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WOMEN AND FAMILY HEALTH: THE ROLE OF MOTHERS IN PROMOTING FAMILY AND CHILD HEALTH

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ABSTRACT

In many societies, women have been socialized to provide care and maintenance to the family unit by procuring and preparing food, giving care to dependent family members, and by socializing children to become productive adults. Thus, women's roles within families have positioned them to become health managers or promoters of overall family health, particularly for children in developing countries whose lives are directly linked to that of their mothers. The authors propose that efforts to improve the health of children should focus on the family unit as a whole, with a particular focus on the mother or mother figures of the family. Using a systems approach which centers on the mother-child dyad, this paper suggests a model to facilitate women/mothers' functioning as family health managers for the well-being of children. Policy implications for promoting the role of mothers as family health managers are also discussed.

Although at times the concept of family seems elusive, it is generally agreed that most families share at least two common characteristics. First, families are socially constructed units with one of its primary functions being to provide care to dependent members, particularly children, by providing the physical, emotional and social necessities needed for survival in the environment to which they are born1. Secondly, most family units are socially constructed in a manner in which roles are defined with regard to gender1. Traditionally, men are responsible for providing physical resources, such as food and shelter, and women are mainly responsible for managing these physical resources and for providing emotional and social resources to the family. Given that the main function of most families is to assure the survival of its offspring, it seems appropriate that interventions aimed at promoting child health should focus on the family as its locus. More importantly, these interventions should utilize the unique roles of women within families as a means of promoting child and overall family health. Thus, the purpose of this paper is to propose a model that utilizes women's roles within families to promote family health by examining women's traditional roles within families and by suggesting resources needed to equip women to become effective health promoters and managers.

Although a model that utilizes women's roles within families to promote child and family health is appropriate for women of all nations, the model proposed in this paper is conceptualized around women and families in developing nations. Families in developing nations are unlike families in developed nations, in that they live in constant risk of diseases that threaten their physical and emotional health status 2. The World Health Organization estimates that most of the life threatening diseases in developing countries, such as diarrhea, pneumonia and malaria, can be prevented or controlled by improving

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environmental conditions through proper sanitation and proper food handling and preparation 3. Moreover, because many of the diseases afflicting developing nations are preventable by improving the physical environment, and women have traditionally been responsible for maintaining this space, women in developing nations are positioned to become health promoters and health managers of the family and to effect significant changes in child and family health given the appropriate education and resources.

Women's Family Roles

Women's traditional roles within families have positioned them to directly impact the overall health and well-being of their families. As food procurers and preparers, primary caretakers of dependent family members and socializing agents, women ensure that their family members are healthy by providing appropriate nutrition, diagnosing and treating illness, and teaching and monitoring hygienic practices 4,5. Thus, the roles that mothers occupy within the family are directly tied to the health of the family, particularly that of young children. When mothers are absent, children's health and overall family health is negatively affected. In fact, Buckshee found that in India, a mother's death significantly increases the chances of her young children dying within two years 5. Therefore, understanding and utilizing women's roles within families is a way to promote and improve overall family health in developing nations.

Women are central to the health of their families by contributing directly to the nutrition of their families through the production, processing and selection of foods for family consumption 6. In developing nations, many of which have predominantly agriculturally-based economies, and where the majority of the population is dependent on subsistence farming, women perform the majority of the food-producing labor 7. In large developing regions of the world, such as in Africa and the Indian sub-continent, women are responsible for three-fourths of the annual food production 5.

In addition to producing foods, women are responsible for the selection and preparation of family meals. The types of foods selected and prepared by mothers for family consumption are essential for child health outcomes. Lack of proper nutrients, such as vitamin A, can lead to disorders such as xeropthalmia (night blindness), iron-deficiency anemia and childhood infections, conditions that are prevalent in many developing countries 8,9. Teaching mothers in developing countries how to procure and select foods that supply required nutrients in sufficient amounts for normal growth is an important step to reducing malnutrition in poor countries and improving child health.

Equally important as women's selection of foods, is the manner in which foods are processed and handled, processes that can directly affect child and family health. Improper food handling techniques, such as inadequate storage, not washing hands before cooking or handling raw foods, and using unsanitary food equipment to prepare food, can lead to the transmission of disease-causing organisms. In an exhaustive review of mortality statistics from England and Wales from the 18th and 19th centuries, McKeown, Record and Turner showed that improved nutrition and hygiene and safe food handling practices, not medical technology, were mainly responsible for the great decline in mortality and morbidity in this period 10. More recently, it was reported that a lack of sanitary facilities in the home were negatively associated with life-expectancy at

birth and positively associated with infant and maternal mortality, three leading health concerns in developing countries 11. Thus, teaching women in developing nations to practice proper food preparation and food handling techniques when preparing food for the family can have a direct impact on the spread of illness and disease among family members.

The health-promoting actions of the woman on behalf of her family extend beyond that of food procurement and preparation. The contribution of women to the health of their families also extends to their responsibility for ensuring that dependent family members receive proper care. In most cultures, women are socialized to become the primary caretakers of their familial group. In some African societies, girls as young as six are socialized to become caretakers by working alongside mothers in doing household chores and caring for siblings 7. In developing nations, where technologies like breast pumps, which can reduce the amount of time women spend on direct childcare, are not available, mothers spend considerably more time in the care of young children. The extended time providing direct care to young children means women, particularly mothers, often have an intimacy with young children unlike that of any other member in the familial group. Consequently, mothers are often the first to recognize disease symptoms and, as the primary caretakers, they are usually the first to respond to children's illnesses and diseases.

The day-to-day contact with young children, particularly during their formative years, positions women as the primary agents in child socialization who transmit behaviors, beliefs, and value systems. As caretakers of young children, women have the opportunity to teach children health behaviors and information, such as the importance of hygienic practices, which can affect later health outcomes. Women can also socialize children indirectly by modeling appropriate health behaviors, especially given that children learn particular behaviors by observing the behaviors and actions of their caretakers 12. For example, studies have shown that adolescents who were reared in households in which a parent smoked were more likely to smoke than adolescents who were reared in households with non-smoking parents 13.

As food preparers, caretakers and the primary socializing agents, the roles of women within families, particularly in developing nations, are often synonymous with the role of health provider or family health manager. Women essentially become producers of human capital by making decisions that contribute to the health of their children as well as to their own health 14. Thus, each step taken to improve the health of children should conceptually and methodologically include women's roles within families, especially their direct roles in health promotion and disease prevention.

Necessary Resources

By performing traditional women's roles within families (i.e., food preparers, caretakers and socialization agents), women are already fulfilling the role of family health promoter and manager. However, to improve women's roles as family health manager in order to promote optimal child health, we have to equip women with essential resources and have them supported and sustained through policy implementation and funding. The health and well-being of mothers is crucial to the health of their children and families and by extension, the health of a nation. Increased inputs to improve the health of

women, namely through increased expenditure, may lead to benefits for the family, community and nation. These benefits can be increased child survival, increased productivity, reduction of poverty and better family welfare 7. Thus, supporting the health of women in developing nations has a direct impact on the health and well-being of children. Foremost, in order for women to be the managers of health-promoting units, they must be healthy. Other needed resources include, but are not limited to education, health literacy and access to and management of family and state resources.

Mother's Health and Well-Being

The health and well-being of the mother can not be over-emphasized as a key contributor to the realization of a health-producing family unit. Research from developing countries has shown that illness and death of women have a dramatic negative impact on the family's health and the socialization and education of the children 7. Results from a study which examined the relationship between a mother's presence and the health of her offspring indicated that the survivorship and well-being of young children (i.e., children under 10 years of age) are positively linked to the presence of the mother. In developing nations, a mother's death increases significantly the chances of her young children dying within two years of the mother's death. The presence of the mother is especially vital for young girls who have a four-fold chance of dying when the mother dies compared to a two-fold chance for boys 5.

Policies that seek to improve women's access to and use of health facilities and health providers, particularly those specializing in parturition, would substantially support the health and well-being of mothers. In developing countries access to healthcare is influenced by the availability and location of health facilities, transportation to access to these facilities, availability of trained health professionals at the facilities, and to a lesser extent, ability to pay for services 15,16. Having access to healthcare facilities and/or trained health professionals can support women in the family health manager role by providing them with an additional tier from which to obtain services to maintain their own health as well as the health of their children and families. The ability to obtain services such as preventive care, prenatal and obstetric care and acute care, can directly improve the lives of mothers and children. Thus, the provision of adequate health care services must be a coordinated effort between state governments, community organizations and local districts 15,17. Efforts by state and local government and community organizations to improve health care can start with governments making available health centers, improving the infrastructure by which to access these centers, subsidizing costs for services and locating some centers in remote areas. Communities can help to improve the health of their residents by training health providers in good care practices and the dissemination of health information. Efforts in the past to improve the health of communities in developing countries have focused on the training of traditional birth attendants (TBAs) to decrease the incidence of maternal mortality 16,18. The promotion of family health, therefore, involves inputs from external sources, such as government and community, with the mother managing how these inputs and resources are utilized for the good of the family.

EDUCATION

Perhaps the single most important factor in the promotion of a healthy family unit is maternal education 10. Today, the impact of a woman's education on the health status of her family is as important as it was 25 years ago. Research has shown that education of girls and women is a key determinant of the health and productivity of a country and may be the single most important factor to significantly improve the health of people in developing countries and consequently, the productivity and development of nations 2, 19, 20.

It has been shown that a woman's education is a strong correlate of infant and child morbidity and mortality 21,22. More specifically, a mother's educational attainment is inversely related with infant and child mortality and is a strong predictor of the survival of children under two years of age 21,23. In Ghana, under-five mortality is two- to three-fold greater among children born to uneducated mothers compared to those children whose mothers had 10-plus years of schooling 21. Further, statistics show that infant and child mortality in developing countries with female literacy rates greater than 70 percent are much lower than in countries with significantly lower female literacy rates 23.

The Commission on Macroeconomics and Health has declared maternal literacy as one of the most powerful factors contributing to a reduction in childhood mortality 19. That is because educated mothers are more aware of the benefits of proper hygienic behaviors, such as hand washing, a simple but effective public health practice that can significantly reduce the incidence of diarrhea and other diseases that kill millions of children in developing countries 3. Mothers with primary or secondary educations are also more likely (13 percent and 53 percent, respectively) to have fewer and farther spaced children and utilize contraceptive services than illiterate women 24. Educated women are also more likely to postpone marriage and childbearing, provide better health care to their families, send their children to school and contribute to the economic growth of a country 25. Even among families with scarce household resources, maternal schooling is associated with improved family health. In these families, maternal education was associated with improved child nutrition, better height-for-age Z-scores and increased nutritional knowledge 26, 27, 28.

Policies that promote mandatory and state-funded educational opportunities for girls as well as boys will have a profound effect on the health and well-being of children and families and, consequently, the nation. Citing a United Nations report, Sandiford noted that providing 10 years of schooling would provide a greater direct mortality effect than doubling one's income, equipping one's house with running water and upgrading one's occupational status from agricultural laborer to white collar professional 29. Thus, investment in girl's and women's education may offer the highest returns on any investment available to developing countries. Education has the potential to break the cycle of deprivation and dependence that controls the lives of millions of women in developing countries, where many households are headed by young, uneducated females 24, 30.

HEALTH LITERACY

Formal education or traditional literacy is not the same as health literacy. In sub-Saharan Africa, the death rate from HIV/AIDS among schoolteachers is disproportion-

ately higher than among the general population, suggesting that there is a difference between traditional literacy and health literacy 31. Thus, in order for the woman to be the most effective health manager, her education must go beyond that of formal schooling to include health literacy.

Traditional views of literacy as proposed by the Canadian Education Research Information System include a group of skills that allow adults to function in society, such as quantitative, scientific, technological, cultural, media and computer literacy skills 23. Health literacy may be defined as "the ability to read, understand and act on health care information" 32. Health literacy has also been defined generally as the use of printed and written information to function in society, where functioning implies the ability to apply reading and numeracy skills in the health care environment 33. Health literacy then suggests that the mother is aware of practices that can improve the health of her family, can navigate the healthcare system to acquire care for herself and family and has the skills to interact with professionals within the healthcare system. These skills may be as simple as reading medicine labels and consent forms, understanding written and oral instructions, and following procedures and directions such as keeping appointments and taking medicine on time 33.

The link between health literacy and family health has been explored among families in Accra, Ghana 27. The findings from this study suggested that informal health education, such as delivery of health messages to mothers, can mediate the negative effects of poverty on children's nutritional status. More importantly, the results from the study indicated that informal health education exerts its positive effects on family health by focusing a mother's attention on "good care" habits, such as breast-feeding, feeding practices and the use of preventive health services 27. Furthermore, a basic knowledge and awareness of health problems, the importance of hygiene, the use of oral rehydration therapy to manage diarrhea and the timely immunization of children by parents (more commonly, mothers), can contribute dramatically to a reduction in infant mortality in impoverished nations 22. The implications of these findings are that mothers who are aware of the benefits of good health habits/practices can improve the health of their families even in the absence of "formal education."

Increasing health literacy results in improvements in health through active decision-making regarding women's personal health and the health of their children. To attain health literacy, policymakers must be aware of the critical elements that contribute to health literacy 34. It is necessary for international health organizations, state agencies, local nongovernmental organizations and local communities to take part in collaborative endeavors to create culturally-appropriate public health campaigns aimed at increasing the health literacy of mothers and women. Further, efforts to increase health literacy should also attempt to include women as empowering agents of their own health by implementing programs, such as train-the-trainer. Programs such as these have been shown to be effective in disseminating health information because trained women are able to pass on their skills to other women, establish community networks and increase their influence and position in society 35.

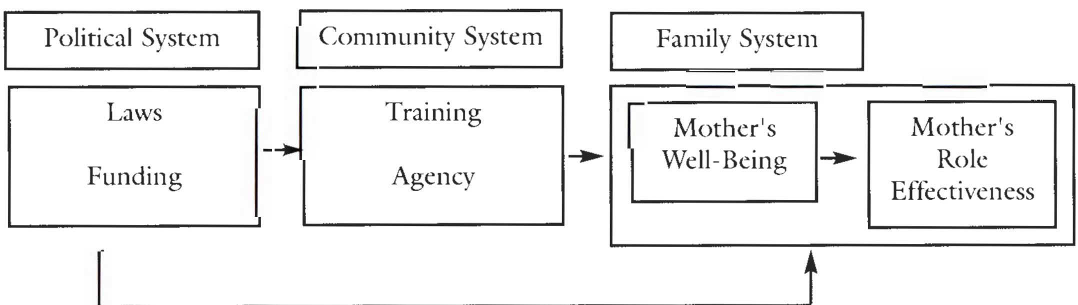
Model of Women's Role in Health Promotion

The emphasis on women as a means of improving individual family members' health is guided by systems theory which states that a system must be understood as a whole and not by examining individual parts in isolation 36. Therefore, in order to improve the health of children in developing nations, one must conceptualize health and health promotion in terms of the community, political and family system rather than as individual child health. Within the family system, it is particularly important to recognize and enhance mothers' abilities to function effectively in their role as family health managers. As aforementioned, women already perform many of the roles, such as food preparers, caretakers and primary socializing agents, which can have a direct impact on the health and well-being of children and other family members. Thus, efforts should be focused on institutionalizing women's important role as family health manager via support through policy and funding.

Figure 1, depicts a proposed model of family health whereby support from the political and community systems have a direct and indirect impact on the family system, particularly the mother-child subsystem. More specifically, we propose that policies and laws created within the political system that mandate and assure women's education, and allocation of funds to support women's health services, education and training, will have a direct impact on mothers' well-being. Furthermore, political systems can indirectly affect mothers' well-being through the community system. Policies at the political system level could provide funding for training of community members to disseminate health information or to assist in the development of culturally-appropriate public health programs. Policies that support strong and sustainable community networks that are able provide support and assistance to the family systems are also essential to support women as family health managers.

By far, the most important system affecting children's health and well-being is the family system, most notably the mother-child subsystem. This is why it is vital that policy and community systems' interventions aimed at advancing child health also focus on the health and well-being of women and mothers. Policies and communities that promote mothers' well-being also promote mothers' effectiveness as family health managers by supporting her food procurement/preparation, caretaking and socializing abilities. As aforementioned, the family roles that women have traditionally filled are critical to the health and well-being of children.

Figure 1. *Proposed model to facilitate women/mothers as family health managers to improve child-well-being.*



Policy Implications and Discussion

The premise of this paper is that individual child health should be conceptualized in the larger context of the family system, with particular emphasis on the mother-child dyad. In most societies, women are socialized into roles in which they are responsible for the selection and preparation of foods, the care of children and other dependent family members and for the socialization of minors. As a result of performing these tasks within families, women, particularly mothers, become the managers and promoters of child and family health. Policies and community programs should focus on ensuring that the family system can offer a physically and emotionally protective environment for children that promotes a healthy lifestyle. We argue that the primary way of doing this is to enhance and support women's health and well-being through the allocation of funds and resources and through community empowerment.

Using theoretical guidance from systems theory, the model of family health proposed in this paper suggests how political and community systems can have a direct and indirect effect on the family system, especially the mother-child subsystem. Policies mandating and allocating funds for the education of girls can have a direct impact on the family system 20, 23. Furthermore, policies that provide funding to train community health workers and collaborations with communities to develop culturally appropriate public health campaigns to promote health literacy, directly and indirectly support the family system by empowering community members to be agents in their own and their communities' health. Strong community networks that are trained in health education and health literacy can effectively disseminate health information to women and ensure that the needs of the particular community are addressed in public health programs 35.

The support of women's health and well-being, and ultimately the support of children's health, requires, as suggested, input from both political and community systems. However, issues not addressed in the proposed model of family health are cultural and attitudinal barriers regarding the importance of women in the health of families and the health of nations. Thus, the larger task becomes how to convince policy makers of the major contributions women make to the health of the families and the nation. One of the major issues policy makers in developing countries should address to facilitate women's roles as family health managers is the social status/class of women and girls. The status of women in society in relation to that of men is one of the factors at the core of the poor health outcomes of families in developing nations. Because men in most societies, especially those in developing countries, still consider women as unequal members of the society, and these societies are dominated by males, women are less likely to be educated and have limited participation in the decisions that affect the running of households. Additionally, males in some cultures in the developing world may control a woman's access to money, food, healthcare and management of her children 14. This hierarchical system does not promote the health of families. Educating girls and women is central for proper family function as it has the potential for breaking the cycle of deprivation and marginalization that helps to keep women and their children in poverty and ill health, particularly in developing countries. For example, a 25-year study in 63 developing countries found that the social status of women and women's education explained more than 50 percent of the reduction in childhood malnutrition 2.

It is hoped that the proposed model will help to guide policy makers in formulating policies that can form the framework for improving health at the child, family, community and national levels. Interventions designed to address health at the family level by recruiting the mother as manager, and the participation of all family members, can only have a meaningful and long-term effect on the health of children and families and benefit the nation overall. Consequently, a clear policy objective should be one that enhances the roles of women as producers of a healthy family unit and assures them a greater participatory role in the management, allocation and utilization of household and state resources.

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