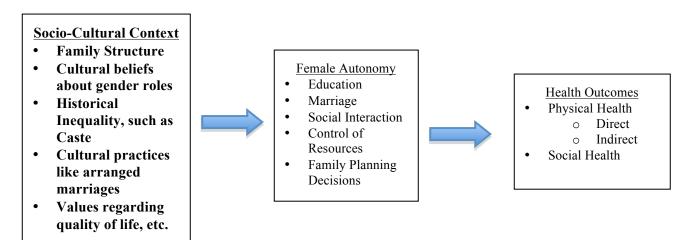
In the operative definition, maternal health includes social wellbeing. Essentially, female autonomy itself is an indicator of *social health*. Therefore, when women lack female autonomy, they are socially unwell. On that note, female autonomy is not only important because of its indirect and direct impact on physical health, but because, in and of itself, female autonomy is an indicator of health. Programs need to improve female autonomy (1) because of the indirect and direct effects that it has on physical health and (2) because of the intrinsic value of female autonomy in the social health as an integral component of maternal health.

Table 8: Summary of Female Autonomy Pattern and the Potential Impacts on Physical and Social Health

Female Autonomy	Health Outcome
Pattern	

Education	Indirect Physical Health: Gives women the critical thinking skill to better absorb information about contraception and other preventative health measures Social Health: Education allows the woman to develop critical thinking and also expands their horizons. Education helps women see their potential.
Marriage	Indirect Physical Health: Early arranged marriage could lead to early childbearing, which can have physical health outcomes. Social Health: Delaying the age of marriage could allow women to finish their education.
Social Interaction	Indirect Physical Health: Women do not connect with valuable health communication networks; women are less likely to seek contraception. Social Health: Social integration promotes affiliation and health relationships with the community.
Control of Resources	Indirect Physical Health: Women are less likely to seek contraceptive care. Social Health: Control of resources gives women more power and control of their political and material environments.
Family Planning Decision-making	<u>Direct Physical Health</u> : Too many pregnancies or too little space between pregnancies can lead to maternal-fetal complications <u>Social Health</u> : Primary involvement in decision-making, particularly pertaining to her own body, allows women to increase their bodily integrity.

Social Context



In order to comprehensively analyze how female autonomy affects maternal health

outcomes, I look to social systems that supply and contextualize maternal health. I will call these social phenomena social contributors. Social contributors (1) are characteristics of female autonomy itself, (2) supply and reproduce female autonomy and (3) are an intrinsic part of health because they promote social wellbeing. For example, control of resources (1) is an indicator of female autonomy, (2) reproduces female autonomy patterns because can determine how much control women have in family affairs, and (3) is considered intrinsically beneficial to women's empowerment and wellbeing. As Muhammad Yunus suggests in the development of his legendary microfinance programs, there is a considerable impact on women's empowerment when they have a certain control of their financial conditions. Sen (2000) explains that empirical evidence often links women's wellbeing and the ability to earn an independent income and be educated participants in family decisions, among other factors. Only seven of the participants had a job, have a job, or mentioned wanting a job outside of household work in the future. Perhaps, in Marxist theory, women who do not have a job that is recognized (because household maintenance and childcare is certainly work, but is not recognized as such) do not have the opportunity to see themselves through creative labor. Perhaps work outside the home and control of resources could give women an opportunity to see themselves outside of their reproductive role, and thus have an impact of maternal health.

Education is a social contributor because (1) it is an indicator of female autonomy (2) increasing or decreasing education can increase or decrease female autonomy respectively and (3) education matures women's self-recognition of their importance and potential. Education is another important social contributor affecting maternal health. As discussed in the literature, education instills the critical thinking skills so that women can better absorb information about health-seeking behavior. In my sample, women who were more educated were more likely to

talk about having a job, and more likely to discuss birth control. Education is invaluable to culturing "senses, imagination and thought", another central capability in Nussbaum's list (2000, p.78). Fostering senses, imagination and thought can breed female empowerment, which can impact maternal health decisions. Education can expand women's horizons and perhaps impact her reproductive health decisions.

Nussbaum refers to more than just the physical restrictions imposed by others that limit women's social interaction and movement within the community. The gang rape case of a 23-year-old student in December 2012 sparked a massive wave of protest against the treatment of women in India (Timmons 2012). The case represents a clear violation of women's bodily integrity because women may not be able to move freely in their communities due to social conditions. As the number of rape cases increases, and the government and police forces perpetuate the social inequalities between men and women, women's bodily integrity is limited. Certainly, rape affects one's physical health, but the restrictions on women's autonomy could also be internalized in a way that limits women's ability to be who they want to be. In reference to the broad definition of reproductive health in terms of physical as well as social health, when analyzing whether certain social norms affect one's reproductive health, the researcher must also explore how the social realms of reproductive health are affected.

While understanding how crossing physical boundaries intrude on a woman's bodily integrity seems obvious to an outsider, it is hard to advocate for bodily integrity when the women are barely aware that they have the right to fight. Often when attempting to identify the source of gendered injustices, people point to women's desires to expand their roles in society, or lack thereof. Annas (1993) explains that in traditional societies where women have fewer options than men, women use adaptive techniques for adjusting their desires to what is realistically possible.

The various social roles overwhelm the women to act in certain ways. Women are influenced by the social role of pregnancy, of daughter-in-laws, and of wives. Rohini's indifference to endless pregnancies in pursuit of a son is an example (discussed on page 40). The socialization of the roles of pregnancy comes down to the fundamentals of sociology. From a young age, the women in the sample watched their mothers obey their grandmothers, work all day cooking and cleaning, worship their brothers, and stop their education or marry because of social expectations.

Family is also a very important social component that affects health. Family and family decision-making is interwoven into all of the patterns discussed in the findings section: Families make decisions about education and marriage; families are redefined after marriage through social identities; the family's reputation is considered when female social interaction is prohibited; family members control the resources; and family members make decisions about family planning. Family, as a social phenomenon, is perhaps the most important social component to remember when designing programming and development. Because families are so integral to maternal health, if they are included in the solution in an appropriate manner that honors their cultural importance, the impact could extend far and wide.

Nonetheless, it is important to acknowledge there are exceptions to women's passivity in every category. There are a handful of women who subtly or explicitly questioned their mothers-in-law's stronghold or their inability to make decisions. Perhaps this critique suggests that there is a generational shift in what is a valued state of social wellness. Are the women who think that it is wrong of their mother-in-law to impose bodily restriction the way they do, and the women who think that they should be able to use contraception with their husbands, suggesting that they value a life in which they can make those choices? In that case, the social norms *are*

affecting their health outcomes because they are not capable of accessing the life that they value.

While generational attitude shift could be one explanation for the criticism of the social system suggesting a negative impact on health outcomes, the women's critique could just characterize a stage in the life course. Perhaps as a daughter-in-law there is room to critique, but once a woman becomes a mother-in-law, she perpetuates the very system that she was critiquing as a daughter-in-law. Perhaps once the power is yours, the critical thoughts fade. Or, as suggested by the literature (Gangoli et al. 2011), once there is a threat to the bond between the participant and her son, i.e. a daughter in law, then the participant will fall into the same patterns that her mother-in-law followed.

Applications: Development Campaigns

As the extensive impacts of female autonomy on physical and social wellbeing unfold, the importance of including female autonomy as a component of development campaigns becomes unbearably evident. Unfortunately, many development measurements do not include social phenomena associated with female autonomy. Amartya Sen's discussion of freedom as development (introduced on page 6) is the most efficient at including social phenomena like female autonomy into the development equation. Contrary to utilitarian and G.D.P.-based programs for development, Sen suggests that development should be based on the notion of freedoms and the mitigation of unfreedoms. He argues that the focus of development should be on the capabilities of individuals to perform various functionings (beings or doings) within the scope of what is valuable to the individual and to the community. Both personal characteristics and social environments affect the individual's capability. The person's freedom is thus reflected in the individual's capability to live life in a way that she or he perceives as valuable (Sen 1993, Sen 2000). As developed in the findings section, the social control that curtails women's

autonomy is often rooted in social norms of family dynamics: the importance of family to one's identity, the gendered dynamics of families, the social boundaries created and perpetuated by family and caste. These social norms inflict social and physical control on women, and could act as unfreedoms in the women's lives, thus affecting their bodily integrity, and health.

Despite the Sen's jargon, the concept is rather understandable when applied to a human story. For example, Aditi (discussed earlier on page 39) valued spacing out her pregnancies and having only two children. The being or doing in this scenario would be using a contraceptive control between pregnancies and having a sterilization operation after the second birth. However, her mother-in-law was controlling and decisive when she told the young couple that they would not use contraception and alluded to the postponement of a sterilizing surgery until the couple had produced a son. Simply speaking, the mother-in-law controlled Aditi's capability to perform her functioning (spacing her pregnancies and limiting her fertility).

However, Aditi's mother-in-law's actions do not exist within a vacuum, but are molded and influenced by social factors: socio-cultural norms like valuing sons over daughters, which in turn, are influenced by other social factors like mothers-in-law dominating passive daughters-in-law because of the daughters-in-law threat to the maternal-son bond (Gangoli 2011). The personal characteristics that could affect whether Aditi could perform her functionings could include whether she had enough money to pay for the treatment. But these personal characteristics are also affected by social conditions, like whether Aditi would have access to the money as a daughter-in-law, or whether her family would be more likely to be in poverty because they classify as Untouchables. The unfreedoms in Aditi's scenario are the factors that control and limit her decision-making about family planning. Such social factors that contribute to the unfreedom can be traced to others, and soon the web becomes exponential. As

such, Sen argues that development plans must untangle the web of social factors to promote capability among those who are denied functionings.

Clearly, social norms are rooted in values¹⁶. Sen is often set a part from other development theorist because of his emphasis on people's capability to live they life that they value. Sen includes this notion of values to incorporate cultural relativism and recognize that different cultures may value different things, while still arguing for universal capabilities to access culturally relative functionings. As discussed above, the values upheld by the social norms that the women are experiencing are affecting health outcomes on some level. But in terms of social impacts, are the social norms creating a health situation that is valuable to the participant? The definition of reproductive health incorporated social wellness, but the values of the certain culture illustrate what social wellness means. Coming from a Western perspective, it is easy for the researcher to fall into patterns of blame and suggestive solutions that are rooted in Western notions of empowerment. If the social norms actually lead to a life that an individual values, then should the health outcomes be considered negative? Are the values of social wellness based on a setting of power where patriarchy and caste-discrimination coerced people of "inferior" status to suffocate their fight for equality out of fear of provoking disapproval of those with more social status and power?

Nussbaum's universal list of central capabilities incorporates benchmark indicators of the various capabilities that Sen discusses. Most of her central capabilities are all critical ingredients of female autonomy. Fostering "Senses, imagination and thought" and "practical reason" will promote education for women. Promoting "bodily integrity", "emotions" and "affiliation" contributes to increasing female autonomy in marriage decisions. Working towards

¹⁶ Discussion of social health is rooted in the investigator's values. Thus, it is important to note that in analyzing whether certain social norms affect the participants social wellness the researchers Eurocentric values could be pernicious to the true evaluation of the impact on health outcomes.

increasing "bodily integrity" advances efforts to increase female autonomy in terms of social interaction. Encouraging "control over one's material and political environment" prompts control of resources among women. And finally, furthering "bodily integrity", "practical reason" and "control over one's environment will give women more autonomy in the decisions about family planning.

Increasing female autonomy should be a goal of development campaigns. In and of itself, it is of vital importance to ensure quality of life for women. It also has extensive and various impacts on physical health, whether they are direct or indirect. Sen and Nussbaum's perspective on development incorporate the tools that can put female autonomy on the development agenda.

CONCLUSION

The perplexing relationship between female autonomy and health is important.

Nevertheless, this relationship is the epitome of intersectionality, often making it hard to make concrete conclusions and develop reasonable and feasible solutions. Viewing health holistically, including social and economic perspective, is imperative to improving health situation of the developing (and developed) world. Unfortunately, in the search for measurement techniques and evaluative data, social components of health are marginalized in discussions. As such, the evaluation of programs that address social conditions affecting health faces difficult challenges. It is obvious that there are "social morbidities". However, with the increasing gap between foreign aid and foreign improvements, evaluative procedures that can establish reliable results about the effects of improvement projects are essential to making foreign aid efficient and functional.

For now, we can only work with what we know thus far. First, there are strong relationships between female autonomy and health. Second, there is available technology and knowledge to eradicate most of the morbidities and prevent mortalities that plague developing nations, especially in the realms of maternal health. However, there are many barriers to accessing such services. Third, cultural and social factors play an integral role in the dissemination of health in a society and must be part of the discussion. Lastly, the discussion must include those who understand the ins and outs (including women and other marginalized communities) of the social and cultural factors to health, because, in the end, they are the ones who will develop a sustainable, feasible and accurate solution.

Within the shambles of the urban slum, where deprivation lurks in the cracks of the tin ceilings and the torn clothes, the women who participated in this study were a vital energy that radiated through the physical conditions. Surprisingly, interacting with the women made it feel like the slums throbbed with the essence of human life, more than places characterized by wealth or "development". The women were strong and energetic; they smiled and laughed; they played with their children; they created the best life out of their living situations. I think the key to creating a solution to address maternal health and social factors like female autonomy is to channel the vital and powerful energy that women embody; to include them in the development of programming, in the execution of programming; and in the maintenance and evaluation of programming. Giving women a voice in these decisions will defy the social norms that suffocate their voices in other circumstances. For, as Christopher Buckley (2009) so eloquently said in *Florence of Arabia*, "women might just have something to contribute to society other than their vaginas."

REFERENCES

- Annas, Julia. 1993. "Women and the Quality of Life: Two Norms or One?" Pp 279-296 in *The Quality of Life*. Oxford: Nussbaum and Sen.
- Agarwal, Bina, and Pradeep Panda. 2007. "Toward Freedom from Domestic Violence: The Neglected Obvious." *Journal of Human Development* 8(3): 359-388.
- Balk, D. 1994. "Individual and Community Aspects of Women's Status and Fertility in Rural Bangladesh." *Population Studies* 48: 21-45.
- Bandyopadhyay, Mridula. 2011. "Tackling Complexities in Understanding the Social Determinants of Health: the Contribution of Ethnographic Research." *BMC Public Health* 11(5): http://www.biomedcentral.com/1471-2458/11/S5/S6
- Basu, Alaka Malwade, and Rob Stephenson. 2004. "Low levels of maternal education and the proximate determinants of childhood mortality: a little learning is not a dangerous thing." *Social Science and Medicine* 60: 2011-2023.
- Bhattacharyya, Subir K., Arup K. Majhi, Subrata L. Seal, Sima Mukhopadhyay, Gourisankar Kamilya, and Joydev Mukherji. 2008. "Maternal mortality in India: A 20-year study from a large referral medical college hospital, West Bengal." *Journal of Obstetrics and Gynecology* (34) 2: 499-503.
- Bloom, Shelah H., David Wypij, and Monica Das Gupta. 2001. "Dimensions of Women's Autonomy and the Influence on Maternal Health Care Utilization in a North Indian City." *Demography* 38 (1): 67-78.
- Bour, Daniel, and Kent Bream. 2004. "An Analysis of the Determinants of Maternal Mortality in Sub-Saharan Africa." *Journal of Women's Health* 13 (8): 926-938.
- Buckley, Christopher. 2009. Pp 3 in *Half the Sky: Turning Oppression into Opportunity for Women Worldwide*." Written by Kristof, Nicholas D. and Sheryl WuDunn. New York, US: Random House
- Das Gupta, M. 1996. "Life Course Perspectives on Women's Autonomy and Health Outcomes." *Health Transition Review.* 6: 213-231.
- DeJong, Jocelyn. 2006. "Capabilities, Reproductive Health and Well-being" *Journal of Development Studies* 42 (7): 1158-1179.
- Derne, Steve. 2006. "Beyond Institutional and Impulsive Conception of Self: Household Structure and the socially anchored real self." *Ethos* 20(3): 259-288.
- Dhar, AArti. 2012. "Blow to misuse of sex determination tests." *The Hindu Times*. January 14, 2012.

- Dharmalingam, A. and S.P. Morgan. 1996. "Women's Work, Autonomy, and Birth Control: Evidence from Two South Indian Villages." *Population Studies* 50: 187 201.
- Dyson, T, and M. Moore. 1983. "On Kinship Structure, Female Autonomy and Demographic Behavior in India." *Population and Development Review* 9: 35-60.
- Gangoli, Geetanjali, and Martin Rew. 2011. "Mothers-in-law against daughter-in-law: Domestic violence and legal discourses around mother-in-law violence against daughters-in-law in India" *Women's Studies International* 34: 420-429.
- George, Asha. "Persistence of high maternal mortality in Koppal district, Karnataka, India: observed service delivery constraints." 2007. *Reproductive Health Matters* 15(30): 91-102.
- Ghose, Malini. 2007. "Gender, Literacy and Women's Empowerment in India: Some Issues." *Convergence* XL (3-4): 193-201.
- Giordano, Giuseppe Nicola, Jonas Bjork, and Martin Lindstrom. 2012. "Social capital and self-rated health A Study of Temporal (causal) Relationships." *Social Science and Medicine* 75: 340-348.
- Goli, Srinivas, P. Aroliasamy, and Aprajita Chattopaghayay. 2011. "Living and Health Conditions of Selected Cities in India: Setting Priorities for the National Urban Health Mission" *Cities* 28: 461-469.
- Goldie, Sue J, Steve Sweet, Natalie Carvlho, Uma C.M. Natchu, and Delphine Hu. 2010. "Alternative strategies to reduce maternal mortality in India: A cost-effectiveness analysis." *PLoS Med* 7(4).
- Khan, A.H.T. 1997. "A Hierarchical Model of Contraceptive Use in Urban and Rural Bangladesh." *Contraception* 55:91-96.
- Kaufman, Joan. 2009. "Measuring Reproductive Health: From Contraceptive Prevalence to Human Development Indicators" Pp. 72-88 in *Reproductive Health and Human Rights*. Philadelphia, Pennsylvania: University of Pennsylvania Press.
- Hadley, Craig, Alexandra Brewis, and Ivy Pike. 2010. "Does Less Autonomy Erode Women's Health? Yes. No. Maybe." *American Journal of Human Biology* 22: 103-110.
- Hazarika, Indrajit. 2009. "Women's reproductive health in slum populations in India: Evidence from NFHS-3." *Journal of Urban Health* 87(2): 264-277.
- ICPD. 1994. "Summary of the Programme Action". United Nations. Available Online" http://www.un.org/ecosocdev/geninfo/populatin/icpd.htm#chapter7

- India Census. 2010. "India Census Results." Available online at: http://censusindia.gov.in
- Institute of Health Management, Pune (I.H.M.P.). Information available online at: http://www.ihmp.org/ihmp pune.html.
- Iyengar, Kirti, AhRd D. Iyengar, Virendra Suhalka, and Kalpana Dashora. 2009. "Pregnancy-related deaths in rural Rajasthan, India: exploring causes, context, and care-seeking through verbal autopsy." *Journal of Health, Population and Nutrition* 27(2): 293-302.
- Jeffery, R, and P. Jefferey. 1993. "A Woman Belongs to Her Husband: Female Autonomy, Women's Work and Childbearing in Bijnor." Pp 66-114 in *Gender and Political Economy: Explorations of South Asian Systems*. London: Oxford Press.
- Jejeebhoy, S. 1991. "Women's Status and Fertility: Successive Cross-Sectional Evidence from Tamil Nadu, India." *Studies in Family Planning* 22: 217-230.
- Jejeebhoy, S. 1995. Women's Education, Autonomy and Reproductive Behavior: Experience from Developing Countries. Oxford: Claredon Press.
- Kaufman, Joan. 2009. "Measuring Reproductive Health: From Contraceptive Prevalence to Human Development Indicators." Pp 72-88 in *Reproductive Health and Human Rights*: University of Pennsylvania Press: Reichenbach and Roseman.
- Kothari, Brij, and Tathagata Bandyopaghyay. 2011. "Can India's 'literate' read?" *International Education* 56: 705-728.
- Marmot, M, and R. Wilkinson. 2001. "Psychosocial and maternal pathways in the relations between income and health A response to Lynch et al." *BMJ* 322: 1233-1236.
- Mistry, Ritesh, Osman Galal, and Michael Lu. 2009. "Women's autonomy and pregnancy care in rural India: A contextual analysis" *Social Science and Medicine* 69: 926-933.
- Mohanty, Sanjay K. 2012. "Multiple Deprivations and Maternal Care in India" *International Perspectives on Sexual and Reproductive Health* 38(1): 6-14.
- Moursund, Anne, and Oystein Kravdal. 2003. "Individual and community effects of women's education and autonomy on contraceptive use in India." *Population Studies* 57(3): 285-301.
- Nussbaum, Martha. 2000. *Women and Human Development*. Cambridge, UK: Cambridge University Press.
- Paul, Vinod K., Harshpal S. Sachdev, Dileep Mavalankar, Prema Ramachandran, Mari J. Sankar, Nita Bhandari, Vishnubhatla Sreenivas, Thiagarajan Sundararaman, Dipti Govil, David Osrin and Betty Kirkwood. "Reproductive health, and child health and nutrition in India: meeting the challenge." 2011. *Lancet* 377(9762): 332-349.

- PudMed Health. 2012. "Anemia." *U.S. National Library of Medicine*. February 7, 2012. Available Online at: http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001586/.
- Rahi, Manju, D.K. Teneja, Amrita Misra, N.B. Mathur, and Suresh Badhan. 2006. "Newborn Care Practice in Urban Slum of Dehli." *Indian Journal of Medical Science* 60(12): 506-513.
- Timmons, Heather and Shruthi Gottipatti. 2012. "Victim of Gang Rape That Galvanized India" *The New York Times*. December 28th, 2012.
- Sadgopal, Mira. 2009. "Can Maternity Services Open Up to the Indigenous Traditions of Midwifery?" *Economic & Political Weekly*. XLIV (16): 52-59.
- Santhya, K.G., Usha Rab, Rajib Acharya, Shireen J. Jejeebhoy, Faujdar Ram, and Abhiskek Singh. 2010. "Associations Between Early Marriage and Young Women's Marital and Reproductive Health Outcomes: Evidence from India." *International Perspectives on Sexual and Reproductive Health* 36(3): 132-137.
- Schuler, S.R. and S. Haskemi. 1994. "Credit Programs, Women's Empowerment, and Contraceptive Use in Rural Bangladesh." *Studies in Family Planning* 25: 65-76.
- Self, Sharmistha, and Richard Grabowski. 2012. "Son Preference, Autonomy and Maternal Health in Rural India." *Oxford Development Studies* 40(3): 305-323.
- Sen, Amartya. 1993. "Capability and Well-being." Pp 30-53 in *The Quality of Life*. Oxford: Nussbaum and Sen.
- Sen, Amartya, and Jean Dreze. 1995. *India: Economic Development and Social Opportunity*. New York, US: Oxford University Press.
- Sen, Amartya. 2000. Development as Freedom. New Dehli, India: Oxford Press.
- Sharma, U. 1980. Women, Work and Property in North-West India." London: Tavistock.
- Sinha, Kounteya. 2012. "40% of Women Have No Access to Money: Study Report Showers Gender Equality is Still Far From Reach." *Times of India, Pune.* Published December 4th, 2012.
- United Nations (UN). 2006. *The Millennium Development Goals Report 2006*. New York: Author.
- United Nations Development Program (UNDP). 2010. "India". Available Online at: http://www.undp.org/content/india/en/home/

- Unknown Author. 2013. "Urban Population in India Jumps to 31%." *The Indian Express*, March 13, 2013.
- UNICEF. 2007. The State of the World's Children 2007.
- USAID. 2001. USAID Congressional Budget Justification FY2002: Program, Performance and Prospects The Global Health Pillar.
- Vijapur, Abdulrahim P. Accessed online Feb 2013. "Education of Ex-Untouchables (Dalits): Plight of Human Rights Education in Indian Schools." *Human Rights Education in Asian Schools*. Available online at: http://www.hurights.or.jp/archives/pdf/asia-s-ed/v10/15Education%20of%20Ex-Untouchables,%20Dalits.pdf
- Visaria, L. 1993. "Female Autonomy and Fertility Behavior: An Explanation of Gujarat Data." Pp 263-275 in *Meeting of the International Union for the Scientific Study of Population*. Montreal: Liege.
- World Health Organization (WHO). 2012. "Maternal health: Maternal mortality ratio (per 100 000 live births)." World Health Organization Retrieved June 1, 2012. (http://gamapserver.who.int/gho/interactive charts/mdg5 mm/atlas.html).
- World Bank. 2010. "India Data." Available Online at: http://data.worldbank.org/country/india.
- Ye, Fang, Haijun Wang, Dale Huntington, Hong Zhou, Yan Li, Fengshi You, Jinhua Li, Wenlong Cui, Meiling Yao, and Yan Wan. 2012. "The Immediate Economic Impact of Maternal Deaths on Rural Chinese Households." PLoS One. 7(6). www.plosone.org>