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Elizabeth Casto
ecasto@bu.edu

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Elizabeth Casto

Elizabeth.Casto@childrens.harvard.edu/ecasto@bu.edu

Major: International Studies and History
Minor: Applied French
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Faculty Mentors:
Irina Stakhanova
Marc Simon

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Abstract

As the United Nations Millennium Development Goals initiative comes to a close, it is important to examine what has been effective in combating disparities in developing nations. In this paper I explore the impact midwives have on improving maternal and child health in Bangladesh by focusing on how the United Nations Millennium Development Goals initiative has helped to change societal views on women and birth as midwives become more integrated into improving maternal and child health. It is a quantitative and qualitative approach analyzing the statistics of implementing midwives as these impact cost-effectiveness and change in mortality rates in addition to social changes that have occurred in the culture towards maternal and child health. The paper further analyzes programs implemented by countries such as India and Sri Lanka comparatively. Data have been collected from published United Nations and governmental reports, media, and research articles. The paper concludes that the implementation of midwives has provided a cost-effective method of reducing maternal and child health in Bangladesh, and will be increasingly efficient as governmental programs continue to improve various aspects and laws of the country. It is important to analyze what is working in order to further improve maternal and child health on both a regional and global level. The use of midwives can provide a fundamental framework in communities that can aid in reducing health disparities as well as all improve all facets of reproductive wellness, providing the support needed at all stages to improve maternal and child health.

Introduction

Maternal and infant mortality has been a major concern in the international community. The United Nations has made it a priority with its Millennium Development Goals to reduce these mortality rates and improve the health of both mothers and children by 2015, with midwives acting as major contributors. Programs in conjunction with the United Nations and the International Confederation of Midwives have developed a strategy to combat mortality rates in developing countries that should allow nations to reach and even bypass the MDG. Bangladesh is one such country implementing these programs with full support from the government, and it is expected to reach the goals set by the United Nations. The role of midwives is having an

influential impact on improving maternal and child health in Bangladesh and reinforces thereby the significance UN programs are placing on enriching health programs in developing nations through the use of these skilled birth attendants.

The design of this case study is primarily a descriptive and comparative analysis of the current programs initiated by the United Nations and the Bangladesh government. It will depict the issues that the country faces regarding maternal and child mortality, and how the implementation of UN MDG programs have aided in improving their health. Furthermore, it will analyze how the government is working with the United Nations to improve the education and programs for midwives. Two comparative analyses of endeavors initiated in India and Sri Lanka will be analyzed in order to understand the effectiveness of Bangladesh in contrast. Finally, the case study will discuss how Bangladesh can continue to improve maternal and child health through the use of midwives once the MDG end this year. This study will draw on a combination of qualitative and quantitative information, using statistical data with sociological analysis to reach a comprehensive conclusion.

Primary sources were mainly taken from United Nations reports on the progress of MDG goals. This allows for the analysis of current statistical data on how maternal health has evolved. These reports also provide detailed insights into the practical implementation of UN programs. In conjunction with the United Nations Population Fund (UNPF), the International Confederation of Midwifery, and World Health Organization (WHO), several reports have also been created that focus exclusively on midwives. The current 2014 State of the World's Midwifery report will

be an invaluable primary source to interpret how midwives have played a qualitative and quantitative role on improving maternal and child health. Furthermore, organizations such as the World Health Organization South-East Asia Regional Office and UNFPA will provide information specifically focused on midwives and Bangladesh. Due to the sheer amount of reports that the United Nations produces, there is an abundance of research that can be consolidated and analyzed to provide a comprehensive overview regarding the role of midwives.

Literature Review

As the deadline for reaching the UN Maternal and Child Health-related MDGs draws near, the country of Bangladesh is on track for reaching its goal of reducing its mortality rates for mothers and their children. Government assistance programs and increasingly easy access for expecting mothers to skilled birth attendants are major contributors towards this reduction. Midwives are often unspoken in their commitment to these improvements, however as the MDGs end and the post-developmental goals are established, the UN has lauded the important role that midwives have in developing countries. With the improvement of access to midwives and facilities, the reduction of mortality for mothers and their children will continue to have a positive impact on Bangladesh, improving the well-being and lives of its citizens. The following literature review indicates this important role of midwives, and supports the hypothesis that midwives are a valuable resource in decreasing mortality rates.

Linda Bartlett et al examined the cost-effectiveness and efficiency of implementing midwives versus obstetrics in fifty-eight low-to-middle income countries. They used the Lives Saved

Tool—a computer-based tool that runs a multitude of scenarios—to simulate maternal and child mortality rates by increasing midwifery and obstetrics services to first 60%, or modest coverage, and then to 99% or universal coverage. The purpose of this research was to formulate theoretical models in order to compare the effects of access to midwives versus to a doctor both in financial terms and by mortality rates. They hypothesized that though a combination of midwives and doctors will produce the best results, midwives who taught family planning were more cost-effective and could reduce mortality rates. It was discovered that when family planning was not implemented, midwifery was two times more cost-effective than obstetrics, at $2,200 versus $4,200 per case where death was averted. Through a combination of family planning as well as prenatal care, labor and delivery, and postpartum-postnatal care via midwives and doctors, it is estimated that the reduction of mortality can be increased by 69% and the cost can be dropped from $4,000 to $2,100.[i] These results confirm the initial hypothesis. With a reduction in cost as well as the implementation of more coverage, the use of midwives can have a major role in reducing mortality rates and improve the well-being of mothers and children in developing and middle-income nations, including Bangladesh.

Michael T. Mbizvo and Lale Say reviewed six countries that have prioritized reproductive health and reducing threats to maternal health in order to examine the national programs that Bangladesh has initiated and which have initiated change in societal views on giving birth. The two scholars determined that a combination of facility and community-based approaches are potentially effective strategies; strong political motivations as well as the involvement of multiple stakeholders are key aspects of successful programs in developing countries. Bangladesh especially has been noted for its strong governmental initiatives that have led to an

increase in secondary education in schools, and it is considered a model country because of the family planning programs and menstrual regulation program. While the study does not mention midwives by name, analyzing this information is necessary for understanding the government's role in reducing risks to maternal and child health.[ii] By analyzing and understanding the potential intricacies of programs and initiatives, the niche of midwives can be better determined, and it becomes possible to determine how they can more accurately and efficiently contribute to improving health outcomes.

Tahera Ahmed and SM Jakaria wrote an article about the implementation of the United Nations Population Fund's program on increasing the number of midwives and other community-based family planning workers in Bangladesh. As Bangladesh's maternal mortality rates are among the highest in the world, improving access to midwives and other health care workers was important in reaching the UN MDGs regarding maternal and child health. The article examines the program initiated by the government of Bangladesh that began in 2004 in order to create skilled birth attendants for home births, since only 15% of all births are delivered in health facilities. The authors hypothesized that the program has resulted in beneficial results and provides chances for improved human resources in order for mothers in Bangladesh to be safe. During this analysis of the pilot program, the authors examined possible ways of improving upon it. They conclude that having community-based health workers will work in the interim as more infrastructure is established, however a cadre of midwives needs to be implemented in order to improve the transition from giving birth in homes.[iii] The midwives provide needed resources and education that community-based health workers do not have and, thus, request this necessary component in improving access to health. Since the study was published in 2009, it will be

necessary to look at the current statistics and examine whether this view was correct, and how Bangladesh has grown after implementing this initial program. It has supported the hypothesis in that the government increasingly relies on midwives to improve maternal and child health care in order to reach the MDGs on time.

Finally, K Afsana, JP Grant, and J Evans provide a more recent outlook on midwives in Bangladesh. They argue that although Bangladesh is on track to meet its MDGs, there is still a shortage of midwives and other health-care professionals. They also support the implementation of community-based health workers such as midwives, since their involvement indicates positive results and helps in strengthening relations between communities and formal health systems. They acknowledge that Bangladesh is currently in the process of improving their community-based workers by transitioning to midwifery practices and improved education to serve and communicate better, as Ahmed and Jakaria proposed. Afsana et al share this positive outlook on observed changes, agreeing that a step in the right direction has been taken. This supports the paper's hypothesis that midwives, particularly with community- and family-planning involvement, are extremely beneficial and efficient in reducing mortality rates.[iv] Both authors strongly support the provision of midwives as an important resource in the community. They should be utilized rather than skilled birth attendants. This conclusion questions the difference between a skilled birth attendant and a midwife, as they provide similar service—particularly to rural communities.

The emphasis on improving maternal and child health in Bangladesh overall shows a positive outlook and supports the paper's hypothesis. As more training and communication between communities, governments, and NGOs increase, Bangladesh will reach its MDGs and continue to improve its nation's overall health. Although it still has a long way to go, Bangladesh is committed to these programs and will continue to move forward as they prepare for post-2015 development goals.

Analysis

The UN MDGs were created at the turn of the century to combat major disparities in developing countries with the plan to reach objectives by 2015. It has become the most successful global anti-poverty push in history and should continue to have positive effects on the regions. Topics included eradicating extreme poverty and hunger, universal education, and combating diseases such as malaria. This paper, however, will focus primarily on MDG 4 and 5 as both are impacted by the use of midwives: reduce child mortality and improve maternal health. Each has specific targets whose deadline is the 2015 date. Regarding child mortality, the goal is to reduce the under-five mortality rate of children by two thirds between 1990 and 2015. As of this point, child deaths under the age of five have been reduced from 12.7 million to 6.3 million as of 2013: an almost 50% decrease. The two main goals are to 1) reduce maternal mortality by three quarters between 1990 and 2015; and 2) achieve universal access to reproductive health. The percentage of mothers in developing nations with access to skilled health personal has risen from 56% to 68% in 2012; however, mortality rates have only dropped by 45%. While all regions of the world have made progress, they still require intervention in order to reach their targets.[v]

Bangladesh, with the third largest amount of poor people after India and China, has a high maternal mortality rate compared to other nations at 170 deaths per 100,000 births.[vi] A primary issue in continued high mortality rates has been attributed to women's low status in society, the poor quality of maternal care services, lack of trained providers, and lack of access to (health) infrastructure. From a socio-cultural perspective, girls are often considered financial burdens within their families, receiving less investment into their health, care, and education than the boys. Due to this fact, there is a high level of child marriages and adolescent motherhood, which contributes to the high level of maternal mortality rates. These practices are further combined with strong cultural and traditional ties privileging giving birth in the home; that practice is based on the belief that women should give birth 'naturally.' As it is primarily a patriarchal society, the husband or mother-in-law makes one in two women's medical decisions, and many do not understand the importance of rest or appropriate nutrition. 48 % of Bangladesh women have their health care determined by their husbands. Violence against women further complicates matters, with over half of all women experiencing some form of violence. Education programs remain necessary to combat these disparities, although it should be noted that in terms of salaries, women still only make 60-65% of the salaries landed by men, and acid attacks against women are also still prevalent. All these factors negatively affect the chances of expectant mothers to gain access to the proper care needed during their pregnancy.[vii]

Lack of infrastructure and access to health services are the greatest factors contributing to maternal mortality rates in the country. Hospitals do not have enough personnel to treat every

patient properly, and there are so few hospitals that it can take hours to get to the nearest one should a mother be living in a rural village. Should mothers want to give birth in a hospital, these are often overcrowded and incapable of providing adequate care. Due to this, there have been reports even in recent months of babies being stolen due to lack of personnel to keep watch, as well as babies dying due to lack of care.[viii] A study from 2014 concluded that the hospitals examined were conducive to the spread of infection. Sanitation facilities varied depending on the hospital; in the pediatric ward of one hospital, there was only one toilet with only one hand-washing station for both doctors and adults. In other areas there were non-functioning toilets, only two patient hand-washing stations working, and no soap. There was an overall lack of routine cleaning, lack of basic infection control measures such as cleaning medical supplies properly, and improper waste management. On top of hygienic problems, electricity was not always available within the hospital, a common occurrence throughout the country.[ix] While the study only examined three out of seventeen tertiary hospitals, it provides insight into a woman's preference to give birth in the home. Other studies and articles have supported claims of overcrowding and lack of electricity. It further strengthens the sense of safety in giving birth in the home, since a hospital may result in an infection or worse.

The Evolution of the Midwife

The government of Bangladesh realized that a number of home birth providers had to be created based on the results of a 2001 WHO Needs Assessment Study. In order to combat these problems and to reach the UN MDGs, the government initiated a program together with UNFPA and WHO in 2004. This initiative sought to train supervisors and fellow trainers to educate

13,500 skilled birth attendants by 2008. A six-month intensive training program for community and clinical practice was developed, implementing seventy-four essential midwife skills in the curriculum. It provided theoretical and practical knowledge for care at all stages of pregnancy as well as some community outreach to help educate families. From 2006-2008, 1739 skilled birth attendants reportedly delivered over 65,000 babies and referred 21,000 for medical care. By the end of 2008 there was a recorded 4000 community-based skilled birth attendants. This program, however, was only a temporary fix to the problem. While the skilled birth attendants were beneficial, they did not have the formal or extensive training of a midwife that would be able to aid the women in the communities more effectively. Furthermore, as more women moved towards using institutions and medical care, the skilled birth attendants were not able to provide the services needed.[x] Realizing that, the government of Bangladesh implemented a new policy in 2008 to reflect these changes.

The government Directorate of Nursing Services and the Bangladesh Nursing Council worked in conjunction with WHO to develop "Strategic directions for enhancing the contribution of nurse-midwives for midwifery services to contribute to the attainment of MDGs 4 and 5.[xi]" It defined two pathways for the training of midwives: a three-month certificate program for existing nurse-midwives and a three-year direct entry midwife program. This is a direct step up from just having skilled birth attendants, since professional midwives have a significant impact on reducing maternal mortality due to their vast array of knowledge. While more needs to be done in order to improve infrastructure and to increase further the amount of midwives available, there

is no doubt that Bangladesh "is an example of political commitment to midwifery, joint agency support to government, and public-private enterprise.[xii]"

An important factor in the education process is the creation of a global standard for midwifery education that was amended by the International Confederation of Midwives in 2013 while working closely with the UN. Minimal education requirements are needed in order to ensure higher expectations and to reflect country specific needs for curriculum content and cultural appropriateness.[xiii] A midwife is essentially a nurse or doctor without needing to work in a hospital, and can have a community presence throughout a woman's pregnancy. Basic midwife skills can include comprehensive obstetric health, the ability to perform physical exams, and provide tests such as for HIV or Sexually-Transmitted Infections (STIs). Regarding pregnancy, they are trained much like a doctor and can make sure that the pregnancy is going smoothly or notice any complications. They are able to determine the estimated date of birth, perform pelvic examinations, and monitor the baby. Finally, they are able to provide high-quality, culturally sensitive care during labor to ensure a safe birth, and handle any emergency situation that may arise. They know when an actual doctor is needed, and will prepare the mother for transfer if needed. Though these are just several aspects of the assistance a midwife can provide, it shows how necessary midwives are for the community in terms of pregnancy alone. They are able to provide community care at all stages so that women do not need to travel for miles to see a doctor, and can still have a safe birth in their homes.[xiv]

What is most effective about midwives, however, is the community outreach that they perform. Family planning is considered to be one of the most effective ways to improve maternal health outcomes. By educating the community regarding sexual health and planning for pregnancy, a significant reduction in population can occur within the next fifteen years. It will reduce the volume of essential interventions, making the service extremely cost effective. Girls and women who have access to family planning and health services also tend to be better educated and healthier than those who don't. Girls equipped with this knowledge are less likely to get pregnant young, allowing them to attend school and receive an education. Having midwives with this information can be lifesaving; this standard in services is very different from the skilled birth attendants that Bangladesh previously had, also by developing a more comprehensive community based service for rural areas.[xv]

Perhaps the most important effect that midwives have on improving maternal health is the cost-effectiveness of training them. Bartlett et al. determined in their article that when family planning was involved, midwifery was two times more cost effective than obstetrics (doctors), at $2,200 versus $4,200 per death averted. Furthermore, having midwives focus on family planning, prenatal care, labor, and delivery while doctors covered emergencies, reduced the cost from $4,000 to $2,100.[xvi] The UNFPA concurs with this report, stating that the investment in midwives could give a 16-fold return and is equivalent to child vaccinations in terms of health impact.[xvii] Having this seamless efficiency of midwives and doctors would allow Bangladesh to continue its education for midwives while using available funds to improve upon its infrastructure. In this way, it will be able to better provide for its rural citizens by creating a close tie between the public health system and the mothers and communities, developing a higher level

of trust to better protect mother and child. In order for this to become a reality, governments must step up to provide financial support. They must be held accountable and prioritize midwifery in their national budget so that all women are given universal financial protection. Bangladesh is taking a strong stance on supporting its midwifery education and is investing thereby in its future. By educating just 500 midwives, it is estimated that they will be able to save 36,000 lives.

As Bangladesh is primarily a rural society, midwives provide essential resources while the country improves its infrastructure as well as increases access to medical services. It provides careers for women that would further empower and educate them through the three-year program. They bring specialized skills that nurses do not have. Underqualified staff often has no training in dealing with pregnancy complications and must defer to a doctor in emergencies, which can, in turn, lead to potential further complications. Midwives, however, will be able to act decisively and make their own decisions, which will decrease maternal mortality rates. Furthermore, as it is an all-woman program, it will aid in tackling cultural barriers for women seeking healthcare. As a patriarchal society, many Bangladeshi still share strict societal views on male-female interactions. Since 75% of rural doctors are men, it puts further pressure on women to give birth at home. Midwives break that barrier and provide for the growing demand of maternal care in rural areas.[xviii] With the first group of midwives graduating in December 2015 from the new program, it is likely that maternal and child health will be able to see a marked improvement. The international education standards employed by the program allow midwives to provide 87% of all needed services to mothers and their children.[xix]As there is already a noticeable improvement and understanding in the value of giving birth with a skilled birth

attendant, a change in the culture of giving birth is shifting with the new generation. A recent endeavor has resulted in a TV show, the equivalent of the BBC series, "Call the Midwife." It is the first of its kind to depict birth in Bangladesh, thereby perhaps helping to reduce cultural stigmas on giving birth. It breaks the silence by addressing topics such as antenatal check ups, newborn checkups, and understanding the problems that can occur during labor. With the second season appearing during the spring, the series is an excellent step forward to help educate the public about maternal and child health issues while including all members of the family in the decision-making process without losing sight of cultural norms.[xx]

Overcoming barriers

In order to continue to improve maternal and child health, several factors must further be addressed. Increasing the Gross Domestic Product (GDP), improving infrastructure, and changing laws in Bangladesh are the key to increasing the number of midwives and services for women. As a member of the Next Eleven Global Economy (http://blog.euromonitor.com/2008/02/the-next-11-emerging-economies.html) , Bangladesh has the potential to be among the world's largest economies of the 21st century. Other countries within this group are Egypt, Indonesia, Mexico, Nigeria, and South Korea. While focusing primarily on agriculture due to its rich natural resources, Bangladesh also hosts one of the largest garment factory sectors in the world. However, working conditions are often poor, as seen in the garment factory collapse at Rana Plaza in 2013 and the plastics factory fire earlier this year.[xxi] Countries such as Canada, Sweden, and Switzerland are beginning to invest more in the country. [xxii]Canadian manufacturers are considering bringing technology and advanced management practices to Bangladesh, and have

already been aiding the country through a development program. They intend to help improve regulatory factors in the garment industry, including regulations for worker's safety.[xxiii] Sweden has recently applauded Bangladesh's endeavors to improve access to midwives and is a key partner with UNICEF to increase their cadre of midwives; it has also been a strong investor in the economy.[xxiv] Furthermore, Bangladesh is working on improving its infrastructure with its neighbors by increasing access to electricity. By working with four countries, India, Nepal, Bhutan, and Myanmar, Bangladesh plans on receiving more megawatts of electrical power.[xxv] This would aid hospitals that do not have consistent electricity, which will also provide better resources and medical care.

Politically, Bangladesh has entered into an agreement with Switzerland to work closer in international forums including the United Nations, particularly on the subjects of migration and climate change. They have also discussed bilateral cooperation in various sectors including trade and investment, development, human rights, cultural exchanges, renewable energy, and connectivity.[xxvi] Having these connections will be essential to the continual advancement of Bangladesh's economy and foreign relations. It has recently been discussed with the International Criminal Court (ICC) to be part of an informational campaign to promote the "Policy Paper on Sexual and Gender Based Crimes.[xxvii]" As Bangladesh has not changed its rape laws since British rule, it is heavily outdated. Sex workers have also been demanding more equal rights and access to healthcare; prostitution is currently legal, however many women turn to it as a career due to a lack of other choices even though there are severe restrictions.[xxviii] These initiatives are a step forward in the government's endeavors towards gender equality and

improving national reproductive health, although it is slow progress. Furthermore, it will aid in improving relations with countries such as Sweden, which has strong policies on gender equality.

Overall, these improvements contribute to the empowerment of women and provide more resources for them. With better working conditions and job opportunities, they will be able to have safer pregnancies. Through changing laws and increased access to midwives, education and health services will further aid in the overall improvement of maternal and child health. News reports have placed midwives in high esteem within the country, and the government has realized the value of implementing them. With international cooperation, Bangladesh has the potential to increase its GDP and to update its national policies and health care improvements. The post-2015 outlook looks favorable as Bangladesh continues to improve.

Continued barriers towards maternal and child health that need to be addressed are in part due to the remaining shortage of nurses and midwives. Quality of education will need to be maintained as the first group of midwives graduates at the end of 2015. This can be achieved through continued interaction with countries such as Sweden and UNICEF. A health work strategy needs to be developed in order to recruit, deploy, retain, and develop midwives. The Midwifery Act and professional regulations need to be passed in Parliament to protect the public's rights and safeguard the midwives, particularly in the case of a death. Institutionalization of maternal and newborn care methods in hospitals needs to be implemented in order to minimize the rates of C-sections, decrease pregnancy-related complications, and decrease child mortality. Finally, midwives and the community need to be further integrated; preparations must be made as the

new cadre of midwives will graduate at the end of the year. This includes the partnership with mothers to promote self-care, respect for human dignity and women's rights, advocacy for women, and cultural sensitivity.[xxix] Changing rape laws and shows such as "Call the Midwife" in Bangladesh are working to improve the situation, and the international education of midwives should help in addressing these concerns. With the International Day of the Midwife occurring May 5 of this year, the theme of "Midwives: For a Better Tomorrow" strongly implies the country's recognition of the importance of midwives and the continual support that will be needed in order to improve maternal and child health in Bangladesh.

A Comparative Analysis: India

Historically, India has maintained close ties with Bangladesh, mainly due to historical and geographic reasons. However, while it has also reached several MDGs, improving maternal health has continued to be a challenge. It is currently second for having the highest number of poor citizens within the country. Nevertheless, it is on track to reach some targets of the MDGs, including the eradication of extreme poverty, the elimination of gender disparities in secondary and primary education, the halting of the spread of HIV/AIDS, and the implementation of a global partnership for development. And yet, major concerns have arisen regarding the level of seriousness in India in reaching the remaining targets. It will be necessary to examine the changing policies of India and its effectiveness in implementing these. A comparison with the services and policies that Bangladesh provides may reveal how a better method of communication might occur between the two countries.[xxx]

Current statistics with the World Bank state that India has a maternal mortality rate of 190 deaths per 100,000 births. While it has made significant progress in this aspect, as the threshold was 550 per 100,000 in 1990, it will not reach this nor the other target for MDG 5: achieving universal access to healthcare and family planning. During British rule, India had a strong, well-organized midwife program. However, that program slowly lost favor when the country became independent, creating issues with maternal health. The program merged with nursing education, with certification programs, shortening the time it took to receive the training while decreasing the number of courses being offered. This devaluation of midwives led to an increase in the role of nurses, which contributed to a drop in influence of midwives today. Furthermore, the position of nurses and midwives was considered to be reserved for lower caste women. As it is considered to have the status of low-class professionalism, many women were not drawn to the career, creating shortages.[xxxi]

As an extension of the caste system, Indian policy makers and officials did not view the hiring of midwives or nurses as a means to reduce maternal mortality rates, leading to an absence of focus on obstetric care. This also shows a lack of management capacity and of political will as well as an absence of comprehensive or stable maternal services.

Political will and management capacity complement each other. By 2008, government expenditure of health was less than 1% of its GDP, focusing instead on infrastructure and defense. No political party or parliament in general asked questions or raised concerns about maternal health, and the media did not cover maternal mortality rates.[xxxii] Furthermore,

pregnancy monitoring was limited, leading to poor quality and services. The Indian government only began policy initiatives aimed at training midwives once the MDGs were developed; previously, one had focused on traditional birthing attendants. As they are untrained they did not improve the maternal mortality rates.[xxxiii] Moreover, a major obstacle faced was that India's federal Maternal Health Division is composed of only four officers and only 2-3 officers per state. The Division has no decision-making powers, and with no interest in parliament, it has difficulty promoting the policies.[xxxiv]

The country has now begun to address maternal healthcare more prominently in parliament, and services are becoming more available. Midwives are now being trained as part of a bilateral agreement between India and Sweden agreement reached in 2006. In 2009, they negotiated a follow-up agreement to improve maternal and child health, which has shown positive results. However, they still focus on auxiliary nurses and accredited social health activists. There is no mention of this bilateral agreement or use of midwives within their recent MDG report.[xxxv] Other programs such as the Janani Suraksha Yojana (JSY) has been lauded a successful program since its implementation in 2005, which gives cash incentives to mothers who give birth in hospitals. The Janani Shishu Suraksha Karyakram" (JSSK) launched in 2011 was meant to help eliminate costs for mothers. This includes free transportation to and from the hospital, and upgrades to health centers. As a result, eight out of ten women are now giving birth in hospitals.[xxxvi]

However, socioeconomically disadvantaged groups and those with strong social gender practices such as limiting the interaction of males and females remain an issue that impacts midwives' role

within. While the new Indian initiatives are generally positive, there remain gaps in services. Transportation to a hospital is not always possible, and the doctors are almost all men. Thus, many women in India will still give birth at home. Auxiliary nurses, already limited, do not have the proper community health training needed to provide services in these rural areas effectively. Midwives would provide the necessary coverage for this and aid in improving community health. As more training is implemented through the Indian-Swedish agreement, it is hoped that India will continue to reduce its maternal mortality rates. Their current programs show progress, as long as they continue to improve accessibility, to train midwives, and to reinforce the internal infrastructure of their hospitals.

Bangladesh can learn much from India in terms of what not to do and possible ideas that may be implemented. Policies aimed at providing training for midwives within Bangladesh have been pretty consistent, and the community health focus has been extremely beneficial since not as many women give birth in hospitals as in India. It would be beneficial to implement services such as free transportation for pregnant mothers in Bangladesh, as it is primarily a rural country. Their three-year training program is also on a par with countries such as Sweden and Sri Lanka, which has an almost 100% rate of providing care for women. Overall, India is an example of what can occur when the government does not focus sufficiently on midwives or improving maternal health.

A Second Comparative Analysis: Sri Lanka

Whereas one country depicts the difficulties of improving maternal health, it is also worthwhile to compare Bangladesh with a country that has been extremely successful in implementing midwives in order to improve maternal and child health. Sri Lanka, an island off the coast of India, has a strong relationship as well as many economic and political ties with Bangladesh. It has the lowest rates of maternal mortality in the South-East Asian region, with 29 deaths to every 100,000 births as of 2013.[xxxvii] It has already reached several MDG targets and is on track or progressing well with the remaining goals. As they have also prioritized reproductive health like Bangladesh, it is important to examine the different policies and what was effective in Sri Lanka.

Sri Lanka's health services have been in implementation since the 19th century and have focused on sanitation and social services for the poor. Formal midwifery training was introduced during British control and records concerning maternal mortality exist since 1902. Since 1965, midwives have worked to improve family planning services throughout the country.[xxxviii] As such, nearly 100% of all births are attended by a skilled birth attendant in the form of a doctor or midwife, 98% of which take place in a medical setting. The Sri Lankan public health midwives are a working government unit, and make systematic home visits. They provide advice about child care and nutrition to mothers during their pregnancy and until the child reaches the age of five. Furthermore, they provide family planning services within the community. The Ministry of Health has also created policies so that doctors are appointed throughout the country, thereby increasing the availability of medical professionals in less developed areas.[xxxix] Their joint midwife-doctor ratio and policy initiatives have proven to be extremely effective.

Maternal and child health endeavors have been approached holistically, and so remaining challenges for the country are associated with both. Child and maternal mortality has stagnated due to the need for evidence-based, cost-effective, and targeted interventions throughout the country. However, marginalized populations and some regions in the country still indicate service gaps. Although they are considered 'achievers,' the Sri Lankans still have much to overcome past the MDG goals, including reducing malnutrition, unsafe abortions, and the establishment of a proper resource management system.[xl] There is also a shortage of health care workers, and services have begun to deteriorate due to financial strain.[xli] Sri Lanka has begun to draft policies to improve these through the National Strategic Plan on Maternal and Newborn Health 2012-2016. Launched in 2013, it placed 12 policy goals to maintain and strengthen effective services. They have also created three targets for the health sectors to reach by 2020: reducing the maternal mortality rate to 0.2 deaths per 1,000 live births; decreasing the under-five mortality rate to 6 deaths per 1,000 live births; and cutting the infant mortality rate to 8 deaths per 1,000 births.[xlii]

The correlation between the priority a country places on improving reproductive health and positive results marks the importance of government involvement and of a stable policy. Bangladesh stands in the middle—between the changing policies of India and the stable, full access of expectant mothers to midwives in Sri Lanka. With correct policies and continual growth of infrastructure as well as service, Bangladesh has the possibility of emulating the success of Sri Lanka. The latter's joint midwife-doctor initiative is similar to the current policies

and goals of Bangladesh, and both are highly committed to improving reproductive health. Should current policies, training of midwives, and improved access to health care continue, Bangladesh will reach target goals and be in a position to continue to grow. Sri Lanka indicates that it is possible within a low-income country to improve maternal and child health greatly as long as the country remains focused on its goals and makes improving health a priority.

The Key of Globalization

Globalization is the key theme surrounding the topic of midwifery and the improvement of maternal and child health in Bangladesh. This process of international integration results from the interchange of world views, products, ideas, and aspects of culture. It has particularly advanced in three different aspects of globalization as defined by the International Monetary Fund: trade and transactions; capital and investment movements; and the dissemination of knowledge.[xliii] The UN's MDGs has brought together countries and organizations to combat disparities throughout the world and to promote communication between nations. Bangladesh has been highly involved with the United Nations, working with organizations such as UNICEF to improve services for maternal and child health, as well as cooperating with other nations with the largest peacekeeping operation. It has increased relations with other nations such as India, Switzerland, and Sweden in order to improve its economy and infrastructure. The most effective aspect of the MDG is the interchange of world views and ideas that have spread. Midwives and the International Confederation of Midwives represent such examples that with an international method of training, countries are able to implement and work with others to develop successful services. Further post-2015 goals will bring together more ideas and interactions to continue to

improve disparities in developing nations. Bangladesh has the possibility of becoming a highly globalized nation due to its increase in economic and political partners, as well as its potential as a "Next Eleven" economy. Globalization has been a successful tool for the country as it continues to grow and develop.

Bangladesh still has a long way to go, however. There is still an acute shortage in educators on both a private and public level, slowing down the number of midwives that are graduating through the program. Due to the lack of infrastructure and sociocultural difficulties in communities, there is also an issue in supporting the midwives after they graduate. Nevertheless, it is a step forward in the right direction with positive effects already being noticed. A generational shift has already been observed, with more expectant mothers going to the doctors or midwives to seek assistance. Through awareness campaigns and allocating funds to help educate midwives, more women are seeking aid. Midwives will still remain in integral part of Bangladesh society for years to come as only 15% of women give birth in a hospital (Shahriar Sharif, 2014).[xliv] However, it will become much safer as they will be more educated and have trained, universal care from midwives.

Conclusion

The UN has determined that Bangladesh is on track to reach its MDGs next year, and a lot of credit has to be given to the midwifery programs that the government has initiated. While new post-2015 goals will be put into place, continued work will be done to continue to improve

maternal and child health. Without the UN MDGs, Bangladesh would not have had the support or resources to improve maternal and child health.

Continual development of a joint midwife-doctor program will help fill in the gaps in services that are needed in the rural communities of Bangladesh. They have an important role in providing support and education to better assist girls and women from before to well after a pregnancy. As Bangladesh women still primarily give birth in the home, midwives can provide clean, safe assistance and intervene in an emergency. By combining this care with family planning programs, there will be a better midwife to community ratio; it will allow the birth rate to drop in as early as fifteen years, which will ultimately further improve access.

The UN and participating governments have taken strong steps towards improving the overall wellbeing of individuals throughout the world. As the MDGs end in 2015, Bangladesh can be used as an example of how communities can be improved with full support of government programs. While continual work must be put in to continue to improve the health of children and mothers, the current programs show the possibility of being extremely effective. The role of midwives will be essential in this as the often unspoken heroes of maternal and child health.

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