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Nazish Haqqani

02 December 2011

Religio-Cultural Concepts and Bangladeshi Women's Decisions to Seek Biomedical Care During Childbirth

by

Nazish Haqqani

Robert Phillips, PhD Adviser

Department of Middle Eastern and South Asian Studies

Robert Phillips, PhD

Adviser

Joyce B. Flueckiger, PhD

Committee Member

Devin Stewart, PhD

Committee Member

Lynn Sibley, PhD

Committee Member

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Nazish Haqqani

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An abstract of a thesis submitted to the Faculty of Emory College of Arts and Sciences of Emory University in partial fulfillment of the requirements of the degree of Bachelor of Arts with Honors

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Abstract

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Bangladesh's rates of maternal mortality of 320 per 100,000 and neonatal mortality 360 per 100,000 are among the highest in South Asia and in the world. The about 90% of Bangladeshi women give birth at home, where they may be assisted by relatives, neighbors, traditional birth attendants, or no one. Yet, home-based childbirth often results in high rates of complications, since the emergency services required for complications are typically available only at health facilities. In order to improve the rates of clinically based deliveries in order to yield better maternal and child health outcomes, it is necessary to identify the factors that prevent women from obtaining biomedical care during childbirth complications, especially in a timely manner. I apply the Delay Model on data obtained through the Lynn Sibley's project "Improving Recognition of and Initial Response to Prolonged Labor and Birth Asphyxia in Bangladesh" to argue that beliefs and practices related to three religio-cultural concepts can cause serious delays in Bangladeshi women's decisions in seeking timely care at biomedical facilities during reproductive complications. The specific concepts I analyze are purity/pollution, spiritual causation of illness, and sharam/pardah. I apply these ideas to offer suggestions on how the biomedical system can work within the religious and cultural worldviews of Bangladeshi women to increase their utilization of biomedical health services, especially during reproductive emergencies.

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INTRODUCTION

The World Health Organization (WHO) estimates that, every year, at least 358,000 women die from pregnancy-related complications (WHO, et al. 2010). The causes of maternal mortality include hemorrhage, sepsis, complications of unsafe abortion, eclampsia, and obstructed or prolonged labor. Similarly, an estimated four million newborns die yearly in the first four weeks of life, primarily due to birth asphyxia, preterm birth, and severe infection (JE Lawn, et al. 2005). Both mother and child are most vulnerable to morbidity and mortality during labor and birth, especially during the first 48 hours following birth (JE Lawn, et al. 2005; Li, et al. 1996). The majority of maternal and neonatal mortality occurs in developing regions of the world and among the poorest populations within those regions. For example, a woman's lifetime risk of maternal death in the developed world is 1 in 7300, but 1 in 75 in the developing world (WHO 2011). In certain regions, this risk is even greater, such as in South Asia, where a woman has a 1 in 43 lifetime risk of maternal death. Reducing rates of maternal and neonatal mortality and morbidity is essential for making substantial progress in improving global health.

Responding to these statistics, in 2000, the international community, comprising 189 nations and numerous United Nations partners and non-governmental organizations (NGOs), launched the Millennium Development Project, of which two central goals are to reduce global maternal mortality by 75% and child mortality by 66% by the year 2015 (U.N. 2011). With guidance from the World Health Organization, member states and NGOs are engaged in maternal, newborn, and child health programs to reduce mortality and morbidity. Through collaboration with partner health sites in Bangladesh,

anthropologist and nurse-midwife Lynn Sibley, of the Nell Hodgson Woodruff School of Nursing at Emory University, led a study in Bangladesh between 2007 and 2008 to determine how cultural beliefs influence behavioral response during cases of perceived prolonged labor and birth asphyxia (PL/BA), two interrelated and primary contributors to maternal and neonatal mortality and morbidity. In this thesis, I present primary data from this project about Bangladeshi women's beliefs and behaviors surrounding two birth complications (prolonged labor and birth asphyxia). My goal is to explain how these women's religio-cultural ideas and related social norms can cause delay in seeking biomedical care, thereby contributing to negative health outcomes for mother and child. I argue that biomedical healthcare practitioners need to understand better these beliefs and behaviors and adopt culturally appropriate measures in order to increase women's rates of timely care seeking at biomedical centers and, ultimately, improve maternal and neonatal health.

I. The Case of Bangladesh

Bangladesh's rates of maternal mortality of 320 per 100,000 and neonatal mortality 360 per 100,000 are among the highest in South Asia and in the world (Afsana 2004). Every year, approximately four million women become pregnant and about 600,000 develop complications. Yet, the majority of women—about 90%—give birth at home, where they may be assisted by relatives, neighbors, traditional birth attendants, or no one (Afsana 2004). The absence of birth attendants who have formal biomedical training, such as midwives, doctors or nurses, can decrease the chances of early recognition and adequate management of complications that can arise during childbirth. According to the World Health Organization, home-based childbirth often results in high rates of complications,

since the emergency services required for complications are typically available only at health facilities (Hodnett, et al. 2005; Montague, et al 2011).

In order to improve the rates of clinically based deliveries in order to yield better maternal and child health outcomes, it is necessary to identify the factors that prevent women from accessing health facilities. In their paper "The Challenges of Meeting Rural Bangladeshi Women's Needs in Delivery Care," medical anthropologists Kaosar Afsana and Sabina Rashid share their findings on the attitudes and experiences of women from a large rural district in Bangladesh relating to care seeking at both governmental and nongovernmental health facilities (2001).¹ They indicate several factors that can prevent women from going to health facilities for childbirth, including the expectation of the birthing process to be 'normal' unless a 'complication' arises; the association of hospitalized births with surgical operations, which women wish to avoid due to the social stigma attached to surgical deliveries; the refusal by husband or mother-in-law to allow the birthing woman to go to the hospital; the inability to pay the costs associated with services at health facilities; and the lack of transportation to the health facility. Additionally, Afsana and Rashid share their own observations of the health staff at some health facilities in this region, indicating that healthcare providers sometimes overlook cultural and religious issues that are important to female patients. For example, they note that the health staff does not always maintain privacy according to the patients' desires "due to a lack of cultural understanding and dismissive attitudes towards women" (6).

¹ Located 300 km north of the capital city of Dhaka, this rural district is the service area covered by the Bangladesh Rural Advancement Committee (BRAC), which provides 21 health facilities called BRAC Health Centres (BHCs) that offer services to a population of 250,000. These services include essential obstetric care, antenatal and postnatal care, outpatient care, and laboratory services. Governmental district hospitals are the referral centers for the BHCs.

While many health practitioners are sympathetic towards women's notions of privacy, they may not completely understand their female patients' cultural-religious reasons for the need for such privacy or for other preferences. Many women believe they can maintain their privacy better at home than in a hospital. They believe that at home they have more control over the position in which they give birth (many prefer the squatting or kneeling positions to the supine position practiced at health facilities); they find the costs more manageable, and they consider the home surroundings to be conducive to a sense of security or comfort.

In addition to social, economic, and geographic barriers, Afsana and Rashid acknowledge that religio-cultural beliefs and practices also can negatively influence Bangladeshi women's health seeking at biomedical health facilities. Specifically, in their study, they recognize that the observance of *sharam/pardah* can make women hesitant about going to health facilities for childbirth. In this thesis, I corroborate and expand their observation about the influence of religio-cultural concepts on women's health seeking at biomedical centers. Drawing on the qualitative data of the Sibley project mentioned above, I argue that three religio-cultural concepts can cause serious delay in Bangladeshi women's decisions to seek care at biomedical facilities during reproductive complications. The specific concepts I analyze are: beliefs and norms relating to the concept of purity/pollution, spiritual causation of illness, and the observance of *sharam* and *pardah*.

II. Utilizing Community Sources in Improving Maternal and Child Health

Many health and social scientists have engaged in research around the influence of cultural and religious ideas on a particular community's health seeking behavior and how

these beliefs can be recognized and harnessed to implement effective health intervention programs. One such researcher is Lynn Sibley, who is deeply involved in creating innovative approaches for safer childbirth in regions that are resource limited, including rural and urban-slum areas of Bangladesh, rural Ethiopia, and rural India. Specifically, Sibley contributes to the development and testing of community-oriented strategies that are aimed at improving pregnancy outcomes.

In rural Bangladesh, Sibley has been involved in developing home-based life saving skills (HBLSS) as part of the maternal, neonatal and child health (MNCH) community based activities. This family-centered HBLSS program was developed with the aim of reducing mortality by increasing access to basic life saving measures within home and community and to reduce delays in referral in the event of obstetric complications (Dynes, et al. 2011). As part of the program, in June 2007, Sibley's team implemented four HBLSS meetings by 41 community health research workers (CMHW) with all pregnant women in rural Matlab, located southwest of the capital Dhaka. During these meetings, pregnant women were taught actions to take in response to problems. For example, participants were taught ten steps for preventing birth delay, including preparing for birth and keeping everything clean, watching for problems such as bleeding, and not pushing on the belly. They were also taught nine steps for responding to a baby experiencing breathing difficulties, such as covering the infant for warmth, stimulating the baby through massage, and referring to biomedical health professionals. Between June 2007 and March 2008, the research team observed a rapid integration of the program into the study area: the CMHWs made 4500 HBLSS contacts with 2409 pregnant women and over 51% of pregnant women attended all four HBLSS meetings.

The article does not provide outcome data related to maternal and newborn deaths but notes that an evaluation revealed several anecdotal stories about successful use of HBLSS skills within the community. Based upon the successful implementation of the HBLSS program in Matlab, the study recommends its implementation in other communities.

Consistent with her interest in developing home- and community-based interventions to improve the efficacy of maternal and child health intervention programs, Lynn Sibley has attempted to answer whether or not training birth attendants (TBAs) in low-resource areas improves pregnancy outcomes. In 2006, Lynn Sibley co-authored a systematic review of studies describing traditional birth attendant training programs (Sibley and Sipe 2006). The authors present the training of TBAs as a global publichealth strategy for reducing maternal and child health mortality and improving women's reproductive health. They note that common objectives for TBA training are: enhancing the linkages between the modern health system and community, increasing the number of TBA-attended births, and improving the skills and stature of TBAs. Based on their objective, different training programs focus on different skill sets. For example, some focus on upgrading TBAs' skills so they can perform safe deliveries, while others focus on training TBAs in the prevention of, screening for, and referral to health facilities during childbirth complications. Sibley and Sipe observe that TBA training programs yield moderate-to-large improvements in behaviors relating to selected intrapartum and postnatal care practices, such as safe delivery, clean delivery, and cord-care practices. They also associate TBA training with small increases in women's use of antenatal care and emergency obstetric care, and with small decreases in perinatal and neonatal mortality due to birth asphyxia and pneumonia. Based on these positive results, Sibley

and Sipe conclude that TBAs trained with biomedical knowledge and skills can contribute to improving maternal/child health outcomes during pregnancy.

Relevant to this thesis is a project for which Lynn Sibley recently served as a primary investigator and which collected data on Bangladeshi women's beliefs and behaviors relating to two prolonged labor and birth asphyxia. Before proceeding with analyses on this data using anthropological literature on South Asia, I first describe the objective, aims, and methodology of this project.

III. Research On Beliefs & Response to Prolonged Labor and Birth Asphyxia in Bangladesh

The project led by Lynn Sibley is entitled "Improving Recognition of and Initial Response to Prolonged Labor and Birth Asphyxia in Settings Characterized by Homebirth with Unskilled Attendants: A Multi-Site Study," hereafter referred to as the "PL/BA study." The primary research objective of the study was to improve communitybased strategies and interventions that aim to reduce maternal and newborn mortality and morbidity resulting from obstructed labor and birth asphyxia in partner program areas (GHI Grant Proposal 2007). To this end, "the research team conducted formative research to then develop or modify, test, and evaluate culturally appropriate strategies and interventions that are specifically concerned with the prevention and identification of and initial response to prolonged labor and birth asphyxia," including timely referral of to appropriate health facilities.

A primary aim of the project was to describe Bangladeshi cultural beliefs and norms relating to labor, birth, and newborn adaptation to extra-uterine life, including the possible modes of transmission of these beliefs/norms (GHI Grant Proposal 2007).

Towards this aim, the study had a preliminary qualitative phase to understand the local terms and phrases that are associated with labor, birth and newborn adaptation to extrauterine life, specifically in relation to signs, causes and treatments for these conditions. These local terms and phrases were generated in Bengali using a semi-structured questionnaire that consisted of open-ended questions to elicit women's spontaneous responses. For example, women were asked to name all signs of normal labor process and progression. They were then asked about the causes, kinds of care given, and consequences to a laboring woman if no care is given. This type of questioning was repeated for abnormal labor, and then for normal and abnormal newborn adaptation to extra-uterine life.

These terms and phrases were then used to develop a locally appropriate structured interview questionnaire consisting of yes/no questions in the format "X" is a sign of / cause of / treatment for / consequence of "Y" (GHI Grant Proposal 2007). Some examples of questions regarding causes of a relevant condition are: "*Alga*: might this be a cause for prolonged labor?" and "Can prolonged labor be a cause of birth asphyxia?" Examples of questions regarding appropriate treatments for a relevant condition are: "Think of a newborn baby that is having difficulty breathing and it is caused by *alga*: can taking the baby to an allopathic doctor or nurse be a treatment?" and "Think of a baby who does not breathe at birth: can massaging the baby with mustard oil be a treatment?" This questionnaire was used to gather data on cultural norms and variations in beliefs about the causes, signs, and treatments for PL/BA from 360 randomly selected respondents. The respondents included women who had given birth in 2007, elderly women who were potentially influential in childbirth matters, traditional birth attendants

(TBAs/*dais*), local doctors without formal training, and trained medical health workers (GHI Grant Proposal 2007).

A second aim of the PL/BA study was to examine the relationships between norms, individual health beliefs, and the personal experiences of those who were faced with these life-threatening complications (GHI Grant Proposal 2007). Towards this aim, integrated illness history (IIH) narratives were conducted with women who experienced the conditions. In order to map women's process of identification and response to PL/BA, trained interviewers conducted these face-to-face group interviews with nineteen groups for BA (n=19), and sixteen groups for PL (n=17). The groups included the women who had experienced the birth complication-hereafter called focal females-and any other women identified by the focal female as having been present and involved during the complication event. The interviewers originally conducted and tape-recorded these interviews in Bengali; they later transcribed and translated the recorded interviews into English for further analysis. The informants were asked to recollect in specific detail their experiences and roles in the identification of and initial response to the relevant condition. Some examples of the types of questions asked during the IIH narratives are: 1) what do you think caused the baby to have birth asphyxia; 2) what signs/symptoms made you realize that the baby was asphyxiated; and 3) Did you attempt any treatments upon realizing that the baby was asphyxiated?

The informants for the PL/BA study were selected from three partner sites in Bangladesh (GHI Grant Proposal 2007). The first site was the ICDDR,B Matlab Health Research Center service area,² located southwest of the capital Dhaka, which has a large

² International Centre for Diarrhoeal Disease Research, Bangladesh

rural population. I will refer to this area as "Matlab." The second site was an urban slum site from the BRAC service area that covers 4000 urban slums in Dhaka.³ The third site was a rural site covered by the LAMB service area⁴ with a large rural population in the district Dinajpur of northwest Bangladesh. All partner sites offer basic obstetric care at local health facilities and comprehensive emergency care at district hospitals. The majority of the 360 informants included in the structured interview (i.e., survey questionnaire) phase of the study—about 76%—were Hindu, while the remaining were Muslim.

Currently, the findings of this study are being analyzed to develop and implement strategies and interventions that are designed to improve recognition and response to PL/BA. Also, they will be used to evaluate the short-term impact of new or modified strategies and interventions on PL/BA recognition and response, and on birth outcomes. IV. Analyses and Products of the PL/BA Research Data

Various analyses have been conducted on the data findings of the PL/BA study. I provide two examples of such work and the products resulting from them. As a research assistant on Sibley's team, I worked with Kristin VanderEnde, a doctoral student at the Nell Hodgson Woodruff School of Nursing, to compare the behavioral responses of women who experienced the conditions as documented in the group interviews, with their responses on the survey documenting their beliefs about the conditions. Using SPSS statistical software, we conducted descriptive data analyses to determine congruence between the focal female and her primary caregiver's knowledge/beliefs about the

³ BRAC is the largest non-governmental organization in the world. It runs community-based programs to alleviate poverty, empower people, and improve health in target regions.

⁴ LAMB Integrated Rural Health and Development is a faith-based NGP that has worked in Dinajpur since 1976.

condition and what transpired during the complication event. We determined congruence based on whether or not the recognition/response of the group corresponded with their stated beliefs. We also observed relative frequencies of perceived causes and associated signs and symptoms of the PL or BA event, the number of various types of actions taken during the event, patterns of agreement between the beliefs of the focal female and her primary caregiver, and the patterns of inconsistency in narration of event even among group members. In May 2011, Kristin and I presented our PL/BA data analyses at the annual national conference of the American College of Nurse-Midwives. We also submitted a research abstract of our work to the *Journal of Midwifery and Women's Health* (Haqqani and VanderEnde, In Process). Below, I provide the results this presentation and abstract.

For the PL data, we observed that the highest rates of congruence (i.e., agreement between beliefs/knowledge and behavioral response) occurred when the perceived cause was malnourishment of the baby and/or mother and the treatment was seeking biomedical care. The highest rates of incongruence occurred when the perceived cause was evil spirits and the treatment was seeking professional care. Notably, the most common treatment was seeking allopathic care, while the highest rate of disagreement between the beliefs of the focal female and primary caregiver surrounded the seeking of care from a village doctor for an asphyxiated newborn (Haqqani and VanderEnde, In Process).

For the data on BA, we observed that the highest rates of congruence occurred when the perceived cause was prolonged labor and the treatments were stimulating the baby and seeking biomedical care. The highest rates of incongruence occurred when the perceived cause was spirits and the treatments were covering the baby and massaging the

baby with oil. The highest rates of disagreement between the beliefs of the focal female and her primary caregiver occurred when perceived cause of BA was evil spirits.

Overall, our results indicated that natural/physiological causes (e.g., malnourishment) and biomedical treatments (e.g., stimulating the baby) elicit greater amounts of congruence between belief and behavior and agreement between focal female and her caregivers, than spiritual and traditional causes (e.g., evil spirits) and treatments (e.g., stirring the placenta). We predicted that, during prolonged labor and birth asphyxia, inconsistency between knowledge and behavioral response and disagreement among participants may cause delays in the seeking of appropriate care, leading to negative pregnancy outcomes.

Other members of the PL/BA project are also generating products that present and analyze the study's findings. In April 2011, the journal *Midwifery* published an article co-authored by Sara Head, Lynn Sibley, and Kathryn Yount describing the process of recognition and response to symptoms during potential prolonged labor among 17 women (Head, et al. 2011). The authors note that the most frequently sought care was from traditional birth attendants (*dais*), followed by care from biomedical attendants outside the home. Further, the authors find that care seeking outside the home occurred a median of 19 hours after perceived onset of labor. They attribute women's delays in careseeking to: 1) confusion over the onset of labor, 2) power processes inhibiting women's disclosure of labor symptoms resulting from *sharam*, 3) the practice of "waiting for delivery," and 4) preferences for home delivery. To explain how the above-mentioned factors influence women's recognition of and initial response to PL, the authors apply the Delay Model, which I describe below.

V. Framing Women's Delay in Seeking Emergency Biomedical Care: The Delay Model

Developed by Sereen Thaddeus and Deborah Maine in 1994, the Delay Model (also known as the Three Delays Model) provides the framework for understanding how and at which points the relevant contexts can cause delay in seeking appropriate emergency care for life-threatening complications (Thaddeus and Maine 1994). The Delay Model examines the factors that can affect the utilization of care and health outcomes during the time interval between the recognition of an obstetric complication and the receipt of appropriate care (Maternity Worldwide 2011). It proposes that, during an obstetric complication, delays in seeking emergency care can occur at three different phases: 1) delay in the decision to seek care, 2) delay in identifying and reaching a health facility, and 3) delay in receiving adequate care at health facility.

Delay in the decision to seek care can occur due to a failure in recognizing a health complication, as well as to socio-cultural barriers, such as refusal by husband or mother-in-law in allowing the focal female to seek hospitalize care. Delay in identifying or reaching a health facility can occur due geographic barriers, including a lack of money or transportation. Delay in receiving adequate care at a health facility can occur due to patient's socioeconomic barriers, such as lack of finances, as well as to inadequate facilities, supplies, and personnel. Since its proposal, the Delay Model has guided research and safe motherhood programming. Examples of studies that apply the Delay Model to interpret behavioral responses to illness include but are not limited to Cham, et al 2005; Killewo, et al 2006; Mbarku, et al 2009; Sibley, et al. 2009; Head, et al 2011; Nahar, et al 2011; and Jammeh, et al 201. Below, I describe the application of the Delay Model in two relevant studies.

Co-authors Head, Sibley, and Yount interpret the women's delayed decision to seek biomedical care during potential PL to the first delay described by Delay Model: decision to seek care. They find that the late recognition of problem as well as by the negative influence of social, cultural, and religious barriers result in the first delay. Of particular interest is Head et al's identification of women's beliefs and norms relating to the observance of *sharam* as a leading cause delay in women's decision to seek biomedical care during PL. In this thesis, I use the PL and BA data from the Sibley project to corroborate their observation about the potential of the observance of *sharam* in causing the first delay in women's response to childbirth complications. Further, I propose that two other religio-cultural concepts—belief in evil spirits and belief and norms pertaining to pollution/purity—can also cause delay in women's decisions to seek care health facilities during perceived prolonged labor and birth asphyxia.

Lynn Sibley et al also apply the Delay Model to determine the factors that negatively influence rural Bangladeshi women's decisions to seek care at biomedical centers during perceived postpartum hemorrhage (Sibley, et al 2009). The authors note that, generally, traditional birth attends and local women from Matlab agreed on the signs, causes, and treatments of postpartum bleeding. The authors indicate several factors for potentially causing a delay in women's decision-making to seek care from health facilities to several factors, including: 2) the belief that bleeding to cleanse the womb of old blood is necessary for health, coupled with an inability to quantify bleeding; 2) limited awareness of atonic uterus and retained placenta as causes of excessive bleeding and potentially useful first-aid measures; and c) attribution of excessive bleeding to *alga* and the importance of traditional healers and spiritual remedies.

Relevant to the last factor, the authors indicate that there was consensus among these informants that evil spirits (*alga*) can cause postpartum bleeding, and the problem requires spiritual treatments that can be obtained from traditional healers. However, only one out of the 19 groups that experienced postpartum bleeding attributed the condition to *alga*. The authors write, "This finding raises questions about beliefs in malevolent spirits as real barriers to timely emergency care for PPH and suggests the importance of triangulating normative with behavioural data." Contrary to this observation, I use data from the PL/BA study and apply the Delay Model to argue that belief in spiritual has strong potential for causing delay in women's decision to seek care for a childbirth complication.

My perusal of the transcripts of the IIH narratives suggests that there are three significant influences on Bangladeshi women's reproductive health seeking behavior: the notion of purity/pollution, the belief in spiritual causation of illness, and the concepts of *sharam* (shame/embarrassment) and *pardah* (the social segregation of males and females). Drawing on these concepts, I attempt to construct a religious and cultural framework for the reproductive health beliefs and practices revealed in the PL/BA study. Although my research data and case studies are limited to a small number of sites in Bangladesh, I supplement this data with that of anthropological literature pertaining to these concepts elsewhere in South Asia since these three concepts are shared by many ethnic and religious communities across the region. Hence, my analyses and conclusions have wider relevance beyond Bangladesh. In the following section, I provide Daniel Hruschka's critique of the use of the culture in explaining population health data and

health disparities. I then respond accordingly to Hruschka by providing a layout of how I will use religio-cultural concepts to explain some of this data.

VI. Critique of the Use of "Culture" in Population Health Literature

I suggest that, in order to respond more effectively to maternal and child health crises and produce better childbirth outcomes, biomedical practitioners need a greater understanding of the religious and cultural context. This understanding will enable them to fine-tune community health interventions. In his systematic review of the use of culture as an explanation in population health studies, Daniel Hruschka articulates the concern that I have with public health's understanding of the role which religio-cultural concepts play in women's recognition of and response to reproductive health problems (2009). Hruschka first notes that population health and epidemiology present culture as a powerful determinant of health outcomes, one that can "either be a barrier to health or a protective factor" (1). He finds that approximately 40% of the 2008 American Journal of Public Health articles cited culture as the cause of health disparities. He then observes two problems with the use of culture in public health studies. First, he observes that, although these studies regularly identify culture as the reason for particular health-related decisions and behaviors, they rarely describe "the precise mechanisms by which cultural factors influence health disparities" (7). Instead, they present culture's influence on patients' recognition of illness and their health behaviors as self-evident. For example, when describing the cultural theories of postpartum bleeding in Bangladesh, Lynn Sibley et al (2009) indicate that informants included in the study

"agreed that *alga batas* (malevolent spirits) is a cause of excessive, forceful and continuous bleeding and bleeding with clots... There was consensus among the

informants that, if the bleeding problem was caused by *alga batas*, the family should seek help of a traditional healer (*kobiraj*) and the problem should be treated with spiritual means, i.e. blessing or amulets [instead of a trained allopathic provider]."

The above quote indicates that women do not consider *alga* to be the only plausible cause of postpartum bleeding; yet, the researchers do not provide information on why, how (based on which observations), and when (the frequency of occurrence) women perceive spiritual causality for this complication. This additional information would help contextualize the frequency for how often women do indicate a spiritual cause and, consequently, prioritize the seeking of spiritual treatments over biomedical treatments.

Hruschka also observes that, while the most common use of culture in these articles focuses on "providing culturally sensitive, competent, or appropriate care," they rarely provide sufficient detail to understand how such interventions could be implemented (8). For example, in their 2009 study, Sibley et al indicate their hope that their research findings will be used to implement "effective, culturally-appropriate interventions." However, they do not provide suggestions for how the commonly held idea of spiritual causation requiring spiritual treatment can be implemented in health intervention programs, nor how perceptions of excessive postpartum bleeding as cleansing of the female body can be implemented in interventions.

In response to Hruschka's critique, I first provide detailed descriptions of the three religio-cultural concepts that I consider to have the strongest influence on Bangladeshi women's behaviors during reproductive crises. Then, I identify the mechanism by which these concepts and practices influence women's health seeking

from biomedical sources. Finally, I apply these ideas to offer suggestions on how the biomedical system can work within the religious and cultural worldviews of Bangladeshi women to increase their utilization of biomedical health services, especially during reproductive emergencies.

VII. A Discussion on Religio-Cultural Concepts and Their Influence on Women's Care Seeking Behavior During Childbirth

First, I consider the cultural beliefs around the concept of bodily purity and pollution and their influence on Bangladeshi women's reproductive practices and behaviors. Both Muslim and Hindu traditions consider reproductive blood to be ritually polluting and mandate specific guidelines for its confinement and removal. Typically, menstruating and parturient women limit their extra-domestic excursions in order to confine their reproductive pollution for a specified period of time, since spreading pollution can endanger the structure of the community by blurring the separation between purity and impurity (Douglas 2005). In some communities of Bangladesh, menstruating and parturient women withdraw to a designated location until they regain ritual purity.

Another reason for Bangladeshi women's limiting their public activity during states of ritual impurity is to limit contact with malevolent spiritual forces (Afsana, et al. 2000:76). Anthropologists have argued that reproductive blood is viewed as deeply powerful because many communities believe that it can be harnessed and manipulated to cause either harm or good; as a result, reproductive blood—and any items associated with

it, placenta, and the fetus—are believed to be vulnerable as well (Rozario 1992; Chawla 2006). Individuals with malevolent intentions are believed to be able to manipulate these powers and use the placenta as the vehicle for black magic (Blanchet 1984; Rozario 1992). For example, many Bangladeshis believe that infertile women can steal a parturient woman's placenta and cause the victim to become infertile.

In addition to black magic and the evil eye (commonly referred to as *nazar* or *dristi* in Bengali), other supernatural forces that many Bangladeshis believe can be harmful to humans include deities (like the goddess Kali) and spirits, invisible beings (*jinn*), or the ghosts of deceased humans (*bhut/pret/alga*) (Blanchet 1984; Claus, et al. 2003). These spirits are believed to have affinity towards certain forms of impurity, especially women's reproductive blood, which is often considered among the worst forms of pollution (Blanchet 1984: 56). As a result, menstruating, birthing, and parturient women are vulnerable to attack and possession by malevolent supernatural forces, whose influence can manifest in either mental or physical illness (Flueckiger 2006:65). Like the mother, the fetus and newborn, too, are considered vulnerable to attack by malevolent spirits, and they also typically receive *taviz* (protective amulets) only upon being ceremonially cleansed of their birth impurity. In particular, *bhut* and *alga* are said to be attracted to the fetus in the womb because of its association with the mother's reproductive blood. This attraction may have harmful effects for the fetus, like miscarriages and stillbirths, prolonged labor, and birth asphyxia.

Women can protect themselves and their children from the harmful actions of spiritual forces by abiding by cultural norms relating to the confinement of the pollution and the observance of *sharam* and *pardah*. For example, to repel the evil eye, many

women take great care to hide menstrual cloths or pads and bury the placenta and afterbirth. It is noteworthy that, during emergency situations like gynecological and obstetric complications, the observance of norms relating to purity/pollution and *sharam* and *pardah* are flexible. For instance, women experiencing reproductive health complications may still seek healthcare outside the home, albeit with some reluctance.

There also exist traditional forms of protection that can repel malevolent spiritual forces, like the *taviz*, which are amulets usually containing a piece of paper with Quranic verses or symbols written on it. Although people in ritually polluted states typically do not wear *taviz*, during an emergency situation, a woman may obtain *taviz* for herself or her child if the cause of complication is perceived to be spiritual, especially if she has previous experience with attack by malevolent forces.

A third aspect of Bangladeshi religious and cultural worldviews that affects women's health-seeking behaviors are the notions of *sharam* (shame/embarrassment) and the practice of *pardah* (the social segregation of males and females), which are common throughout South Asia and, specifically, in Bangladesh. In general, women consider pregnancy and birthing to be secret matters, recognizing them as *sharam ki baat*, or a matter of shame and embarrassment (Chawla 1994). Moreover, because women consider pregnancy and birth to be female matters, they do not openly discuss them with males.

Directly resulting from the concept of *sharam* is the practice of *pardah*. Various anthropologists who have worked in South Asia, including C. M. Pastner (1972; 1974), Shelly Feldman (1983), Santi Rozario (1992), and Kaosar Afsana (2005), suggest that the observance of *pardah* and *sharam* serves several interrelated purposes. First, *pardah* safeguards the sexual purity of women by minimizing social interaction between

unrelated males and females (Santi Rozario 1992). This is necessary for maintaining female sexual purity, which is associated with family honor and reputation (*izzat*) (Rozario 1992:86). Second, the observance of *pardah* confines women's reproductive pollution to domestic areas, thereby controlling it and maintaining the purity of the community at large (Rozario 1992:86). Third, observing *pardah* minimizes women's—especially those who are menstruating or have recently given birth—exposure to malevolent supernatural forces, to which they are most susceptible outside the domestic boundaries (Rozario 1992:97). Using the framework provided by the Delay Model described below, I discuss the mechanisms by which the above-mentioned three religio-cultural concepts cause delay in Bangladeshi women's decision-making process to seek healthcare at biomedical facilities. In the conclusion of this thesis, I provide suggestions on how these religio-cultural ideas can be integrated into maternal/child interventions to increase women's rates of seeking of care health facilities in timely manner.

VIII. My Application of the Delay Model to the PL/BA Data

I argue that Bangladeshi women's belief in and practices relating to the concept of purity and pollution, spiritual causation of illness, and observance of *sharam* and *pardah* often result in a delay in the decision to seek biomedical care. First, although none of the informants included in the PL/BA study directly referred to the concept of purity and pollution, many groups indicated in their IIH illness history (group interviews) that they attempted traditional treatments that are based on the concept of purity and pollution. As I discuss in Chapter I, the association of the mother's reproductive blood with the placenta—the interface between the mother and fetus—makes the placenta powerful. Specifically, the placenta can "trap" a baby's soul or life, potentially causing birth

asphyxia or death. Bangladeshi women commonly believe that the placenta can be stirred in warm water or fried over fire to revive a listless or asphyxiated newborn. The majority of women who practiced these treatments also sought care at health facilities when treatments involving the placenta failed to revive the baby. However, they did so after spending between one to two hours implementing the traditional methods, which caused delay in their receiving the emergency biomedical services to respond to the baby's condition, possibly endangering the life of the baby. In a few cases, the baby had died by the time the family arrived at a health facility.

Second, belief in the influence of spiritual forces on human health can also has serious implications for maternal and child health outcomes. As becomes apparent in the PL/BA study, women commonly believe that a spiritual causation of health problems requires spiritual treatments, which are offered by spiritual healers and usually include amulets, blessed water, herbal roots, and/or exorcism. Upon perceiving a spiritual cause for a reproductive complication, women typically prioritize seeking spiritual treatments over biomedical treatments. Yet, the complications that result in maternal/neonatal death require services that generally are accessible only in health facilities, such as basic and comprehensive services like IV fluids, drugs, blood, anesthesia, and surgery. Through the behavioral responses of groups that attributed the reproductive complication to a spiritual cause, the PL/BA data illustrates that prioritizing the seeking of care from traditional healers can delay women's access to the emergency services available at health facilities.

Third, the expectation for women to keep the matters of pregnancy and birth secret, especially from men, can lead to delays in the communication of signs and symptoms resulting from gynecological and obstetric complications. The PL/BA provides

several cases in which pregnant women chose not to reveal pain that they were experiencing towards the end of their pregnancies when men or non-relatives were around, not realizing that it may have been abnormal pain signaling a prolonged labor. Norms relating to *sharam* and *pardah* can also result in delays in the seeking of biomedical care outside the home, as doing so would involve the exposure of "secret matters" to males and unrelated females. By restricting the movement of women, the observance of *sharam* and *pardah* can limit the sources of care available to women during obstetric and gynecological complications. The observance of *sharam* and *pardah* is flexible, for example during emergency situations like a serious illness; thus, women can still receive the healthcare they deem necessary. Nonetheless, it can cause serious delays in the decision-making processes for women about communicating their health conditions and about leaving the house to obtain care.

While individuals and institutions, government and non-government agencies, and others involved in public health may recognize the religious worldview in which Bangladeshi women live and situate their reproductive experiences, I urge them to understand exactly how women employ religio-cultural ideas to recognize, interpret, and respond to reproductive complications. It is apparent that beliefs and practices relating to purity/pollution, malevolent causation of illness, and *sharam/pardah* often result in significant delays in women's decisions to seek care at health facilities. In order to acknowledge the potential of religio-cultural beliefs and practices for causing delay in a biomedical response to birth complications, health practitioners need to integrate these terms/concepts into their biomedical practice. This integration will help reduce women's reluctance in going to health facilities, for both normal and emergency reproductive care.

The adoption of religious and cultural concepts into the biomedical model will require the biomedical practitioners to have a deeper understanding of the subtleties of South Asian—and specifically Bangladeshi—religious and cultural worldviews, which I provide in this thesis. In the Conclusion, I provide specific proposals for how biomedical practitioners in Bangladesh can work within this context to provide more culturally-specific health services in order to improve health seeking at health facilities and produce better health outcomes.

CHAPTER I: THE CONCEPT OF PURITY AND POLLUTION

In this chapter, I consider the concept of purity and pollution and the norms relating to it in South Asian communities. First, I employ anthropologist Mary Douglas' model of the "purity/pollution system" to provide a definition and general overview of the concept. In acknowledgement of the fact that worldviews in which this concept plays an important role are based on religion, it is important to recognize the foundation that the two predominant religious traditions of South Asia offer for ideas about purity/pollution. Hence, I include a discussion on the Hindu and Islamic sources of ideas and norms relating to purity/pollution. I then contextualize the concept by providing examples of how it is applied in some South Asian communities, such as the Kalasha Valley, Tamil Nadu, and Bangladesh. Lastly, I provide case studies from the PL/BA study to understand how beliefs and practices relating to purity/pollution influence women's health behaviors during a health complication. I illustrate that, specifically in response to birth asphyxia, the application of treatment methods relating to purity/pollution causes delays in women's decisions to seek biomedical care. The fact that delay in obtaining of appropriate emergency health services can lead to negative health outcomes highlights the need for biomedical practitioners to recognize the beliefs and practices around purity/pollution.

I. Defining and Applying the Concept of Purity and Pollution in South Asia The notion of purity/pollution and, in particular, the association of impurity and pollution with females, has been discussed repeatedly in the anthropological literature on South Asia. Yet, the concept of purity has proven difficult to define. Anthropologist Mary Douglas has made one of the most significant contributions (2005). According to her theory of pollution, society, social classes, and the human body all have boundaries that separate them from the outside. Pollution is anything that threatens these boundaries, whether by crossing the boundaries or not fitting into them, thereby threatening the structure of the society or community and leading to disorder. Thus, she argues, the observation of purity/pollution laws is meant to protect societal structure. The idea of maintaining boundaries applies also to the human body: "Taking the body as a bounded entity, overflows which cross the boundaries of the body render it impure... All effluvia from the body are themselves impure and render the body impure" (Carman and Marglin 1985:67). These "overflows" may include saliva, urine, semen, and blood. Douglas further identifies purity/pollution as being relative: a state of being or an object is pure or impure only in comparison to another being or object, so that few things are considered completely pure or completely impure.

There is debate about whether the perception of reproductive blood as a form of pollution disempowers women or not, since many scholars assume a moral judgment behind the concepts of purity and pollution (Maggie 2001; Pintchman 2007). When exploring the concept of purity/pollution as practiced by the Kalasha community of the Chitral District in Northwestern Pakistan, anthropologist Wynne Maggi employs Douglas' theory of pollution (2001). She identifies the Kalasha categories of *onjesta* and

pragata—respectively "pure" and "impure" spaces and objects. She emphasizes that that the Kalasha have not internalized the moral judgment implications that are typically associated with these categories. Men are considered pure and women impure, although either can be pure or impure to various degrees. Places where women never go, such as altars, are completely pure; places where men never go, such as the menstrual hut, are completely impure. Based on her observations, Maggi suggests that pure space is not one in which there is no impurity; rather, it is where the pollution is managed and contained (40).

Maggi offers the Kalasha women as a counterexample to the observation that "female impurity [is] often taken as the antithesis of women's freedom, [since] this identity and the restrictions that go with it are [assumed to be imposed] rather than embraced or selected" (46). Like Douglas, Maggi observes that the geography of purity and pollution is flexible. Among the Kalasha, women are considered to be the source of pollution (in the form of reproductive blood), so they are responsible for controlling it. As a result, they are responsible for maintaining the separation between pure and impure spaces, the geography of which they can change. Thus, Maggi argues that women are empowered in their control of the boundaries of *onjesta* and *pragata*. Women consider themselves to be *azat*, or free, in choosing to follow—or not—customs relating to the observance of purity/pollution, such as remaining in the menstrual hut during their menstrual and postpartum periods. They perceive "impurity not [as] a construct of denigration imposed upon them, but [as] a concept shaped by [their own] active agency" (46).

Maggi recognizes that women's leaving behind their homes and families in order to confine their reproductive impurity is not only inconvenient, but that failure to observe purity-pollution boundaries is believed by both men and women to have negative, community-wide consequences. In agreement with Douglas, Maggie reports that the Kalasha believe that introduction of the impure into pure spaces produces unpredictability and change, which can transpire in various negative forms, including attacks by evil spirits, natural disasters, and illnesses (49). Thus, the threat of unpredictability, change, and disaster serves as an impetus for the separation of pure and impure spaces. Both Islamic and Hindu religious traditions have specific guidelines for differentiating between purity and impurity and how to separate these opposites in order maintain the sanctity and protection of pure spaces.

II. Islamic Concept of Purity/Pollution

Generally followed by the Sunni Muslim majority in South Asia, the Hanafi school of Islamic law supports the perception of menstrual and puerperal blood as impure. As recorded in al-Marghinani's *The Guidance*, Hanafi law identifies degrees of impurity and differentiates between the impurity incurred from reproductive blood and impurity incurred from other bodily substances released from genitalia, such as urine (2006:69-73)). Semen and menstrual blood are considered equally polluting, and ritualistic purification for both of them is mandated through a full-body bath. However, while feces, urine, and blood from a wound are also considered polluting, an simple ablution is sufficient in restoring a person's ritualistic purity. Thus, Islam textual traditions identify blood associated with reproduction as more polluting than most other forms of bodily pollution.

A person in the state of pollution is prohibited from most religious observances, such as the performance of the five daily prayers, keeping of the fast, and recitation of the Quran. Because prohibitions on the observance of religious activities apply to both males and females during states of pollution, male and female forms of pollutions can be considered to be equal. Yet, it can be argued that male pollution is controllable while female pollution is not. As Santi Rozario argues, "a man can control the major source of his pollution through celibacy, [while] a celibate woman cannot control her menstruation" (Rozario 1992:100). In consistency with Douglas' theory of pollution, the uncontrollability of women's pollution threatens the structure/order of the Muslim community, as she poses danger to the sanctity of pure places and objects, such as the mosque and the Quran. Thus, a woman experiencing menstrual or postnatal bleeding is prohibited from touching the Quran and entering the mosque during states of impurity. The Hindu tradition has similar norms and expectation for women in ritual polluted states.

III. The Hindu Concept of Purity/Pollution

As recorded in *Manusmriti*, the *Dharmashastra*, and Patanjali's *Yoga Sutras*, Hindu tradition perceives bodily substances as polluting in nature (Chawla 2006:52-5; Coward, et al. 1989:3,15). Hindu traditions also recognize varying degrees of impurity, according to whether the impurity is a bodily substance or a non-bodily substance. Bodily impurities include urine, semen, and blood, and they are considered more impure and polluting than impurities produced by other sources, such as dirt. Pollution can be removed through prescribed procedures, such as washing (Coward, et al. 1989:15)
Paralleling Islamic ideas and conforming to Douglas' theory of pollution, Hinduism determines the purity/impurity of an object or a person in relation to another object or person or the performance of a particular act. In this hierarchy, menstrual blood is considered to be the worst form of pollution (Chawla 2006:23). Moreover, Hindu tradition associates danger with impurity; hence, the strong polluting nature of reproductive blood makes it powerful (Chawla 2006:54-5; Rozario 1992:98). Anything that is associated with or comes into contact with this blood also gains this power to disrupt. Ideas about the polluting nature of reproductive blood as well as the power that it lends to objects associated with the blood is also observed in Bangladesh.

IV. Beliefs about Purity and Pollution in Bangladesh

In Bangladesh, women recognize pollution, or *napaki*, as all discharges from the body that cause ritual impurity, including blood, urine, and feces (Blanchet 1984: 32). They also accept that women experience impurity more often than men do, since they spend a significant amount of their lives experiencing menstruation and post-partum. Moreover, a common belief in Bangladesh is that menstrual and post-partum blood is more polluting than other bodily forms of impurity. Hindu women in Bangladesh consider it so based on the tradition passed down from generation to generation. Bangladeshi Muslim women consider it so based on the belief that childbirth—and the accompanying menstrual and post-natal bleeding—was given to [Eve] as punishment on the day that Adam and Eve [disobeyed God by eating the fruit of the Forbidden Tree]" (Blanchet 1984:33). In punishment, God cursed Adam with a life of physical labor and Eve with a more severe punishment: "she was condemned to bleed once a month, to carry and deliver children against her will, and to be often close to death at delivery" (20).

Being the worst form of pollution also makes reproductive blood powerful—a power that it can lend to anything that it is associated or comes into contact with it. As is evidenced by the PL/BA data, one such object is the placenta, which has the power to "trap" a baby's soul or life during childbirth. This phenomenon can manifest in health complications for the newborn, such as birth asphyxia—when the baby has difficulty breathing—or even death. The placenta, then, can be manipulated to restore the soul/life of the newborn. Similarly, the umbilical cord, the lifeline that connects the fetus to its mother, while it is still unclamped, provides a pathway for the soul/life of the baby to travel to or away from the baby. As such, it also is considered to have a form of power. A newborn that has difficulty breathing or does not move can be revived by "milking" along the umbilical cord towards the baby, thereby driving the soul/life towards the baby. V. Blood and Placenta and Their Implications for Health: Cases from the PL/BA Study While none of the informants in the PL/BA study directly mentioned the concept of purity and pollution, several regularly referred to the powerful nature of the placenta. It quickly became apparent that some of the women believe that the placenta contains the life force of the child, not just when the child resides in the placenta as a fetus but also after it is removed from it. These ideas identify the placenta as deeply powerful and capable of reviving the baby when it has difficulty breathing – a symptom of the medical condition known as birth asphyxia in which the newborn does not receive a sufficient supply of oxygen. For example, in the BA portion of the PL/BA study, 5 out of 19 groups⁵ revealed that the *dai* who assisted at their birth used the placenta in attempt to revive the baby, whether by massaging, heating, or stirring the placenta while it was still

⁵ Cases: 1A_BA; 1B_BA; 1C_BA; 3H_BA

attached to the baby. One *dai* from rural Matlab indicated that, upon noticing that the baby was not breathing, she directed another attendant "to stir the placenta in a bowl containing water so that the baby could [gain] breath."⁶ Although this treatment was meant to revive the baby, it failed to do so and the baby was later taken to the hospital. The *dai*, who had undergone a training program offered at a local health facility, explained, "We also rubbed the back and chest [of the asphyxiated baby] as the doctor [trained us to do so], and we moved the baby [i.e., moved his arms and legs] as the doctor told us. But we stirred the placenta from our perception … People stir the placenta in order to keep well the baby." In another case, the mother of the focal female recalled that, when she observed that the baby did not cry, breathe, or move, she "placed the placenta in the a bowl of water. All said that baby's life [is] stuck in the placenta. Then I moved it by a stick for about ten minutes."⁷ When the baby did not gain breath or movement, the family took him to the local health facility, along with the placenta, as they had not cut the umbilical cold. The doctors at the facility pronounced the baby dead.

Some groups interpreted the asphyxiated condition of the baby as a sign that the baby's soul had remained behind after the baby had been delivered. Responsive to this interpretation, in 3 out of 19 cases,⁸ the *dai* "milked' the umbilical cord towards the baby, in an attempt to drive the "soul" of the baby to the baby. One *dai* from BRAC explained that she can determine the condition and chances of survival of a sick newborn by touching the umbilical cord: "If the baby [is going to] die, it is easy to understand [by] touch[ing] its cord."⁹ Although the baby was listless and not breathing, she understood

⁶ Case: 1B_BA

⁷ Case: 1A_BA

⁸ Cases: 2B_BA; 2C_BA; 2D_BA

⁹ Case: 2B_BA

that "it had breath" and would survive. As one *dai* from rural Matlab explained, "The baby's soul sometimes stays in the placenta of the mother." She proposed that the baby she had delivered was weak, had difficulty breathing and, in general, appeared "sick" because "its soul [had] stayed in the placenta [after delivery]."¹⁰ She delayed cutting the cord, believing that if she cut the cord before the baby started breathing, he would die. Another TBA narrated: "We first poured [fresh river] water on the baby's navel and then [we] milked the cord. Doing all of that baby's breath did not come. Then we fomented the placenta. We put the placenta in a dish and put it [on] the fire. By giving fomentation, the placenta became round two and half [inches]. Then the baby becomes conscious."¹¹

All groups of women that employed treatments involving the placenta and umbilical cord took these actions immediately upon perceiving the asphyxiated condition of the baby. In the majority of these cases, the baby's condition did not improve and the groups decided to seek hospitalized care. In most cases, the caregivers spent approximately one to two hours on these home-based treatments. Only afterwards did they make the decision to go to a health facility. Because timely action is crucial in responding to a health complication such as birth asphyxia, these women often lost precious time when employing these cultural treatments.

Just as the powerful nature of the placenta can be used to revive the baby, many Bangladeshi women believe it can also be manipulated with maleficent intentions against the newborn and/or its mother, causing them both sickness and the mother infertility. For example, an infertile woman can cause the future infertility of a parturient woman by stealing and cursing her placenta . The PL/BA study revealed that while most women felt

¹⁰ Case: 1D_BA

¹¹ Case: IC_BA

comfortable calling a *dai* to assist at their home birth, at least one group of women was "scared" to seek the assistance of the *dai* during a home delivery, believing "she does bad [work] ... She steal[s] and stock[s] placentas because of wickedness."¹² Since the *dai* is typically recognized for her knowledge and skill at assisting normal birth and managing complicated births, women who do not seek her services lose an essential resource, especially when they also do not seek the assistance of other birth attendants.

The concept of purity/pollution has significant implications for the health of pregnant and parturient women, as well as their newborn babies. Bangladeshi women have specific treatments based on this concept that they employ during reproductive complications. Yet, these treatments are often not an adequate response; biomedical services, such as oxygen gas, IV fluids, and surgeries may be required to save the baby. The utilization of cultural treatments can cause delay in women's seeking of these services, which can result in negative health outcomes for the patient.

¹² Case: 3D_PL

CHAPTER II: MALEVOLENT SPIRITS AND FORCES

In this chapter, I discuss the second concept that helps create the religious worldview in which the women of Bangladesh experience their reproductive lives: the belief in the existence of malevolent spirits. I first provide a brief introduction to the relevant spiritual forces. Second, I explore the idea that certain malevolent spirits are attracted to pollution. Apparently, the association of birthing and parturient women as well as their fetuses with reproductive blood makes them vulnerable to attack by these spirits. I contextualize this belief by describing Bangladeshi norms and rituals that are intended repel evil spirits or neutralize their negative influences, especially during reproductive events. Lastly, I provide case studies from the PL/BA study to illustrate how Bangladeshi women perceive the behavior of evil spirits in relation to them and their children's health during reproductive childbirth. In describing how women recognize and respond to prolonged labor and birth asphyxia, the PL/BA study reveals that women's behavioral responses to these reproductive complications are deeply reflective of a belief in the supernatural causation of illness. Essentially, women believe that an illness caused by spiritual forces requires spiritual treatments. As a result, during such cases, they prioritize seeking

spiritual care over seeking biomedical care. This behavior causes significant delays in their receiving appropriate emergency healthcare, increasing the chances of morbidity and mortality during childbirth.

I. Evil Spirits and Forces and Islam and Hinduism

There are at least three different spiritual forces that can become involved in women's reproductive lives: evil spirits, the evil eye, and black magic. All three types of forces have foundation in both the Islamic and Hindu tradition. The category of evil spirits can include the jinn, which are invisible beings who can infringe on the spaces occupied by humans, usually with negative consequences for humans; and *bhut*, *pret*, and *alga*, which are ghosts that continue to wander the physical world and can prove harmful to human beings. Jinn, *bhut/pret*, and *alga* are believed to be active agents in the world of spiritual possession and attacks. Most of their subjects are women, since women in general are more susceptible to attack than men, and especially so during states of impurity. For example, according to popular belief in North India, the *churel* is the *bhut* of a woman who dies during childbirth (Chawla 1994:15-7). Due to her unsatisfied maternal cravings, the *churel* threatens women during pregnancy and labor (citation). The PL/BA study documented a large number of cases that identified *alga* as the perceived cause their health complication.

The evil eye, referred to as *nazar* in Urdu/Hindi and as *dristi* in Bengali, can also have negative influence on humans. Both humans and spirits can project the evil eye, often by staring enviously at another's looks, possessions, or children. Women, particularly those who are sterile, are believed to possess the evil eye (Marçais 2011). While women and young children are considered most vulnerable to *dristi*, happy

circumstances—such as pregnancy and childbirth—in a person's life can increase one's vulnerability. For example, fear of the evil eye often discourages women from sharing news about conception or an upcoming delivery, articulated by the belief that "the more people talk about the birth event, the more time [childbirth] requires and the more suffering occurs [during it]" (Afsana 2005:74). The PL/BA study revealed the evil eye to be a primary cause for why many women choose not to communicate their initial labor pains.

The negative influences of evil forces can manifest in physical or mental illness, death, and various forms of calamity (Flueckiger 2006). However, these evil forces can be repelled and their harmful influences neutralized through protective measures such as the recitation of particular Quranic verses or the possession of *taviz*, which are amulets containing a piece of paper containing names of Allah or Quranic verses (Flueckiger 2006).¹³ Moreover, a person who experiences attack by a malevolent spiritual force can seek the assistance of religious or spiritual healers, who are equipped to neutralize the harmful effects. In South Asia, and specifically in the Bangladesh, Muslims and Hindus share many ideas about evil spirits and how to deal with them, although the evil spirits may have either Muslim or Hindu origin.

II. Religion in Practice: Bangladesh

Historian Asim Roy argues that the shared socio-religious history between the Muslims and Hindus of Bangladesh has allowed for the creation of a "syncretistic belief system," one in which elements of the two religions are shared (Roy 1983). A fundamental construct that reflects the sharing of religious ideas is the belief in malevolent spirits and

¹³ Quranic surahs often recognized to have protective powers are surahs 113 and 114; the verse with the most protective power is verse 225 of Surah 2.

forces. Thérèse Blanchet, an anthropologist who conducted research in a rural village of northwest Bangladesh, proposes that this shared worldview provides Muslim women social and religious space to worship Allah while simultaneously propitiating spiritual agents that can be either Muslim or Hindu in origin (1984: 32). According to some Muslim women in Bangladesh, events like menstruation and birth do not concern Allah, the larger and distant deity; instead, women must placate other spiritual agents for safe pregnancies and deliveries and for the protection of mothers and babies during the postpartum period (Blanchet 1984). These spiritual agents can include jinn as well as *bhut*, *pret*, and *alga*. Thus, in order to fulfill their responsibility for maintaining their own health and well being, as well as of the child, Muslim women legitimate spirits and deities who are otherwise not supported by the Quran. Indeed, they acknowledge that, while "Allah said Muslims should not believe in *bhut*," *bhut* exist, disturbing women and children, and thus must be appeased (Blanchet 1984:55).

The belief that "when someone is ill, there is no difference between Muslims and Hindus, [as they] want only to get well" is exemplified by Bangladeshi women who seek spiritual care from healers who may be of a different religion than they (Blanchet 1984:49). Although women may identify spiritual agents and forces as being either Hindu or Muslim, they believe that these spiritual agents can cross religious boundaries and afflict both Hindus and Muslims. As a result, they usually seek a healer, Hindu or Muslim, who can most effectively remove or neutralize their influence. This idea was not directly expressed or explained by the informants of the PL/BA study, although there were a few examples of Muslim women going to Hindu *ojhas* and Hindu women going to

Muslim *faqirs*.¹⁴ For example, when a Muslim family from rural Matlab observed that their newborn was neither moving nor breathing, they suspected the involvement of an *alga* that had attacked the mother earlier during the pregnancy. In response, they called a female Hindu *ojha* who exorcised the *alga* by "reading holy blessings" on mustard oil, "blowing" on the sick child, and giving *taviz* to the mother. The family then applied the sanctified oil to the baby's entire body through a massage. Thus, it is apparent that malevolent spiritual forces can cause health complications in women and children, especially during reproductive events when they are in polluted states, when their contact with reproductive blood makes them vulnerable to attack.

III. The Link Between Impurity and Malevolent Spirits and Forces

Childbirth in Bangladesh is perceived as both an auspicious and a highly polluting event. While pregnancy and childbirth are highly desired, they nonetheless render the mother and child ritually impure. As discussed in Chapter II, both Muslim and Hindu women perceive menstrual and puerperal blood as a severe form of pollution. The physical vulnerability of the mother and child during pregnancy, childbirth, and the postpartum period is often interpreted as vulnerability to spiritual forces and agents, which are believed to be highly attracted to pollution (Blanchet 1984:56).

In addition to being vulnerable to evil spirits as result of their attraction to reproductive pollution, women are vulnerable because they are unable to perform certain religious rituals that serve a protective purpose. Besides fulfilling a religious obligation, the regular and proper performance of religious rituals such as Hindu *puja* or the Muslim *namaz* also protect the performer from evil spirits and forces. For example, a Hindu

¹⁴ Case: 1A_BA

devotee of the goddess Kali can protect herself from the affliction of a *pret* by maintaining regular worship of the goddess (Bellamy 2011:179). Thus, for the sake of their own health as well as the health of their children, women in Bangladesh participate in an intricate belief system that is designed to appease, repel, and expel malevolent spiritual agents and forces.

IV. Bangladeshi Rituals for the Repelling of Malevolent Evil Forces The avoidance of evil spirits is an essential aspect of ensuring reproductive success as well as the well being of both mother and child during pregnancy and after childbirth. Bangladeshi women typically observe this avoidance throughout their lives, starting as early as the onset of their puberty. Upon beginning their menstruation, young Bangladeshi girls are often encouraged to observe *pardah*, or physical separation from males, by limiting their excursions from domestic areas, especially without an escort (Rozario 1992:94). One reason for this is to avoid attracting *alga*, who prey on unmarried women and "like to eat their eggs," causing their victims infertility (Blanchet 1984:74). Similarly, women also reduce their public activity even further during pregnancy, for fear that they will experience miscarriage or stillbirth due resulting from *alga*'s "find[ing] the child in the womb very tasty," (Blanchet 1984:74).

When a woman experiences reproductive complications during childbirth, she may be blamed for having been neglectful in avoiding interaction with *alga* by exposing her vulnerable condition to *alga*. Evil spirits are said to be most active during mid-day, evening, and night (Afsana and Rashid 2000:30). As a result, pregnant women are discouraged from leaving the protection of their houses during these times. Similarly, they are also discouraged from bathing during the late afternoon, when it is believed that

alga can harm the baby through the medium of the water. In the PL/BA study, this idea was proposed as the cause of illness by three out of the nineteen women who gave birth to an asphyxiated baby. One woman from a rural area in the Dinajpur district explained, "When the baby was in the womb, it might have been caught by an evil spirit. [I] had taken a bath in the late afternoon, so the baby caught a cold."¹⁵ Thus, pregnant women typically observe norms that are intended to prevent *alga* harming them or their babies.

Just as the fetus was vulnerable to attack by evil forces, the newborn child continues to be vulnerable during the first week of life until the day s/he is cleansed of the birth impurity, usually on the seventh day. As a result, during its six days of impurity, the neonate is rarely left unattended or taken in public, because s/he is in danger of being harmed or "kidnapped" by evil spirits. This idea did surface in the PL/BA study, but it has been articulated in more detail in anthropological literature on rural Bangladesh: "If the baby is left alone, a male and a female *hydor* [evil spirit] appear as human being to steal the baby. One of them sleeps on the bed, taking the baby's form. Then, the *hydor* baby develops breathing problems. Its colour changes from red to blue; later, it dies" (Afsana and Rashid 2000:30). This quotation suggests that the baby is asphyxiated, a condition explained by the malevolent actions of spirits.

Typically, upon perceiving (or expecting) the influence of evil spirits during a reproductive event, Bangladeshi women seek a *kobiraj*, *faqir*, or *ojha*. A *kobiraj* is usually identified as an herbalist, and a *faqir* and *ojha* as spiritual healers; however, the three names are often used interchangeably for an individual—usually a male—who has spiritual authority and/or is capable of spiritual healing (Afsana 2005:101). The healer or

¹⁵ Case: 3C_BA

herbalist may prescribe herbal roots, *taviz*, and/or *panipura*, or blessed water, as either preventative or curative methods. For example, a pregnant woman who has previously experienced miscarriage can obtain a *taviz* to help "close her body [to the entrance of] evil spirits," which may help prevent miscarriage from reoccurring (Afsana 2005:33).

Generally, a person in a state of impurity, especially reproductive impurity, does not receive *taviz*, since his/her pollution is believed to render the *taviz* ineffective. During the *choditula* and *haqiqa* celebrations, which often take place on the seventh day following childbirth and mark the end of the baby's state of impurity, the baby is provided with *taviz* to repel evil spiritual forces. The mother may also receive *taviz* for protection from evil spirits upon the end of her own period of impurity, usually on the fortieth day following childbirth. However, the prohibition on wearing *taviz* during an impure state is flexible. For example, an asphyxiated baby can be provided with *taviz* when his/her condition is believed to have a spiritual origin. In my analyses below of cases from the PL/BA study, I discuss women's patterns of health seeking behavior and the negative implications that can have for maternal and child health.

V. Cases from Bangladesh: the PL/BA Study

In the PL/BA study, women who had experienced prolonged labor and/or birth asphyxia narrated their experiences, sharing details on how they recognized the complication, what they perceived to have caused it, and how they responded to it. Out of the nineteen cases that were included in birth asphyxia portion of the study, five cases identified a spiritual causation for the birth complication.¹⁶ Out of sixteen cases in the prolonged labor portion of the study, three cases identified a spiritual causation for the abnormal birthing

¹⁶ Cases: 1A_BA, 1B_BA, 2A_BA, 3B_BA, and 3C_BA

process.¹⁷ Below, I present and analyze one such case from the study to illustrate how women typically recognize, identify causation, and respond to a birth crisis that has a spiritual cause.

During the sixth month of her pregnancy, Shifon, a young Muslim woman living in the slums of Dhaka, experienced lactation.¹⁸ Worried that *alga* had "attacked" her, Shifon's mother and grandmother called a female Hindu *kobiraj*. The *kobiraj* exorcised the *alga*, "blessed" Shifon, and gave her *taviz*. In preparation for delivery, Shifon removed the *taviz*, since "it is mandatory to remove all amulets from body at the time of delivery [to allow the body to open up and release the baby]." Upon delivery, the *dai* observed that the baby did not move, cry, or breathe, and that its body was covered with a whitish substance, like "milk cream." She explained that the baby had been "spoiled" and "eaten" by *alga*. She also reveals that this was not uncommon, as *alga* typically "follow" and "attack" women during pregnancy. The dai further speculates that the same alga that had attacked Shifon during her sixth month had "destroyed" Shifon's baby, suggesting that the *taviz* had been ineffective in their protective powers.

In this case, the baby does not breathe or move upon birth. The *dai* takes several actions to recover the baby, including giving it mouth-to-mouth breathing, clearing its nose and mouth to clear its airways, and obtaining *taviz* for it. When the baby remains listless, the dai sends Shifon to a hospital, reasoning that when the treatment for alga is ineffective, one goes to the doctor. Apparently, spiritual treatments are not always effective,

 $^{^{17}}$ Cases: 3A_PL, 3C_PL, and 3G_PL 18 Case: 1A_BA

necessitating the seeking of other sources of care. The doctor at the hospital pronounced that Shifon's baby to be dead.

For both birth asphyxia and prolonged events, all eight groups that perceived a spiritual cause sought various spiritual treatments from *ojhas*, *faqirs*, and/or *kobirajs*, receiving primarily blessed water and *taviz*. The majority of these cases also sought care from other sources, such as biomedical community health workers, village doctors lacking professional training, and biomedical doctors. However, these groups did so after obtaining spiritual treatments. The women's initial preference for spiritual treatments supports the idea that an illness caused by a spiritual source requires spiritual treatment. Yet, the fact that many cases also went elsewhere for treatment indicates that they were most interested in resolving the problem and attempted to do so through any means available. Although their initial preference might have been for one type of treatment versus another, they did not feel that other treatments would be necessarily ineffective given the perceived origin of the illness.

For most of the eight cases that identified a spiritual causation, the groups' initial behavioral response of obtaining spiritual care caused serious delay in their seeking biomedical care, which they considered a secondary option. In a few cases, the baby died before appropriate health service could be obtained. A few remaining groups did not deem it necessary to seek biomedical care after having obtained spiritual care. This behavioral response has even greater potential for neonatal morbidity and mortality than a delayed biomedical response. Upon recognizing the potential for negative child health outcomes that the prioritization of spiritual treatment has, I suggest that biomedical health professionals work with spiritual healers as intermediaries into the religious world of

Bangladeshi women. Since these healers serve as a primary resource for women during certain reproductive health crises, perhaps they can be incorporated into biomedical healthcare delivery to yield better neonatal health outcomes during reproductive complications. In the conclusion chapter, I provide suggestions and examples for how this incorporation can be accomplished.

CHAPTER III: SHARAM AND PARDAH

In this chapter, I discuss the implications that the concept of *sharam* (shame) has for the health of women and children in Bangladesh. First, drawing on anthropological literature on the concepts of *sharam* and the practice of *pardah* in South Asia, I define and illustrate the significance of these concepts to the organization of communities, especially in the expectations they produce for the appropriate presentation and behavior of females. For the purpose of this thesis, I concentrate on four socio-cultural norms relating to the practice of *sharam*: the observance of gender segregation (*pardah*), restricted physical mobility, modesty, and silence. These norms effectively guide the behavior of women in most social contexts, including reproductive events. I then present and analyze case studies from the PL/BA study within this context to conclude that the practice of norms relating to *sharam* often result in a delayed biomedical response to health complications. Thus, understanding the concepts of *sharam* and *pardah* in Bangladesh societies is

essential for understanding how and why women behave in certain ways during reproductive crises. This understanding is necessary in developing culturally appropriate interventions for the reduction of the maternal and child morbidity and mortality.

I. Constructing Sharam

When analyzing the concepts of shame and the observance of *pardah*, Shelly Feldman and Florence McCathry argue that these concepts are reflective of societal perceptions of what is considered appropriate conduct, especially appropriate sexual conduct for females (1983). When describing the "code of *sharam*" as practiced in South Asia, Janet Chawla acknowledges that 'shame' is an inadequate translation for the term *sharam*, as it divests the concept of its positive aspects and reduces it simply to its negative aspects (2006). Instead, Chawla considers *sharam* to be "an accepted social code which offers both protection and the ability to negotiate within a gendered world as well as [to delineate] female behavior and domains" (25). Santi Rozario observes that for an individual—male or female—to have *sharam* is accepted by women as a good quality since it prevents one from breaking social norms (1992:85-6). Contrarily, *besharmi*, or lacking shame, is a negative quality, because it endangers the *izzat*, or honor and reputation, of the family and household males. An individual's misbehavior can bring *sharam* upon him/her as well as his/her family, resulting in loss of respect or dissolution of social status.

The significance of the concepts of honor/shame for the purposes of this thesis lies in the standards that it establishes for the status and behavior of women in society. C. M. Pastner proposes that, while the concepts of honor and shame refer to the behavior of both males and females, women are considered more susceptible to losing these qualities (1974). Because the honor of the males/family depends on the honor and sexual purity of

women, *pardah* is one effective means of preventing the loss of male/family honor (Feldman and McCarthy 1983; Rashid and Michaud 2000).

Pardah literally means "curtain;" however, the term is used to refer to gender segregation, including segregation created through various styles and forms of female veiling. Analyzing the practice of *pardah* in rural Waziristan of Pakistan, Pastner defines *pardah* as a "highly ritualized expression of explicit values, honor and shame, which are directly concerned with the status of women" (1974:3). The institution of *pardah* is based on the physical segregation of men and women, and entails the modesty/embarrassment of women, especially in the company of males, their confinement to the house, and/or forms of veiling. Typically, in those families that observe *pardah*, a girl begins observing *pardah* at the onset of puberty, when she is perceived to be at risk for male sexual advances. At this point, her public activity becomes limited and/or she begins to travel in *pardah* by wearing veil outside the house (Feldman and McCarthy 1983). By conforming to the socio-cultural norm of *pardah*, young females can help maintain the *izzat* of their families and household males.

South Asian women's observance of *pardah* varies in different religious and socio-economic groups. In Bangladesh, specifically, most mature women adhere to the general precept of *pardah* of limiting their social interaction with unrelated males (Rozario 1992:94). However, there are various ways of observing *pardah*. Some women observe *pardah* strictly, through a bodily covering, while others observe *pardah* more simply, through limited interaction with males without donning a physical covering. In this case, *pardah* can take the form of "civil behavior, modest dress, and appropriate behavior towards men" (Rashid and Michaud 2000:3).

II. The Practice of *Sharam* and *Pardah* During Reproductive Events in Bangladesh In Bangladesh, one significant aspect of *pardah* is maintaining the secrecy of reproduction, both from unrelated females and from males in general. Processes relating to reproduction are considered "sharam ki baat," or matters of shame, and are not discussed openly with others (Afsana 2005; Chawla 2006). In effect, women actively keep these matters secret, sharing them only with close female relatives. The failure to maintain the secrecy around issues of reproduction and pregnancy is believed to have potentially negative consequences. Kaosar Afsana reports a well-known proverb from a northeastern Bangladesh village that articulates this idea: "The more people talk about the birth event, the more time it requires and the more suffering occurs [during the process]" (2005:74). The idea is based on the fear of the evil eye (*nazar* or *dristi*). In general, happy news of childbirth makes the mother and child vulnerable to ill will resulting from others' envy, whether intentional or unintentional (Marçais 2011). Many Bangladeshis believe that the more people who know about a pregnancy or an upcoming birthing event, the greater the likelihood that an ill-wishing individual, usually an infertile woman, may cause suffering through her envy of the pregnant woman (Chawla 2006:23). This envy may manifest itself in the form of a miscarriage, prolonged labor, or stillbirth. The fear of nazar/dristi discourages women who are nearing the termination of their pregnancy from communicating their bodily symptoms that signal childbirth.

In addition to the fear that communicating her bodily signals will result in an abnormal delivery, a sense of modesty/shyness can also prevent discourage a woman from communicating her impending labor. Typically, a woman experiences stronger feelings of *sharam* if she is young and/or is pregnant for the first time. Thus, for the

safety of both mother and child, women limit the news of pregnancy and childbirth to closely related females and may not share it even with female neighbors (Afsana 2005:74). These behaviors were common among the female informants of the PL/BA study who experienced prolonged labor.

The concept of *sharam* and the fear of endangering the honor of her family determine a woman's behavior during reproductive events. The demarcation of reproductive matters as 'female' results in specific guidelines for women's behavior during these events. For example, a pregnant woman is encouraged to hide her pregnant condition in front of males, whether relatives or non-relatives. Reducing her activities outside the house is an effective means of hiding her condition from non-relative males, while covering her belly with a hanging piece of cloth, such as her scarf or the end of her sari, can hide it from the males with whom she comes into contact. Also, women are generally encouraged to endure the pain of childbirth silently, especially when men are present (Afsana 2005:74). When a birthing woman expresses pain in the presence of males, she embarrasses the male and brings shame upon herself for her inappropriate behavior. Similarly, it is a matter of *sharam* for males to witness a birthing event. Hence, they are usually not allowed within the premises where the birth is taking place (Afsana 2005:39). They may remain nearby, however, since the females may require their assistance in purchasing tools for labor, calling a traditional midwife or village doctor, or transporting the parturient woman and/or newborn to a traditional healer, clinic, or hospital.

III. Impact on Women's Reproductive Health: Cases from the PL/BA Study

By regulating the comportment and behavior of women, norms relating to the observance of *sharam* and pardah have great potential for leading to negative health outcome for birthing women and their children. First, the practice of *pardah* often results in limited physical mobility for women in Bangladesh, limiting, for example, prenatal visits to healthcare providers. The observance of *pardah* can also potentially have negative impact by reducing the number of healthcare options available to women during reproductive emergency times. The PL/BA data suggests that the observance of *pardah* is flexible enough to give woman the agency to leave the house in search of healthcare, whether from traditional healers, village doctors, or biomedical doctors. However, if women lacked this agency, their options for healthcare would be severely limited, leading to increased chances of negative health outcomes.

Second, norms relating to *sharam* limit a woman's ability to communicate the physical condition of her body to others, both males and females. She may have feelings of *sharam*—i.e., shyness, embarrassment, and modesty—about discussing menstruation and/or pregnancy, sharing news relating to conception, and communicating symptoms related to reproductive organs. The PL/BA provides strong evidence that that feelings of *sharam* can result in delays in appropriate and adequate care seeking during obstetric complications. In the prolonged labor portion of the study, seventeen women and their attendants from rural and urban-slum areas narrated their experiences with this complication. The majority of these women recalled having experienced *sharam* in discussing their pregnancy and/or related pain with or around others, often resulting in a failure to communicate their initial labor pains. All focal females experienced prolonged labor, usually without recognizing their labor processes as 'abnormal' or 'complicated.'

Their failure to communicate initial labor pain withheld essential information about their labor progress. Family and others attending the birthing woman often became aware of birthing woman's pain only by seeing or hearing her non-verbal expression of her physical discomfort (Head, et al. 2011). In a few cases, the birthing woman did communicate their pain, but were often reprimanded for expressing it and/or encouraged to endure the pain in silence.

Upon being asked to elaborate upon her feelings of *sharam* in communicating her initial labor pain, one informant from an urban slum in Dhaka stated, "My child in my womb—in this condition, if I had to disclose this thing in front of other people or if I said that I am sick, then I would feel more [*sharam*]. For that reason, I did not tell [my aunt]. [Feeling *sharam*] means pregnancy itself is a matter of shame, and it was my first baby."¹⁹ This informant considered it indecent and inappropriate to discuss her body and the fetus within it. The fact that she was a first-time mother accentuated this *sharam*. Ultimately, the feelings of *sharam* prevented her from revealing her initial labor pains (Head, et al. 2011).

Another informant from an urban slum in Dhaka experienced pain in the legs, chest, pain, and abdomen, and her eyes were sunken prior to her delivery.²⁰ Although she interpreted these signs as indicative of the onset of labor, she did not verbally express her pain to anyone. She recalled, "I wanted to tell my mother... I didn't tell her because of shyness; next-door neighbors were present, and I had brothers and sisters in the room/hut. [I thought] the pain would become relaxed slowly, [so I] walked and kept lying down." Although this informant was comfortable discussing her pain with her mother, she was

¹⁹ Case: 2G_PL

²⁰ Case: 2B_PL

uncomfortable discussing it in front of her siblings and neighbors. For many crucial hours, she did not communicate her initial labor pain. Then, in full labor, she and her attendants recognized that labor was not progressing normally. Thus, her failure to communicate her initial symptoms resulted in a delay in the recognition of prolonged labor and in the seeking of appropriate care for it.

Also surfacing in the PL/BA data is the idea that verbalizing childbirth pain causes increased suffering (Head, et al. 2011). When narrating her experience with prolonged labor, one informant from Matlab, in southwest Bangladesh, verbalized this idea: "The elderly people commonly say that if a delivery happens without anyone hearing, not even a bird, then it is good. If others hear [of it] then the mother suffers a lot. This is indigenous knowledge."²¹ A few hours prior to her delivery, this informant revealed to her mother that she was experiencing pain. Her mother consoled her that the pain was normal and encouraged her to remain silent, lest the pain become worse or the delivery become prolonged. Although they arranged transportation to the local obstetric facility, they did not immediately seek any form of assistance. Instead, they "trusted in Allah, [believing that] the baby [would] come out in the world when Allah permits." Similarly, another birthing mother from an urban slum in Dhaka did not communicate her labor pain, even to a relative, for fear that "the more people hear, the more [labor] pain and sufferings [she would] get."²²

According to literature on Bangladeshi women's health-seeking behavior during birth, the code of *sharam* can also prevent from seeking hospitalized care during deliveries (Afsana and Rashid 2001). In a study executed by Afsana and Rashid with

²¹ Case: 1B_PL

²² Case: 2C_PL

poor women from an urban slum in Dhaka, some informants revealed that they felt uncomfortable and immodest when asked to remove their garments when they went to a health facility for delivery (2001). One informant recalled, "In the labor room, the sisters removed my petticoat from the bottom. As I was trying to cover my private parts, they said that we were all women and there was nothing to feel shy about. They asked, 'Would you feel shy in front of us?'" Evidently, the code of *sharam* does not guide women's behavior exclusively around men, but also around women. Afsana and Rashid write that the health workers failed to understand this woman's "need for privacy," a need which is better fulfilled at home where she is among her relatives. As suggested by a case previously presented, even at home, women's need for privacy may not be fulfilled, since the presence of female neighbors and young, closely-related females can inhibit a woman from feeling comfortable. Thus, the observance of norms relating to *sharam* can cause women to be reluctant about delivering or seeking care at health facilities.

When analyzing certain sentiments and behaviors that repeatedly surface in studies on the health-seeking behaviors of Bangladeshi women, it is essential to understand the concept of *sharam*. For women, the social construct of *sharam* usually produces socio-cultural norms—including the observance of *pardah*, silence and modesty regarding matters related to their bodies, and restraints on movement in public space—that dictate their comportment and behavior around males and females, relatives and non-relatives. It is necessary for biomedical-oriented personnel and health-policy makers to understand how the norms relating to *sharam* influence women's beliefs and behaviors during reproductive processes, lest they violate the beliefs that the women uphold. In the

conclusion, I propose suggestions for how biomedical health practitioners can acknowledge their understanding of Bangladeshi women's needs for privacy.

CONCLUSION

I propose that, in order to improve reproductive health outcomes, individuals and organizations engaged in public health and biomedical health practitioners need a deeper understanding of the religious and cultural worldview in which the women of Bangladesh situate their reproductive experiences. I have described three aspects of this worldview: the notion of purity/pollution, belief in spiritual causation of illness, and observance of norms relating to *sharam* and *pardah*. Closely interrelated, these social concepts strongly influence women's interpretation of and response to reproductive complications, specifically prolonged labor and birth asphyxia. I do not mean to imply that researchers and public health figures are unaware of the roles that these concepts play in the reproductive lives of women in Bangladesh. In fact, population health researchers regularly cite cultural and religious concepts as being responsible, at least partly, for the

high rates of maternal and neonatal mortality and morbidity rates in Bangladesh (Hruschka 2009; Afsana and Rashid 2011). Rather, I encourage public health participants, first, to understand these constructs more deeply in order to realize their significance to women and, second, to deliver reproductive care to women within their religio-cultural context by incorporating these concepts into the biomedical model of healthcare. In this conclusion, I provide suggestions for how biomedicine can accommodate and integrate religio-cultural ideas and practices in an attempt to improve women's access to and utilization of biomedical healthcare.

In rethinking the delivery of reproductive care to Bangladeshi women, I address several areas, the first of which is the research data collection process. When reading the group interviews from Lynn Sibley's PL/BA study, I observed that, although the informants typically freely shared certain beliefs, they did not always spontaneously provide sufficient detail on the religio-cultural concepts and practices to which they referred. This was probably because these concepts and practices are ingrained in their minds and behaviors. Additionally, because the women who conducted the interviews spoke Bengali, the informants probably assumed a level of understanding on their part and did not deem it necessary to offer more detail. This became a problem, however, when the interviewers sometimes did not ask the questions that—I think—would have generated a clearer understanding of how informants interpret signs/symptoms of illness to rationalize 1) attributing their complication event to a specific cause(s), and 2) seeking care to address the perceived cause(s).

For example, in one case of birth asphyxia, the birth attendants observed that the baby did not cry, move, or breathe and its body appeared blue upon delivery.²³ They performed several treatments, including stirring the placenta in a bowl of water, until the baby began to breathe. Later, the family took the mother and baby to the hospital. During the group interview, the participants of the complication event attributed the baby's blue appearance to *alga*, but his overall illness to the mother's prolonged labor experience (i.e., the baby had been "stuck in the mother's abdomen due to his large size"). In this narration, the interviewers did not elicit information on why/how the informants attributed the causation of the complication to prolonged labor and a symptom of the complication to *alga*. Also, they did not ask the informants why they chose not to seek spiritual care for the baby despite recognizing the involvement of evil spirits in his illness. Additional information elicited by these questions would more clearly present the thought-processes of the women as they recognized and interpreted the complication event.

The thought-process is an important aspect of women's health-seeking decisions, as it can determine whether women will prioritize one type of treatment over another. Greater understanding of the thought process involved in women's recognition of and response to a health complication will enable biomedical and community health workers to use women's own terms and concepts to explain physiological conditions. For example, health workers can emphasize the idea that an illness with a spiritual cause can also have biological or physiological cause, informing the local women of the importance of timeliness in responding to the latter. Knowing that the condition has both a natural

²³ Case 1B_BA

and a supernatural origin, the women can plan to seek biomedical treatment upon illness recognition, rather than resorting to it after the spiritual treatments do not produce desired effects.

In another case that emphasizes the importance of this suggestion, the women revealed in their group interview that they "thought the baby was no more; its life was in the placenta, [for which reason they] burnt the placenta. After that the baby became [conscious], took breaths, but didn't cry."²⁴ Here, the interviewees offered no information regarding the purpose of burning the placenta besides that it was meant to "cause the baby to cry," which it had not done upon birth. They did not articulate their purpose in terms of returning the life or soul to baby. The interviewers failed to request more information on why the soul/life of the baby sometimes remains behind in the placenta or how stirring or heating the placenta returns the life/soul to the baby. The interviewers also did not ask any questions relating to the results of this treatment (i.e., why the baby begin to breathe and but not cry).

The PL/BA data suggests that these ideas and practices are not uncommon, at least in the three localities of Bangladesh that were included in the study. Although ethnographic literature can provide the information needed to understand these beliefs and behaviors, having women's unique explanations would decrease the chances of assumptions and misunderstandings. Explanations from the informants would enable individuals involved in public health to understand and interpret women's initial responses to health complications. Biomedical health facilities could then offer training

²⁴ Case: 3H_BA

programs or classes for local women on how to improve home-birth health outcomes by integrating these concepts.

For example, in observance of *sharam*, women take great care to hide their menstrual cloths from the male gaze. Thus, instead of hanging washed menstrual cloths in the sun to dry, they may hide them in closed, dark places, such as between mattresses (Chawla 2006:36). The lack of light, however, is a stimulus for bacterial and yeast growth on the cloth, which can spread to the owner of the cloth upon use. In response to this dilemma, I suggest teaching women that, since *bhut/pret/alga* reside in dark, closed spaces, women should avoid hiding their menstrual cloths there lest evil spirits use them as a medium through which they can cause harm to the owner. Instead, they should hang their menstrual cloths out to dry in a designated open space somewhere in the house that is closed off from view but can still receive direct sunlight. In this instance, health professionals can use women's own concepts to improve maternal and child health.

My next few suggestions for how the biomedical healthcare model can work within the religio-cultural framework relate to the potentially negative impact that beliefs and practices surrounding the concept of purity and pollution can have on women's seeking (timely) care from health facilities. Responsive to the powerful yet vulnerable nature of the placenta and afterbirth—as a result of its association with reproductive blood—many Bangladeshi women have specific procedures for how to dispose of them properly. These procedures reflect the belief that the placenta can be used as a medium for black magic. For example, an infertile woman it can misuse another woman's placenta and bring about her infertility (Chawla 2006: 23). Indeed, how the placenta is

treated and disposed can affect the well being of both the mother and child. Thus, ceremonies for the disposal of the placenta are an attempt to protect the mother and child.

When women give birth at home, they have agency over the fate of their placenta. Many women bury the placenta and aftermath in elaborate rituals. However, at a birthing facility, women lose agency over the placenta, since it is typically not returned to them following delivery. Some women cite this loss of control over the placenta as a reason for their preference for a home-based delivery instead of delivery as a health facility. While this idea did not surface in the PL/BA study, public health researchers in Bangladesh, like Allysin Moran, have recognized it (2006). I encourage health practitioners to return women's placentas and afterbirth to them following childbirth. Perhaps women would then feel less hesitant about coming to a birthing facility for delivery. Increasing the number of hospital-based deliveries can help lessen the chances of child mortality and morbidity, since health facilities either offer services for both preventing and responding to emergencies or have direct access to another facility that provides these services.

As the PL/BA study demonstrated, when Bangladeshi women attribute a spiritual cause to birth asphyxia, their initial response involves using the placenta to revive the baby. The majority of these cases spent a significant amount of time, usually between one to two hours, attempting these treatments, before seeking hospitalized care. The delay in seeking appropriate emergency care during such a complication can have severely negative consequences for the health of the child. In deference to women's beliefs in the powerful nature of the placenta and how it can it be used to revive an asphyxiated newborn, the biomedical system can designate special locations within hospitals and clinics where women can perform their cultural treatments, such as stirring or frying the

placenta. Such an acknowledgement of their home-based treatments will perhaps convince women whose home-based delivery result in an asphyxiated neonate to arrive at the health facility early than they would otherwise. At the hospital, the neonate can receive both biomedical and traditional care.

Finally, I suggest that the biomedical health model in Bangladesh better accommodate women's needs for privacy at health facilities. The fear that they will not be able to observe *sharam* and *pardah* appropriately can prevent women from going to health facilities during normal deliveries and during health complications. In response, the biomedical system can put greater emphasis into training female health workers to provide care for pregnant and laboring women. This will help reassure women and increase the rates of clinic-based deliveries.

As mentioned previously, while women sometimes attribute an illness to a single cause, they often provide more than one plausible cause. This observation has particular significance when women perceive illness as resulting from a combination of spiritual and non-spiritual causes, because their health seeking behavior in response to the illness will then involve obtaining spiritual care as well as biomedical care. Several cases in the PL/BA study revealed that they had thought that birth asphyxia was caused by both *alga* and a "physiological" cause, such as prolonged labor or the malnourished state of the mother during the pregnancy. Upon perceiving the involvement of malevolent spirits, the majority of these cases prioritized the seeking of care from traditional healers. Many of these cases also sought hospitalized care, but usually after visiting a spiritual healer. As the data suggests, considering of biomedical care as a secondary option can cause serious delays in seeking and receiving adequate emergency care, which increases the chances of

negative health outcomes for both mother and child. In very few cases, the informants did not feel the need to seek hospitalized care at all when they perceived a spiritual causation, which had the potential to produce even worse health outcomes.

It is noteworthy that, for the patients, the traditional and biomedical healthcare models do not contradict each other. Indeed, the PL/BA data clearly suggests that seeking care from one source versus the other is not mutually exclusive, which indicates that women are pragmatic in their health-seeking behaviors. Thus, it makes sense to integrate the biomedical and indigenous health systems in order to correspond with the attitudes of the patients. For such an integration, I encourage biomedicine to recognize the crucial role of traditional healers in women's healthcare by inviting them to practice at or near health facilities. The presence of traditional healers nearby can help make biomedical healthcare facilities more appealing to women. Moreover, since female patients regularly go to traditional healers and, afterwards, to biomedical healers, making the services provided by both sources available in one location would reduce delays in the patients' receiving the biomedical services they need.

The idea of integrating traditional healers into the biomedical health system has recently been implemented at Merced Medical Center in Merced, California (Brown 2009). In 2009, the medical center invited Hmong shamans to perform traditional ceremonies for Hmong patients. Because the Hmong community in Merced largely does not consider surgery, anesthesia, blood transfusions, and other similar procedures culturally and religiously acceptable, Hmong residents have previously demonstrated low rates of seeking care at hospital and they experienced high rates of late diagnoses of serious illnesses, such as cancer. Understanding illness as having primarily spiritual

causes, Hmong residents regularly sought care from traditional instead of biomedical healers. However, since the Merced Medical Center's recognition and incorporation of shaman healers, Hmong residents have been coming to the facility more frequently and in larger numbers. At this health facility, Hmong patients now have the option to receive both biomedical services to treat the physical aspects of a disease as well as traditional treatments to treat the spiritual aspects of a disease. Clearly, the integration has helped change the negative perception that the Hmong community had of biomedicine, which was based on the observation that the biomedical system responds to the physical facets of an illness but not its spiritual facets.

Just as the incorporation of traditional healers into the biomedical health system has been implemented in Merced, and has produced good results, its implementation is also possible and full of potential in Bangladesh. Instead of focusing on changing women's perceptions of and belief in spiritual causes and spiritual treatments, this integration would change women's perceptions of the biomedical health system. As both the PL/BA data and the anthropological literature suggest, women generally believe the biomedical system cannot treat the spiritual aspects of an illness. For example, although a hospital can provide oxygen to an asphyxiated newborn, it does not typically have the capacity—or interest—in driving away the *alga* which may have caused the baby's condition. If health facilities provided both the spiritual and the biomedical treatments, women would perceive the medical practitioners as more sympathetic of their religiocultural beliefs. Theoretically, they might come to a health facility upon recognizing a health complication where they can receive treatment services that will address and respond to a spiritual as well as a physiological/natural causality.

Healers from both the traditional and the biomedical system share a common objective: to help and heal their patients, although they do so by addressing different facets of an illness. Recognizing the pivotal role that traditional healers play in women's reproductive lives, medical practitioners need to identify these indigenous figures of authority and request their assistance in decreasing the rates of maternal and child mortality and morbidity rates resulting from late access to emergency biomedical services. This integration will involve some amount of learning and training for both types of healers. Since each perceives the female body and its reproductive capacity differently, both will require insights into how the other views illnesses, the human body, how to respond to it. In considering this proposal, biomedical practitioners should realize that that offering traditional healing treatments to women at health facilities does not necessitate subscribing to indigenous ideas about the actions of the supernatural on the human body. Likewise, it also does not mean believing in the efficacy of the services provided by traditional healers. Cooperation between biomedical and spiritual healers simply means that they recognize that women situate their reproductive experiences in a religious framework to which they are responding by providing culturally-appropriate interventions. Thus, instead of working against traditional healers, they can work with traditional healers to increase women's access to timely emergency services during reproductive crises.

Besides actually integrating traditional healers into the healthcare system, biomedical practitioners can also ask them for suggestions on how to pregnancy outcomes, focusing on reducing women's rates of delays in seeking emergency allopathic care during complications arising in childbirth. Local women recognize these religious

healers are community leaders. Since *ojhas*, *faqirs*, the *kobirajs* regularly minister to female patients experiencing obstetric complications, they know their patients' beliefs, preferences, and needs. As such, these religious community leaders represent a great source of knowledge. Public health policy makers can request their ideas for how to make maternal and child health intervention programs more accommodating of women's religio-cultural ideas and practices.

The World Health Organization emphasizes the leadership roles that religious leaders often occupy in communities and strongly encourages public health policy makers to increase collaboration with faith-based organizations (FBOs). The WHO bases its recommendations on the positive results obtained through a study in sub-Saharan Africa (WHO 2007a). The research study found that Christian hospitals and health centers provide about 40% of HIV care and treatments services in Lesotho and about a third of HIV/AIDS treatment facilities in Zambia. The report notes that "since [FBOs and religious leaders] provide a substantial portion of care in developing countries, often reaching vulnerable populations living under adverse conditions, [they] must be recognized as essential contributors towards universal access efforts" (2). Further, the WHO cautions, "The failure of health policy makers to understand the overarching influence of religion [in defining the health-seeking strategies of patients]—and the important role of FBOs [and religious healers] in treatment and care—can seriously undermine efforts to scale up health services" (2). Clearly, the health practitioners need to seek ideas as well as assistance from religious healers in policy making and the implementation of culturally-appropriate health interventions. A long-term, respectful

collaboration between religious healers and those engaged in public health is crucial for improving Bangladeshi women's rates of health seeking at biomedical facilities.

In this thesis, I first provided discussion on the three primary religio-cultural concepts that influence women's behaviors during reproductive events and during reproductive crises: beliefs/norms relating to purity and pollution, belief in spiritual causality of illness, and the observance of *sharam/pardah*. I followed this general discussion with an analysis of the mechanisms in which they negatively influence women's decisions to seek biomedical care in a timely manner.

I determining the mechanisms by which these three concepts on women's behavior influence women's behavioral responses during childbirth complications, I have followed the example of Head et al's application of the Delay Model (2009). This model is regularly in maternal/child health studies to explore how local contexts can cause delay in women's receiving the emergency obstetric care. Head, Sibley, and Yount applied the Delay Model to the PL data to observe that the concept of *sharam* has negative consequences for women's timely seeking of emergency obstetric care. Using the delay framework on both PL and BA data, I confirmed their observation. Additionally, I illustrated that belief in spiritual causality of illness and the application of practices relating to purity/pollution have a similar negative influence.

These three concepts should be of great interest to the biomedical health practitioners, who can fine-tune maternal and child health intervention programs by understanding, accommodating, and incorporating the religio-cultural norms of women. For the purpose of this thesis, the larger objective of the biomedical health system is to respond appropriately to maternal and neonatal health complications that can cause morbidity and mortality. Upon recognizing the religious worldviews in which Bangladeshi women participate, the biomedical system needs to integrate as many of these ideas as possible into the its healthcare delivery to increase the rates of timely careseeking at health facilities. This will ultimately reduce the maternal and child morbidity and mortality rates in Bangladesh.

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