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Grandmothers' influence in MCH decision-making: a meta-synthesis of qualitative research by  
the Grandmother Project

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the Grandmother Project

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## **Abstract**

**Background/Purpose:** Improving the health of mothers and children in the developing world has been the objective of numerous public health programs during the past twenty years. Most maternal/child health programs based on individual behavior change paradigm narrowly focus on young mothers based on the assumption that if their knowledge and attitudes are changed they will automatically modify their own practices. Young mothers often defer to more senior women, who in large part direct and control their activities within the household, concerning diagnosis of illness and childcare decisions. To date, very few maternal/child health programs have included older experienced women or grandmothers in health interventions.

**Objective:** The objectives of this meta-synthesis are: 1) To identify household roles and decision-making around maternal/child health issues. 2) To clarify the role of grandmothers as advisors to younger women and as family caregivers.

**Sample:** From 1995 to 2013, the Grandmother Project conducted 9 studies in Laos, Djibouti, Senegal, Mali, Uzbekistan, Albania, Mauritania, and Sierra Leone. The approximate sample size for this meta synthesis is 2970 participants. The sample population included mothers, grandmothers, fathers, community members, traditional healers, village leaders, health care workers, and women of reproductive age.

**Methods:** A qualitative meta-synthesis methodology was used for the analysis of 9 studies conducted by the Grandmother Project. In each study, key metaphors, phrases, ideas, concepts, and relations were identified and translated using grounded theory.

**Results:** Five common themes emerged from these studies related to the social dynamics and decision-making within households and communities: distinct roles based on gendered experiences, collective decision making, the role of grandmothers as primary advisors in maternal/child health, the influence of female support systems in maternal/child health, and the conflicting paradigms of health care workers and grandmothers.

**Discussion:** Across the multiple contexts reviewed, families were consistently found to be multi-generational and hierarchically structured; roles and responsibilities were based on gendered experience. Grandmothers/mothers in law participate in informal social networks of communication and support, through which information is shared, advice is given, and problems are solved. Grandmothers are respected advisors on issues pertaining to maternal and child health; they contribute substantially to decision-making and implementation of decisions. This culturally assigned role of grandmothers creates conflict with health care workers, but despite this conflict they are open to learning and wish to be included in MCH activities.

**Implications:** These findings create an opportunity for MCH programming to shift their focus from targeting individual populations with health messages, to identifying with the family actors that are most influential in MCH decision-making. By encouraging a voice, authority, and confidence amongst those key influencers, could potentially improve MCH outcomes.

*Keywords: maternal/child health, grandmothers, advisors, decision-making, support systems*

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## **Chapter 1: Introduction**

In developing countries, nearly 9 million children under the age of five die every year and over one third of all child deaths are linked to malnutrition(WHO, 2013a). The underlying causes of child malnutrition include fetal growth restriction, stunting, wasting, and vitamin A and zinc deficiencies, along with suboptimum breastfeeding(Bhutta et al., 2013). Because they are considered the primary caretakers of children, maternal and child (MCH) programs in developing countries typically target women of reproductive age (WRA) through health education campaigns that focus on micronutrient supplementation, vaccinations, family planning, and young child feeding practices(Bhutta, Darmstadt, Hasan, & Haws, 2005). However, poverty, illiteracy, poor status and care of women, as well as dysfunctional health systems are critical underlying factors that adversely affect maternal and child health in many developing countries and these factors are relatively difficult to change in the short term(Bhutta et al., 2005).

Maternal child health interventions, such as protein supplementation, micronutrient supplementation, malaria protection using insecticide-treated bed nets, have been shown to reduce child mortality, however, there are fundamental gaps in the research of how to most effectively improve perinatal and neonatal outcomes (Bhutta et al., 2005). Among these gaps, are the determinants of family and community practices and their influence on newborn care and care-seeking behaviors(Bhutta et al., 2005). Maternal child health outcomes rely on a “family health cycle” connecting mothers, fathers, children, and grandparents in a system that, as a whole, is a determinant of the health of individual family members(Simon, Rosen, Claeson, Breman, & Tulloch, 2001). Two critical aspects of understanding MCH behaviors within families are the caregiver and the decision-maker, that is, who is providing childcare and who is involved in childcare decisions(Kerr, Dakishoni, Shumba, Msachi, & Chirwa, 2008). In



collectivist societies, where child health decisions are made as a family, research about how behavior-change interventions are implemented in this context and evaluation of the effectiveness of these methods are needed to develop better tools for building individual, household, and community capacity for appropriate self-care and care seeking.

Health behavior models and theories have been developed to identify and explain the complex relationships between knowledge, beliefs and perceived social norms, and provide practical guidance on the content of educational programs to promote behavioral change in a given set of circumstances. The limitations of these models and frameworks are that they fail to capture the complex interactions between individual characteristics, household circumstances and community-level attributes(Adams, Madhavan, & Simon, 2002). When health programs target a single disease or set of conditions, they neglect the wide range of inputs that enhance or diminish the health of an individual and determine overall health status. For example, the multi-agency Roll Back Malaria (RBM) movement includes components aimed at health systems and at the community, where reduced rates of morbidity and death from malaria should be viewed as markers of improved health systems(Claeson & Waldman, 2000). Similarly, the Integrated Management of Childhood Illness (IMCI) initiative, which evolved from selective primary health care programs that aimed to control diarrheal diseases and acute respiratory infections in children by working with health workers and strengthening health systems, explicitly incorporates a component of community development (Claeson, 2000). These programs have had some success in improving case management of common childhood diseases through improved use of life-saving health technologies, but their impact on community and household contributions to health promotion and disease prevention remains limited(Simon et al., 2001). Community-level interventions are generally recognized to be a desirable and effective approach to implementing

successful MCH programs, however, health interventions still tend to focus on the individual groups, such as women of reproductive age (WRA), delivering disseminated health messages, rather than effecting behavioral change through a culturally appropriate context.

Growing interest in a life-span approach to development and consideration of the family as a system has further heightened the need for information on grandparents' impact on child development (Pearson, Hunter, Ensminger, & Kellam, 1990). Increasingly, grandparents are viewed as important sources of social support, care giving, and as socializing for their grandchildren. Equipped with expertise and motivation to share it, grandmothers in non-Western and indigenous societies have been targets of public health promotion to great effect: increasing birth weight in Australia(d'Espaignet, Measey, Carnegie, & Mackerras, 2003), improving breast-feeding practices in Cambodia(Crookston, Dearden, Chan, Chan, & Stoker, 2007), or improving nutritional knowledge in young mothers(Aubel, 2005; Coall & Hertwig, 2010). Through childcare, support networks, encouragement, experience, and transmission of cultural values, grandmothers/mothers in law influence MCH decisions made within families(Coall & Hertwig, 2010). Socio-emotional support grandparents provide is key to understanding how grandparental investment may influence MCH health in the developing world.

Established in 2005, the Grandmother Project (GMP) grew out of a series of research studies involving grandmothers as resource persons in community health programs in Laos, Albania, Uzbekistan, Mali, Senegal, Mauritania, Djibouti, and Sierra Leone. The lessons learned from this work led to the development of an innovative approach to maternal and child health education that respects culture while promoting change(Musoko, Scoppa, Manoncourt, & Aubel, 2012). The framework utilized by the GMP is based on three core concepts: recognition and inclusion of grandmothers and elders in maternal and child health decision-making;

strengthening intergenerational communication; and using participatory communication and education methods to strengthen the capacity of leaders and groups to mobilize their communities for positive change(Musoko et al., 2012). Ultimately the goals of the grandmother strategy are to actively involve grandmothers as “resource persons”, to strengthen intergenerational communication, and to use communication methods that foster critical reflection and problem solving rather than dictating to communities what actions they should adopt(Musoko et al., 2012).

## **Chapter 2: Comprehensive Review of the Literature**

In the developing world, maternal and child under nutrition is the underlying cause of 3.5 million deaths, 35% of the disease burden in children younger than 5 years, and 11% of total global disability-adjusted life-years (DALYs)(Black et al., 2008). The number of global deaths and DALYs in children less than 5 years old attributed to stunting, severe wasting, and intrauterine growth restriction constitutes the largest percentage of any risk factor in this age group(Black et al., 2008). The associated effects of poverty, inadequate household access to food, infectious disease, and inadequate breastfeeding and complementary feeding practices often lead to illness, growth faltering, nutrient deficiencies, delayed development, and death, particularly during the first two years of life (Njai & Dixey, 2013).

The Millennium Development Goals (MDGs) 4 and 5, developed by the World Health Organization (WHO), set target goals for maternal and child health to be achieved by 2015. These include, reducing child mortality by two thirds, reducing the maternal mortality ratio by three-quarters, and achieving universal access to reproductive health services(WHO, 2011). Research indicates that progress towards MDGs 4 and 5 in the poorest countries has remained slow (Rosato et al., 2008). Between 1990 and 2005 there was no substantial change in maternal mortality in sub-Saharan Africa, and of the 68 priority countries targeted for child survival improvements, 41% were deemed to have made insufficient progress; 38% made no progress (Rosato et al., 2008). Additionally, in 11 African countries there were reversals in under-5 mortality rates in the same period (Rosato et al., 2008). The evident ineffectiveness of existing programs may in part be due to the lack of community involvement, has led to a renewed focus on health strategies for maternal, newborn, and child survival.

Globally, health behavior models, theories, and survey methods have been developed to identify and explain the complex relationships between knowledge, beliefs and perceived social norms, and provide practical guidance on the content of health programs to promote behavioral change in a given set of circumstances. The models and theories of behavior inherently linked to the measurement of health that are discussed in this paper are the Mosley and Chen framework for child survival, the Health Belief Model (HBM), Theory of Reasoned Action/Planned Behavior (TRA)(TPB), Social Cognitive Theory (SCT), and The Transtheoretical Model (TTM) (Redding, 2000). While these health behavior models help to identify and explain the complex relationships between knowledge, beliefs and perceived social norms, they fail to take account the social, economic, and cultural circumstances. The second topic of discussion is a variety of health theories, such as systems theory, the socio-ecological model, and the household production of health, that seek to understand the determinants of health and health change. Thirdly, by promoting interaction, participation, and critical analysis, the communication strategies for health related behavior changes discussed in this paper are participatory community mobilization approaches, empowerment, and transformative learning. Finally, the survey methods discussed in this paper, describe the critical role they play in designing public health interventions and assessing their impact on MCH behavior.

### ***Health Behavior Models***

#### *Mosley and Chen framework*

From an epidemiological perspective, the most well known model is the Mosley and Chen (1984) framework for the study of the determinants of child survival in developing countries(Mosley & Chen, 1984). This framework is based on the premise that all social and economic determinants of child mortality necessarily operate through a common set of biological

mechanisms, or proximate determinants, to exert impact on mortality(Mosley & Chen, 1984). The framework links the proximate causes of child death to broader socioeconomic determinants ranging from 1) caregiver attributes such as mother's education and health related beliefs and practices; 2) household level factors including food availability and resources for preventive and sickness care, and 3) community-level ecological, political and health systems characteristics(Mosley & Chen, 1984). The overarching goal of this framework is to advance research on social policy and medical interventions to improve child survival.

### *Health Belief Model*

Developed by social psychologists, the HBM has proven useful in providing conceptual clarification in the analysis of behaviors and provides guidance to intervention points in health promotion(Bunton, Murphy, & Bennett, 1991). The HBM was originally designed as a method of predicting the use of screening tests and/or vaccinations(Redding, Rossi, Rossi, Velicer, & Prochaska, 2000). The HBM focuses on factors that affect behavior change, including the individual's perception of vulnerability to a specified illness or condition, the perceived severity and consequences of reducing susceptibility and the presence of cues to action(Bunton et al., 1991). This model suggests that acceptance of, or compliance with, recommended action will be lower when the changes require radical change of individuals lifestyle, well established habits, or basic beliefs.

### *Theory of Reasoned Action/ Theory of Planned Behavior*

The Theory of Reasoned Action (TRA) is a behavioral prediction theory, which uses a social-psychological approach to understanding and predicting determinants of health(Redding et al., 2000). The TRA assumes that we behave in a certain way because we choose to do so by using a rational decision-making process in choosing and planning our actions(Redding et al.,

2000). The Theory of Reasoned Action suggests that a person's behavior is determined, in part, by his/her "subjective norm", which is defined as the perception that most people who are important to him or her think that he or she should or should not perform the behavior in question(Davis Jr., 2004).

A modified version of the TRA is The Theory of Planned behavior (TPB), which aims to explain rationally motivated, intentional health, and non-health behaviors(Hausmann-Muela, 2003). TPB assumes a causal chain that links attitudes, subjective norms, and perceived behavioral control to behavior through behavioral intentions(Hausmann-Muela, 2003).

### *Social Cognitive Theory*

Also known as the Social Learning Theory, the Social Cognitive Theory (SCT) is a behavioral prediction theory that represents a clinical approach to health behavior change(Redding et al., 2000). When applied to health behavior, the SCT includes environmental and social factors with respect to prevention, health promotion, and modification of unhealthy lifestyles(Redding et al., 2000). An important concept that forms the basic organizing principles of SCT is reciprocal determinism, which states that there is continuous, dynamic interaction between the individual, the environment, and behavior(Redding et al., 2000). Thus, a change in one of these factors impacts the other two.

### *The Transtheoretical Model*

As a model of intentional behavior change, the Transtheoretical Model has advantages over other health models. This model has found associations in health behaviors strongly associated with increased morbidity and mortality such as, smoking cessation, exercise adoption, sun protection, dietary fat reduction, condom use, and medication adherence(Redding et al., 2000). The TTM describes the relationship among: stages of change; processes of change;

decisional balance; situational confidence; and situational temptations to relapse (Redding et al., 2000). Overall, the TTM has produced a large volume of research and service across a wide range of problem behaviors and populations, providing important tools for research and intervention development.

Maternal child health programs have had some success in improving case management of common childhood diseases through using these models, but their impact on community and household contributions to health promotion and disease prevention remains limited (Simon et al., 2001). The limitations of these models and frameworks are that they often fail to capture the complex interactions between individual characteristics, household circumstances and community-level attributes (Adams et al., 2002). To better understand health behaviors and influences, strategies, such as participatory community mobilization practices, transformative learning, and empowerment that goes beyond information diffusion and entails social and community interaction.

### ***Theories for Health Related Behavior Change***

The WHO defines health literacy as the cognitive and social skills that determine the motivation and ability of individuals to gain access to, understand, and use information in ways that promote and maintain good health (WHO, 2013b). From this perspective, health literacy goes beyond the narrow concept of health education and individual behavior-oriented communication, and addresses the environmental, political and social factors that determine health. With this understanding, health education should aim to influence not just individual lifestyle decisions, but also raises awareness of the determinants of health, and encourage individual and collective actions that can lead to a modification of these determinants. As such, health education programs are likely to be most effective when they incorporate theories, such as



systems theory, social ecological model, household production of health theory, participatory community mobilization approaches, empowerment, and transformative learning that goes beyond information diffusion and entails interaction(WHO, 2013b).

### *Systems theory*

When considering a health system, it is important to adopt what has come to be known as systems thinking, where health problems are approached in a holistic or global way(Aubel, Kuppens, Douanchang, & Kataoudone, 1995). The World Health Report defines health systems as all the activities whose primary purpose is to promote, restore or maintain health (World Health Organization, 2000). A system is not just any set of elements, but rather one whose essence is that the whole is different from the sum of its parts (Frenk, 1994). In other words, a systems approach emphasizes the interdependence that exists between its different parts by making changes to any single element of the system that will have repercussions throughout the system and, vice versa. The impact of the changes on that element is to a large degree dependent on the other elements of the system and the way they interacts(Ergo, R., Koblinsky, & Shah, 2011).

### *Social Ecological Model*

Frameworks, such as the Socio Ecological Model and the Household Production of Health (HHPH), have been designed to emphasize the need to intervene in domains beyond psychosocial and social variables, such as supportive environments, policies and a reorientation of health services (Elder et al., 2007). The Socio Ecological Model is a comprehensive public health approach that not only addresses an individual's risk factors, but also the norms, beliefs, and social and economic systems that create the conditions for child maltreatment to occur (Jewkes, Sen, & Garcia-Moreno, 2002). At the individual level, attitudes, beliefs, or person

history factors affect the individuals' health (Jewkes et al., 2002). From the relationship level, a person's closest social circle-peers, partners, and family members- have the potential to shape an individual's behavior and range of experience (Jewkes et al., 2002). Community level influences, such as schools, workplaces, or neighborhoods, are factors that increase risk based on community and social environments (Jewkes et al., 2002). From a societal level, macro-level factors, such as cultural belief systems, societal norms, or social policies, influence health outcomes that can potentially create gaps and tension between groups of people (Jewkes et al., 2002).

### *Household Production of Health*

One approach that helps to frame research questions and interventions strategies that places households at the center of health improvement is the Household Production of Health theory (HHPH) (Berman, Kendall, & Bhattacharyya, 1994). According to Berman, the HHPH is a dynamic behavioral process through which households combine their knowledge, resources, and behavioral norms and patterns with available technologies, services, information, and skills to restore, maintain, and promote the health of their members (Berman et al., 1994). The HHPH approach finds a variety of approaches to health improvement rather than rely on a single message, technology, or service. The HHPH views the household as the physical locale and social environment for childbearing and setting for child health interventions, health promotion emphasizes collaborative efforts among various public and private sectors to enhance the well-being of a population within a geographically defined area (Stokols, 1996).

### *Participatory Community Mobilization*

Community-level interventions are generally recognized to be a desirable and effective approach to implementing successful MCH programs, however, these interventions still tend to

focus on the individual groups, such as women of reproductive age (WRA), delivering disseminated health messages, rather than effecting behavioral change through a culturally appropriate context. Community mobilization is defined as a capacity-building process through which community individuals, groups, or organizations plan, carry out, and evaluate activities on a participatory and sustained basis to improve their health and other needs, either on their own initiative or stimulated by others (Howard-Grabman & Snetro, 2003). Historically community participation usually took the form of mass campaigns for immunizations, where communities were passively involved in the implementation and were the target of the specific intervention (Rosato et al., 2008). However, research in Nepal and Ethiopia has shown that when communities provide the resources, they are the active agent of change (Kidane & Morrow, 2000; Manandhar, Osrin, Shrestha, Mesko, Morrison, Tumbahangphe, Tamang, Thapa, Shrestha, Thapa, Shrestha, Wade, Borghi, Standing, Manandhar, Costello, & Members of the, 2004; Rosato et al., 2008). In Nepal, women's groups were supported through a community mobilization action cycle where they discussed maternal and newborn health problems, developed strategies to address them, and then implemented and assessed the strategies in cooperation with local leaders, men, and health care workers (Manandhar, Osrin, Shrestha, Mesko, Morrison, Tumbahangphe, Tamang, Thapa, Shrestha, Thapa, Shrestha, Wade, Borghi, Standing, Manandhar, Costello, & Team, 2004). Research in Ethiopia showed that mobilizing women's groups to effectively recognize and treat malaria at home led to a 40% reduction in under 5 mortality (Kidane & Morrow, 2000). As community participation increases, community ownership and capacity increase, with the result that community action and continuous improvement in the quality of community life are more likely to be sustained over time (Howard-

Grabman, 2007). Thus, community empowerment enhances self-esteem and positive feelings, allowing communities to take ownership of behavior change in improving health.

### *Empowerment*

The key to successful community empowerment is when the community engages in the problem-solving process and recognizes that they can collectively change their circumstances (Rosato et al., 2008). Empowerment is defined as the process and outcome of those without power gaining information, skills, and confidence and thus control over decisions about their own lives, and can take place on an individual, organizational, and community level (Rosato et al., 2008). According to Whitley et. al., during the transformation process, three factors are fundamental to achieving empowerment: consciousness (acknowledgement of needs stemming from power inequities), confidence (feeling capable of modifying one's environment, mastering skills, and having enhanced self-efficacy), and connection (sharing goals with others for creating social support systems and power networks) (Whitley, Kelley, & Campos, 2011). For example, women's groups in Malawi and Nepal are increasing the important capacities within communities, such as the ability to identify maternal and neonatal health problems, the ability to mobilize resources necessary for improving the health of mothers and newborn infants; and the social networks they can draw upon when needed (Morrison et al., 2005; Rosato et al., 2006). This process challenges individuals to change their opinions, attitudes, and beliefs about the basis of problems, develop the capacity to use skills to affect change, and recognize power sources within social relationships to achieve positive outcomes. Through this transformative learning process, community members are engaged to construct knowledge in a social context rather than comprehending disseminated health messages.

### *Transformative learning*

Transformative learning is learning that transforms problematic frames of reference, sets of fixed assumptions and expectations, to make them more inclusive, discriminating, open, reflective, and emotionally able to change (Mezirow, 2003). Transformative learning potentially takes place when “learners” actively and critically analyze both their own experience and alternative solutions presented to them in order to construct their own strategies to deal with everyday problems (Aubel, 2001). One example of the transformative learning process is a participatory communication/ empowerment education approach where grandmothers in Senegal used songs, stories and group discussion to show their ability to learn, to integrate new information into their practices, and to positively influence the practices of WRA (Aubel, Toure, & Diagne, 2004). In the transformative learning paradigm, the learning process involves the construction of knowledge rather than the internalization of pre-defined knowledge, or messages (Aubel, 2001). When understanding and measuring health behaviors, the types survey methods used play a critical role in enabling researchers to gain an in-depth understanding of the problem at hand.

### ***Survey Methods***

Public health programs, such as CORE group and The Food and Nutrition Technical Assistance Project (FANTA), are working towards improving the health of mothers and children in the developing world. The CORE group promotes and improves the health and well being of women and children in developing countries through collaborative NGO action and learning (CORE, 2004). The Food and Nutrition Technical Assistance (FANTA) Project supports integrated food security and nutrition programming to improve the health and well being of women and children (CORE, 2004). In order to understand health outcomes and develop effective health interventions, these programs use survey methods, such as barrier analysis, the BEHAVE

framework, doer/non-doer analysis, knowledge, attitudes, and practices (KAP) methodology, and ethnographic methods. These survey methods play a critical role in designing public health interventions and assessing their impact.

### *Barrier analysis*

Barrier analysis is based on the Health Belief Model and the Theory of Reasoned Action (Davis Jr., 2004). Barrier analysis is a rapid assessment tool used in community health and other community development projects to identify behavioral determinants associated with a particular behavior. Using the scientific literature on behavior change, people used to think that changing knowledge was enough to change behavior. In Barrier Analysis, participants are asked a series of questions to identify eight potential determinants that can block people from taking action that will improve their own or their children's lives (Hungry, 2004). From this assessment tool, scientists and program managers have realized that many people know what they should do, but they still don't do it (Davis Jr., 2004). This analysis tool can be very helpful in ongoing programs that focus on behaviors that have not changed very much, in order to understand what are keeping people from making a particular change.

### *Doer/Non-Doer Analysis*

Doer/Non-doer analysis is a general research analysis that can be applied to both quantitative and qualitative methods (Middlestadt, Bhattacharyya, Rosenbaum, Fishbein, & Shepherd, 1996). It was developed based on the BEHAVE framework. The BEHAVE framework is a strategic planning tool for managers of behavior change communication programs that enables them to decide what data is needed at each step in a project and to focus on the target group's point of view (Hungry, 2004). This framework is helpful in identifying target populations, key behaviors, and determinants for the best behavior change strategies to

implement. Doer/non-doer surveys include questions about the perceived consequences of performing the desired behavior, self-efficacy, and norms of health behavior (Middlestadt et al., 1996). Doer/Non-doer analysis can be very useful in identifying the most important determinants in behavior change by comparing the responses of people who do a behavior (the Doers) with those who do not (the Non-Doers) (Hungry, 2004).

#### *KAP methodology*

Knowledge, attitudes, and practices (KAP) surveys are focused evaluations that measure change in human knowledge, attitudes, and practices in response to a specific intervention (Sight, 2013). KAP surveys are helpful for identifying knowledge gaps, cultural beliefs, or behavioral patterns that may create barriers to public health efforts (Sight, 2013). Although KAP methods are beneficial for rapid assessments and are a relatively inexpensive way to gain insights into main knowledge data, motivational factors, treatment expectations, satisfaction with health care services, decision making for health care, and external barriers are all neglected through these methods (CORE, 2004; Hausmann-Muela, 2003). KAP survey findings generally lead to prescriptions for mass behavior modification instead of targeting interventions towards individuals (Sight, 2013). At the community level, ethnographic methods such as, focus group discussions, in-depth interviews, participant observations, and various participatory methods, could in fact be better for validity and are vital foundations for exploratory investigations.

#### *Ethnographic methods*

Ethnography is considered to be “holistic”, where data is viewed as a whole in order to get a basis for explanation about the observable fact. Ethnographic methodology interprets behaviors through description rather than trying to abstract it from the use of tests, surveys, or questionnaires (Nurani, 2008). When using the ethnographic approach, a hypothesis is not

formulated prior to the research; it emerges as the data collection occurs. By using this approach, researchers avoid any ideas aroused from the hypothesis, which could influence the accuracy of the interpretation (Nurani, 2008). Ethnography entails open-ended questions and detailed exploration of the topic of investigation. When researching dynamic family systems, ethnographic methods, often enables researchers to gain an in-depth understanding of the problem at hand and encapsulates the multi-dimensionality of human behaviors.

Growing interest in a life-span approach to development and consideration of the family as a system has further heightened the need for information on grandparents' impact on child development (Pearson et al., 1990). Increasingly, grandparents are viewed as important sources of social support, care giving, and as socializing for their grandchildren. Equipped with expertise and motivation to share it, grandmothers in non-Western and indigenous societies have been targets of public health promotion to great effect: increasing birth weight in Australia(d'Espaignet et al., 2003), improving breast-feeding practices in Cambodia(Crookston et al., 2007), or improving nutritional knowledge in young mothers(Aubel, 2005; Coall & Hertwig, 2010). Through childcare, support networks, encouragement, experience, and transmission of cultural values, grandmothers/mothers in law influence MCH decisions made within families(Coall & Hertwig, 2010). Socio-emotional support grandparents provide is key to understanding how grandparental investment may influence MCH health in the developing world.

### ***Grandmother Project***

Established in 2005, the Grandmother Project (GMP) grew out of a series of research studies involving grandmothers as resource persons in community health in Africa, Asia, Eastern Europe, and Latin America (Aubel, 2012). These studies used qualitative research methods



which examined the MCH-related roles of various household members at the family and community levels, the relationships between them, communication and decision-making patterns, expectations of various family members regarding the MCH-related roles of younger women, older women and men, family values and beliefs and lastly, community interaction with traditional and biomedical health care providers. Key features of the methodology include: the use of rapid participatory assessment methods; collection of qualitative information using in depth group and individual interviews; data collection from several categories of family and community actors; and the involvement of health and development field staff in the data collection and analysis process(Aubel, 2005). The goals of the GMP are to actively involve grandmothers as “resource persons”, to strengthen intergenerational communication, and to use communication methods that foster critical reflection and problem solving rather than dictating to communities what actions they should adopt (Musoko et al., 2012).

### ***Significance of this research study***

Maternal child health outcomes rely on a “family health cycle” connecting mothers, fathers, children, and grandparents in a system that, as a whole, is a determinant of the health of individual family members(Simon et al., 2001). Two critical aspects of understanding MCH behaviors within families are the caregiver and the decision-maker, that is, who is providing childcare and who is involved in childcare decisions(Kerr et al., 2008). In collectivist societies, where child health decisions are made as a family, research about how behavior-change interventions are implemented in this context and evaluation of the effectiveness of qualitative methods are needed to develop better tools for building individual, household, and community capacity for appropriate self-care and care seeking.

The purpose of this research thesis is to synthesize the experiences and findings across 9 Grandmother Project programs and identify similar and dissimilar themes/factors related to inter-household roles and decision-making around maternal and child health issues. The synthesis also explores the potential for engaging grandmothers in maternal and child health education and practice as a strategy to promote optimal maternal and child health practices within families and communities. This synthesis will aid in clarifying the role of grandmothers as family and community advisors, and as caregivers for maternal and child health issues.

## Chapter 3: Manuscript

### **Grandmothers' influence in MCH decision-making : a meta-synthesis of qualitative research by the Grandmother Project**

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**Abstract:** In developing countries, maternal child health outcomes rely on a community network, connecting mothers, fathers, children, and grandparents in a system that, as a whole, is a determinant of the health of individual family members. Because they are considered the primary caretakers of children, maternal child health programs in developing countries typically target women of reproductive age with activities and messages. Unfortunately in targeting women of reproductive age, programs may, inadvertently or deliberately, exclude other family and community actors that contribute to maternal and child health decision-making thus potentially undermining program impact. Through childcare, support networks, encouragement, experience, and transmission of cultural values, grandmothers play a central role in maternal child health decisions made within families. The aim of this meta-synthesis is to examine the qualitative research on the role of grandmothers and other household actors in maternal child health decision-making. A total of nine qualitative studies conducted by the Grandmother Project were included in the analysis that represents the knowledge of mothers, grandmothers, fathers, community members, traditional healers, village leaders, and women of reproductive age and their beliefs and attitudes toward MCH. The meta-synthesis of the 9 studies produced several overarching themes: gender specific roles, collective decision-making, how grandmothers are primary advisors in MCH, how social support systems influence MCH, and conflicting opinions between health care workers and grandmothers. Traditionally, young women are expected to follow the guidance and support from the grandmother and have limited authority in any decision making within the family. Grandmothers play a central role in families and communities in all aspects of women and children's education and development. An understanding of the role of family actors who are most involved in MCH can help community health strategies to strengthen the knowledge and skills of family members who are most involved in MCH matters.

### **Introduction**

In developing countries, nearly 9 million children under the age of five die every year and over one third of all child deaths are linked to malnutrition(WHO, 2013a). The underlying causes of child illness include pneumonia, diarrhea, and vitamin A and zinc deficiencies, along with suboptimum breastfeeding(Bhutta et al., 2013). Because they are considered the primary caretakers of children, maternal and child (MCH) programs in developing countries typically target women of reproductive age (WRA) through health education campaigns that focus on

micronutrient supplementation, vaccinations, family planning, and young child feeding practices(Bhutta et al., 2005). However, poverty, illiteracy, poor status and care of women, as well as dysfunctional health systems are critical underlying factors that adversely affect maternal and child health in many developing countries and these factors are relatively difficult to change in the short term(Bhutta et al., 2005).

The past several decades have been marked by debate over the success of health education and promotion practices aimed at changing the health behaviors of individuals and groups. The majority of MCH campaigns are largely based on the assumption that changes in individual knowledge, attitudes, and beliefs will improve health outcomes in individuals and populations, and those individuals, regardless of social context, have the power and agency to implement change and to act on information as it is made available(Lee & Garvin, 2003). Many maternal and child health communication campaigns are based on the Health Belief Model (HBM) and directed at a single disease, like diarrhea or malaria, or a cluster of conditions, like vaccine-preventable diseases or obstetric complications(Simon et al., 2001). The HBM assumes that individuals act rationally, evaluate information, and make health choices with limited outside influence(Kerr et al., 2008). These health campaigns are effective in part because they do target a single disease or set of conditions, but in doing so they neglect the wide range of influencers that enhance or diminish the health of an individual and determine overall health status(Simon et al., 2001). The HBM model does not emphasize the knowledge of caregivers and their families, and their ability to adapt information to their own social context.

Health outcomes, both positive and negative, are determined largely by decisions made by the family and within the household. Maternal child health outcomes rely on a “family health cycle” connecting mothers, fathers, children, and grandparents in a system that, as a whole, is a

determinant of the health of individual family members(Simon et al., 2001). From infancy to adulthood, parents provide (or fail to provide) everything from nutrition and shelter to education and health care for children. The family is the center of health decisions during illness and the major source of health promotion and disease prevention activities(Simon et al., 2001).

Therefore, child health and survival outcomes are affected by more distal social and economic influences that operate at individual, household, and community levels. Two critical aspects of integrating an understanding of care within nutrition education are the caregiver and the decision-maker, that is, who is providing childcare and who is involved in childcare decisions (Kerr et al., 2008). Individual caregivers, usually assumed to be the biological mother, are often viewed as passive receptors of knowledge, with communication flows going in one direction from experts to lay people(Kerr et al., 2008). By focusing on WRA, health education programs ignore the important role of the extended family and community in early child development.

Growing interest in a life-span approach to development and consideration of the family as a system has further heightened the need for information on grandparents' impact on child development (Pearson et al., 1990). Increasingly, grandparents are viewed as important sources of social support, care giving, and as socializing for their grandchildren. Equipped with expertise and motivation to share it, grandmothers in non-Western and indigenous societies have been targets of public health promotion to great effect: increasing birth weight in Australia(d'Espaignet et al., 2003), improving breast-feeding practices in Cambodia(Crookston et al., 2007), or improving nutritional knowledge in young mothers(Aubel, 2005; Coall & Hertwig, 2010). Through childcare, support networks, encouragement, experience, and transmission of cultural values, grandmothers/mothers in law influence MCH decisions made within families(Coall & Hertwig, 2010). Socio-emotional support grandparents provide is key to

understanding how grandparental investment may influence MCH health in the developing world.

Established in 2005, the Grandmother Project (GMP) grew out of a series of research studies involving grandmothers as resource persons in community health programs in Laos, Albania, Uzbekistan, Mali, Senegal, Mauritania, Djibouti, and Sierra Leone. The lessons learned from this work led to the development of an innovative approach to maternal and child health education that respects culture while promoting change (Musoko et al., 2012). The framework utilized by the GMP is based on three core concepts: recognition and inclusion of grandmothers and elders in maternal and child health decision-making; strengthening intergenerational communication; and using participatory communication and education methods to strengthen the capacity of leaders and groups to mobilize their communities for positive change (Musoko et al., 2012). Ultimately the goals of the grandmother strategy are to actively involve grandmothers as “resource persons”, to strengthen intergenerational communication, and to use communication methods that foster critical reflection and problem solving rather than dictating to communities what actions they should adopt (Musoko et al., 2012).

To date, few health education programs have addressed the role that grandmothers play in decision-making and childcare activities (Kerr et al., 2008). The purpose of this meta synthesis is to compare themes/factors related to household roles and decision-making around MCH issues across multiple contexts; to clarify the influential role of grandmothers as advisors to younger women and as family caregivers; and to provide evidence based targeting recommendations for maternal and child health programs.

## **Methods**

The Grandmother Project conducted 9 qualitative research studies in Laos, Mauritania,

Senegal, Mali, Uzbekistan, Albania, Djibouti, and Sierra Leone. The 9 studies included in this meta-synthesis represent the knowledge, attitudes, and beliefs of approximately 2970 key household actors from 8 different countries. In collaboration with local non-governmental organizations (NGOs) and the ministries of health (MOH), a participatory ethnographic approach was employed to examine the MCH-related roles of various household members at the family and community levels, the relationships between them, communication and decision-making patterns, expectations of various family members regarding the MCH-related roles of younger women, older women and men, family values and beliefs, and lastly, community interaction with traditional and biomedical health care providers. The studies all used similar research methodologies, namely the use of rapid participatory assessments including, focus groups and individual in-depth interviews with several categories of family and community actors and the involvement of health and development field staff in the data collection and analysis process. The studies are described in detail in table 1.1.

#### *Meta-Synthesis.*

For this secondary analysis, a meta-synthesis method was employed. A meta-synthesis is a research method used to produce interpretive translations, ground narratives or theories by integrating and comparing findings or metaphors of different qualitative studies (Beck, 2002; Sandelowski, Docherty, & Emden, 1997). The traditional method of summarizing a field of research is the systematic literature review, which is a search strategy with the goal of reducing bias by identifying, appraising, and synthesizing all relevant studies on a particular topic (Britten et al., 2002). The difference between a systematic review and a meta-synthesis is that the meta-synthesis involves a process of extracting qualitative data from individual research studies and interpreting and representing them in a collective form (Gewurtz, Stergiou-Kita, Shaw, Kirsh, &

Rappolt, 2008). The meta synthesis method allows one to draw upon the findings from original studies and use the data in a subsequent analysis with the goals of offering new insights that can further advance knowledge and inform practice. Instead of interpreting knowledge as social facts, the evidence constitutes overarching themes or mode of expression that the participants convey with researchers gearing toward an understanding of how individuals construct and reconstruct knowledge about the phenomenon (Hoon, 2013).

This meta-synthesis followed the seven-step meta-ethnography approach proposed by Noblit and Hare (Noblit & Hare, 1988). By using grounded theory, the studies were read and re-read where overarching themes were labeled and the interrelationships were discussed. These themes revealed the differences and similarities between the studies and enabled the researchers to understand how the studies are related to each other. The seven step approach, summarized below, includes the following phases: getting started, deciding what is relevant to the initial interest, reading the studies, determining how the studies are related, translating the studies into one another, synthesizing translations, and expressing the synthesis (Noblit & Hare, 1988).

Step one started with identifying the area of interest and formulating the synthesis question. For this study, the researchers identified their interest in the role of elder women and how they influence maternal child health within households. We developed the question, “What role do elder women play in maternal/ child health within family systems?”

In step 2 we identified the literature relevant to the research question. From 1994- 2013 the Grandmother Project conducted nine qualitative studies where the role of elder women in maternal/child health was examined. Given that this meta-synthesis consists only of the 9 formative qualitative research studies conducted by GMP the integrated approach was employed. The integrated approach is the integration of findings of one investigator’s multiple studies in a



related field (Walsh & Downe, 2005). With this approach, the researchers integrated the 9 studies of GMP research findings using systematic, formal processes for the purpose of generating overarching themes about the role of elder women in MCH. By using the integration approach, the results of the analysis entails the risks of reducing the range of interpretations of the phenomenon, therefore creating limitations. The interpretations presented in this meta synthesis are at least three times removed from the original data. The Grandmother Project conducted all 9 of these studies, all written from the same perspective and insight. This integration approach in the analysis does not allow for the exploration of multiple viewpoints.

In step 3, the studies were carefully reviewed. Of the 9 studies, 5 were published in French and translated by the first author. The studies were read and re-read thoroughly, checking for relevant metaphors, ideas, concepts, and interpretations. Ideas and concepts were identified across texts and the relationships between the studies were compared

Steps four through six constitute core steps of the meta-synthesis and include identifying relationships between the studies, developing themes, and synthesizing the evidence. To that end, were viewed key metaphors, phrases, ideas, and concepts from each study and compared these across studies to explore nuances, similarities and dissimilarities. These were then synthesized into a set of common themes that emerged across the studies. Phrases and quotes from interviewees were then grouped within these relevant themes. The assumption was made that the quotes the authors used in presenting their findings represented the opinions of the participants and were reflective of the broader interpretative themes. The researchers acknowledge that the original authors' decision-making regarding which quote was included represented a level of interpretation and potential bias of the original data (Burns, Schmied, Sheehan, & Fenwick, 2010).

Finally, in step 7 we present the findings. In this stage, we organized our findings into a written narrative and text boxes. The themes from this analysis will be presented with inserts from the study reports in italics and the quotes from interviewees within the narrative and in text boxes. For simplicity, the word ‘grandmother’ in this manuscript is used to represent elder women in the community and family including aunts, grandmothers, mothers in law, and elder women. The term ‘young mother’ is used to represent women of reproductive age and daughters-in-law. The term ‘father’ is used to represent young fathers, sons of grandmothers, and husbands. The term ‘grandfather’ is used to represent elder men. The assumption was made that the quotes the author used in presenting their findings represented the opinions of the participants and were reflective of the broader interpretative themes. The results are explained in detail in the following section.

## **Results**

Five main themes on the hierarchical structure of multi-generational families and the influence of this structure and the roles it creates on MCH emerged across the studies. The first theme describes the culturally defined roles and responsibilities of household members and the designation of these roles based on gendered experiences that shape the decision making process. The second overarching theme speaks to the topic of ‘Collective Decision Making’ and the household hierarchy and roles that shape the decision making process. Underscoring these two themes is a third theme related to grandmothers’ roles as ‘Primary MCH Advisor’ for households and communities. Families and communities rely on the guidance and advice of the grandmother in myriad aspects of nutrition and care for pregnant and lactating women, newborn infants and young children. The fourth theme speaks to the manner in which this guidance is often transmitted and fostered, namely through informal female ‘Support System Networks’.

Lastly, the culturally designated MCH advisor role of grandmothers, the prominent role of grandmothers in household decision making and the informal networks that exist to disseminate their guidance informs the fourth emerging theme related to the conflict between health care workers and grandmothers. Identified across all studies, this theme of conflict speaks to the misunderstandings and conflicting paradigms that lie between health care workers and the grandmothers as is. The impact of this tension on the capacity of health programs to improve the MCH condition and strategies to manage this tension are discussed.

### ***Gender Experienced Roles***

The first theme identified across the 9 studies was the hierarchical structure of roles and responsibilities within multi-generational families. This structure is embedded in and reinforced by the gendered experiences of household members. Grandfathers and grandmothers were identified as the family resource of knowledge and wisdom, more specifically for younger generations within families and communities. Women and men are directly trained and influenced by the skills and experiences of their same-gender culturally designated advisor, the grandfather or grandmother. For fathers, their role of ‘providing means’ is defined as providing tangible support and moral encouragement for the family in MCH matters. Grandmothers fulfill their gender-experienced roles by managing household activities, which includes chore manager, financial coordinator, and guardian of the household. For young mothers, following the guidance and delegation of the grandmother fulfills their role as ‘duty bearer’. The grandfather, father, grandmother, and young mother all contribute to the well being of the household by fulfilling these roles. These roles are further elaborated in the following sections.

With their age and experience, grandmothers and grandfathers were identified in all contexts as a “resource” of knowledge and wisdom -- “educator” and “wise family advisor” were

common titles ascribed to them. In Sierra Leone interviewees described grandfathers as the *wise family advisor, based on their age and experience and their concern for the overall well-being of the family as a whole*. In Mali, “*according to tradition, which is still in force, grandmothers play the role of educator of children by teaching them daily values of society*”. As the advisors and educators grandparents are responsible for mentoring and educating children and youth on culture and tradition, often through storytelling. For example, grandmothers and grandfathers in Uzbekistan, Albania, and Sierra Leone used storytelling to teach younger generations about traditional and cultural values. Overall, as a family resource, grandparents were identified as the custodians of tradition based on their longevity and experience in dealing with life’s problems. The sentiment of the grandparents as “wise family advisors” and their role in transmission of cultural knowledge and tradition is expressed in text box 1.0.

In Senegal, Mali, Uzbekistan, Albania, Mauritania, Djibouti, and Sierra Leone, men and elder women assume the role of leading and managing the family and ensuring the wellbeing of families, however these roles are clearly defined in different contexts. For men they are defined as ‘head of the household’ and for grandmothers they are defined as ‘household managers’. According to the values and traditions of the family members interviewed in Mauritania, *men are the head of the family and therefore the ultimate authority*. Interviewees from Mali acknowledged age and experience as identifiers for the overall responsibility of the household, *in each family, “head of the family” is the eldest male*. Although interviewees across studies identified males as the head of the house, their active involvement in caring for women and children is limited. In terms of the MCH decision-making process, as the head of the family men assume the responsibility of managing financial-related MCH resources for the family, such as providing transportation, purchasing medication, and/or taking a child to the health facility.

According to interviewees from Albania, *when they are at home they always inquire about the health/nutrition of their children but their [men] direct involvement in caring for young children is very limited. They acknowledge that this is the role of their wives and mothers.* The sentiment of men's primary role as 'head of the household' is expressed in text box 2.0.

For the grandmothers, their role as household manager includes managing family chores, managing finances of the house, and maintaining peace amongst family members. On a day-to-day basis, grandmothers are identified as the primary supervisor in delegating chores to the younger women and men in the household. In Mauritania, grandmothers were identified as the manager of domestic activities based on her experience and authority in the family. Along with her active role in delegating responsibility for household activities, grandmothers contribute to these duties. In Sierra Leone and Albania, as long as they are healthy and able, the grandmothers participate in the domestic chores depending on the volume of work to be carried out and the number of hands available to do it. The sentiment of the grandmother being the primary manager of day-to-day chores is expressed in text box 3.0

In Senegal, Uzbekistan, Albania, Mauritania, and Sierra Leone while men were often identified as head of household and procurer of financial resources, grandmothers were identified as the primary money managers and a source of emergency financial resources in times of need. In some contexts, grandmothers also actively generated income. In Senegal, Uzbekistan, and Albania interviewees identified grandmothers as the primary managers of the household money. The grandfathers in Uzbekistan said, *"Management of the family budget on a weekly and daily basis is handled by the grandmothers"*. Participants in Sierra Leone described grandmothers as sensitive to the financial situation in the household and actively participating in revenue for the family by growing or selling palm oil. According to a group of WRA in Mauritania, *"Our*

*families are numerous and many men are unemployed. Grandmothers are very sensitive to this situation and they do everything to increase revenue for the family and they are resources for the needs of everyone*". The sentiment of the grandmother as a financial manager and contributor is reflected in text box 4.0.

Interviewees from Senegal, Albania, Mauritania, and Sierra Leone expressed the highly valued role of grandmothers as the mediator and protector of the family. For example, in Sierra Leone interviewees identified *promoting understanding and cohesion between family members as one of the major roles of grandmothers*. When interviewees in Albania were asked what the difference is between a house with and without a grandmother, many of them referred to the grandmother's role in ensuring order and discipline in the family. Various interviewees in Sierra Leone identified the grandmother as a protector by saying "*the grandmother is the padlock and the shade for the family*". The sentiment of the grandmother as a mediator and protector is reflected in text box 5.0.

The role of young mothers as the 'duty bearer' was identified across the 9 studies. The main responsibilities of WRA are giving birth, ensuring the health and education of children, to care for their husbands and elders, and to contribute to activities and well being of the enlarged family. Due to her age and lack of experience, young mothers maintain the well being in the household by obliging to the advice and supervision from the grandmother. Traditionally, young women are expected to follow the guidance and support from the grandmother; they have limited authority in any decision making within the family. The interviewees in Mali identified the young woman as having 'little experience' and it is the role of the grandmother to understand this and be in charge of her upbringing. In Albania, *between the family members it is understood that she (young mother) will be under the authority of the grandmother as she learns the habits*

*and practices of her new family related to all aspects of housework, childcare, gardening, etc.*

The sentiment of the young mother as the ‘duty bearer’ is expressed in text box 6.0.

### ***Hierarchical Decision Making***

Household roles and responsibilities that are adapted along these gender segregated lines affect the decision making in the family. Across the 9 studies, due to their culturally designated roles as “head of household” and “household manager”, grandfathers, fathers, and grandmothers were identified as the “ultimate decision maker” in MCH matters. Young mothers in the family have limited authority in decision-making and oblige to the advice of family members. When the father and grandfather gives maternal and child health advice or makes a decision related to maternal and child health, the transmission of that decision to the household and its implementation is the responsibility of grandmothers. For example in Uzbekistan *regarding all family problems and decisions to be made, the grandmother informs and advises the grandfather on the situation, he makes a decision regarding what should be done and in turn, he expects the grandmother to “manage”, or implement the solution.* In Sierra Leone, men are expected to consult with the senior women in the family, particularly their own mother, and to follow their advice. The sentiment of collective decision-making is expressed in text box 7.0.

### ***Primary MCH Advisor***

Across all studies, the grandmother was identified as the primary MCH advisor in the family and the community largely due to her experiences in this arena. Grandmothers advise on a range of MCH topics including, marriage etiquette, nutrition, pregnancy, breastfeeding practices, illness, and childcare. Because of this gendered experience, the grandmothers are considered the ultimate authority on MCH advisement not only to the young mothers in the family but also the grandfathers and fathers. For example in Sierra Leone, young men interviewees said “*The*

*Grandmothers are the experts on breastfeeding and given their extensive experience, we are confident that they will advise our wives on the do's and don'ts*". From the beginning and throughout the pregnancy is the grandmother in the family that monitors, advises, and assists the young mother to acquire the necessary attitudes and practices in relation to her nutrition, domestic work, and prenatal consultations. For example in Mali, when a daughter knows she is pregnant, the grandmother starts to follow her work, nutrition, protection, and visits to the clinic. The sentiment of grandmothers as the primary advisor for pregnant women is expressed in text box 8.0.

Identified across studies, based on her age and experience, family members look to the grandmother for primary decisions regarding child health. Even as the young mother gains experience and confidence in MCH, the grandmother continues to play the leading role in child health decision-making in the household. When the family makes a decision about child health, the grandmother was identified to be the most experienced and plays the leading role in diagnosing illness. According to the young mothers and grandmothers in Senegal, *grandmothers usually manage cases of childhood illness because it is they who have the most experience in this arena*. In Mauritania for example, *"the most experienced person is the grandmother with her experience and patience"*. The grandmother makes the primary diagnosis of the problem, continues to provide first aid, and directs the mother and the father of the child with her advice given. For example, in Laos, when treating childhood diarrhea and respiratory infections, family members seek the opinion of the grandmother and her advice is usually followed. The sentiment of the grandmother as the primary decision maker in child health is expressed in text box 9. 0.

### ***Support Systems***

The fourth overarching theme identified is the role of support systems in MCH. In Laos,



Senegal, Uzbekistan, Albania, Mauritania, and Djibouti, all women were part of informal social networks, consisting of grandmothers and grandmother leaders, which are the heart of a system of endogenous exchange and support between women. Beyond the family, the research identified, a support and counseling system for women and their children maintained and supported by grandmothers. In Uzbekistan, virtually all grandmothers are part of a network of communication and support, through which information is shared and advice is given and problems are solved. Throughout the studies, grandmothers identified with the responsibility of helping neighbors, especially those young mothers without a grandmother to advise them in their own family. The women counselors in Djibouti said, “*Our religious and cultural values dictate that we must be in solidarity with our neighbors, especially when they have problems*”. In Senegal, *grandmothers accept the responsibility to support and assist young mothers not only in their family but in their neighbor’s family too*. The sentiment of social networks of knowledge and support is expressed in text box 10.0.

### ***Conflicting paradigms between health care workers and grandmothers***

The final overarching theme identified across all studies speaks to the lack of communication, cultural sensitivity, and disagreement between health care workers and grandmothers. Households resort to home therapies because they are considered less expensive, readily available in most villages, and recommended by elders. As the grandmother makes the primary diagnosis, it is she who decides to either administer a traditional therapy or consult the traditional healer. The influence of the traditional healers is related to their geographical, socio-cultural, and financial accessibility as well as the idea that they generally share the same beliefs with communities regarding cause and treatments for illness. Modern health care workers’ view the health advice and practices of grandmothers as negative. For example, several of the health

workers in Senegal strongly criticized grandmothers on the “bad advice they give to young mothers”. Health care workers and grandmothers were identified to have a power struggle of authority in health decision-making. According to a health agent from Djibouti, “*The young mothers do not follow our advice and they give priority to traditional approaches. This is due to the fact that the consultants (their mothers, mothers in law, aunts, neighbors) are always beside them and they follow what they offer*”. Many health care workers from Senegal *complained that often young women follow the advice of grandmothers rather than their own*. This lack of social connection between communities and modern health providers ultimately translates to limited contact and lack of utilization of services. The sentiment of the conflicting beliefs between health care workers and grandmothers is expressed in text box 11.0.

Throughout the studies, grandmothers expressed, despite their lack of involvement in MCH programs, an openness to learn and participate in these programs. Grandmothers acknowledged the lack of recognition and respect for their role in the family and in society. According to a Mauritanian grandmother, “*You get tired for the well-being of women and children and the programs do not value our efforts*”. Grandmothers are frustrated by the fact that development organizations are not interested in their knowledge and experiences. A Malian grandmother said, “*Maybe they are not interested in us because we are old and because we no longer give birth*”. Despite their frustration, grandmothers were open to sharing their experiences and learning from others. Grandmothers expressed the desire to integrate new health information with their traditional knowledge. The sentiment of grandmothers’ openness to learning is expressed in text box 12.0.

## **Discussion**

The results of this meta synthesis provide valuable evidence regarding the influences and roles of grandmothers and family actors in household level MCH matters in various contexts. Decision-making patterns within the households are one of the greatest influences on MCH and within these patterns, gender, age, and experience affect the direction of these decisions. The grandmothers and grandfathers opinions are valued because they are the heir of a cumulative process of knowledge transmission, that comes from their interaction with others and their own experience acquired over the years, making them recognized and respected by family members. Men are generally concerned for the health and well being of women and children, but their involvement in MCH care is limited and they rely on the guidance of the grandmother. Any advice men contribute is transmitted through the grandmother. Due to their age and lack of experience, young mothers maintain the well being in the household by obliging to the advice and supervision from the grandmother. As young mothers continue to gain experience and confidence in MCH, the grandmothers plays the leading role in diagnosing and treating childhood illness. There is an endogenous exchange and support between women, where information is shared, advice is given, and problems are solved. From the lack of communication, cultural sensitivity, and disagreement between health care workers and grandmothers, creates miscommunication, power struggle, and conflict of beliefs.

Like this present meta-synthesis, research in Malawi, Ghana, the Democratic of Congo (DRC), Mozambique, and Brazil also identified grandmothers as important sources of knowledge and advice in maternal and child health (Aborigo et al., 2012; Fouts & Brookshire, 2009; Gross, Van der Sand, Girardon-Perlini, & Cabral, 2011; Kerr et al., 2008). In Malawi the paternal grandmother is actively involved in care of the pregnant mother and early childcare (Kerr et al., 2008); fathers rely on the knowledge of grandmothers or other elder women in the

village, including the traditional birth attendant, when women start labor (O'Gorman, Nyirenda, & Theobald, 2010). In Ghana, Mozambique, Brazil, DRC, and Malawi research has shown that grandmothers and other family members have a considerable amount of influence on breastfeeding practices and when to introduce food to infants (Aborigio, 2012, Geelhoed, 2011, Gross, 2011)(Fouts & Brookshire, 2009). When the family makes a decision about child health, the grandmother was identified as the most experienced and plays the leading role in diagnosing illness. Similarly, research in Ghana, Mali, and Afghanistan has shown that child health decisions often rest beyond the mother and family members rely on the expertise and diagnostic skills of the grandmother (Ellis, Winch, Daou, Gilroy, & Swedberg, 2007; Engmann et al., 2013; Newbrander, Natiq, Shahim, Hamid, & Skena, 2013). Our findings along with findings from previous research support the conclusion that grandmothers are the primary MCH advisors for families.

Most MCH programs implemented both by non-governmental agencies (NGO) and government services focus on WRA and do not involve other community and family actors, especially elders who are their designated “guides” and “supervisors”(Aubel & Sawi, 2013). Assuming that mothers make health choices with limited outside influence neglects the wide range of inputs that enhance or diminish the health of an individual and determine overall health status. This narrow approach not only tends to alienate grandmothers, but also contributes to decreasing the impact of strategies aiming to promote changes in the attitudes and practices of young women. Acknowledging the gendered and hierarchical decision making within households, respecting the culturally designated and prominent role of grandmothers as MCH advisors, and working within the social networks of which grandmothers are a part could each be

effective starting points for MCH programs that could facilitate inclusion of grandmothers as effective collaborators and change agents in community level activities.

In using a holistic approach to understanding MCH behavior, the Grandmother Project has brought awareness to the main caregivers and decision makers of MCH within family systems -- grandmothers. To date, few health education programs have addressed the role that grandmothers play in decision-making and childcare activities(Kerr et al., 2008). In countries where grandmothers are highly valued and are strongly committed to promoting the wellbeing of children, their mothers and families, the findings from this meta-synthesis clarifies the role of grandmothers as family and community advisors and as caregivers for maternal and child health issues. This secondary analysis of research adds to the literature in support of grandmothers as the voice of authority on MCH issues in the family and the community. These findings underlie the importance of understanding the socio-cultural norms and culturally designated roles of family members and family and community decision-making structures when designing maternal and child health interventions. The results of this analysis brings an insight of grandmothers as primary MCH advisors, sources of social networking and exchange, and brings a voice that grandmothers are open to learning.

Along with these strengths come limitations in this meta synthesis. By using the integration approach, the results of the analysis entails the risks of reducing the range of interpretations of the phenomenon, therefore creating bias. The interpretations and language translations presented in this meta synthesis are at least three times removed from the original data, thus strength and validity was potentially lost. The Grandmother Project conducted all 9 of these studies, all written from the same perspective and insight. This integration approach in the analysis does not allow for the exploration of multiple viewpoints.

Families and communities rely on the guidance and advice of the grandmother in myriad aspects of nutrition and care for pregnant and lactating women, newborn infants and young children. Social networks, which consist of young mothers, mothers in law, grandmothers, grandmother leaders, are the heart of an endogenous system of exchange and support between women, where information is shared, advice is given, and problems are solved. Despite their frustration, grandmothers are open to sharing their experiences and learning from others and expressed the desire to integrate new health information with their traditional knowledge. Health interventions that facilitate discussion and dissemination of new ideas about MCH through the informal communication networks of grandmothers, could strengthen their confidence in their role advising and providing support to women and other family members.

## **Conclusion**

Decision-making patterns within the household are one of the greatest influences on MCH and within these patterns, gender, age, and experience affect the direction of these decisions. Families and communities rely on the guidance and advice of the grandmothers in myriad aspects of nutrition and care for pregnant and lactating women, newborn infants and young children. Young mothers are embedded in family systems and it is expected that they will perform the roles and responsibilities assigned to them within family systems. Within these family systems, given the central role and strong influence of grandmothers in health promotion and in illness management at the household level, MCH programs should directly involve senior women in MCH promotion strategies. By focusing on the knowledge and skills of family members who are most involved in MCH matters, namely grandmothers and mothers-in-law, community participation in MCH strategies could potentially be more effective in improving child survival outcomes.

The multiple roles of grandmothers as wise advisors, house managers, primary MCH advisors, and guardians of households need to be included in MCH programming in order to understand their influence on maternal and child survival. Their centrality in all these areas, and the linkages between these areas, underlies the importance both of involving them in MCH education, understanding their perspective, and understanding how social systems and health are interrelated. These findings underlie the importance of understanding the socio-cultural norms and culturally designated roles of family members and family and community decision-making structures when designing maternal and child health interventions. By engaging grandmothers in MCH education and practices to promote optimal health behavior practices within families and communities, gives them a voice and recognition in health outcomes for women and children.

**Table 1.1. Description of Studies**

<b>Location</b>	<b>Year</b>	<b>Objective</b>	<b>Methods</b>	<b>Actors Involved</b>	<b>Sample Size</b>	<b>Population</b>
Laos	1995	To determine who influences the knowledge and practices related to childhood diarrheal disease and acute respiratory infections	Individual in-depth interviews, focus group discussions, participant observations	Ministry of Health, World Health Organization, Grandmother Project	418	Grandmothers, fathers, mothers, traditional healers, drug sellers, community leaders, religious leaders, women's groups, and teachers
Senegal	2000	To understand the roles and influences of grandmothers in matters of health/nutrition at the family and community level	Focus group discussions	Project CANAH, National Service of Food and Nutrition, Grandmother Project	260	Grandmothers, WRA, family leaders, and village chiefs
Mali	2002	To understand existing roles, strategies, and practices related to MCH	Focus group discussions, individual interviews	Ministry of Health, Helen Keller International, Grandmother Project	559	Grandmothers, WRA, traditional healers, village chiefs, and fathers of young children
Uzbekistan	2003	To identify household strategies and practices related to the promotion of MCH and appropriately managing childhood illness	Focus group discussions	Ministry of Health, Project HOPE, Grandmother Project	244	Grandfathers, grandmothers, women with young children, men with young children, traditional healers, and community leaders



Albania	2004	To understand the roles of grandmothers and other household actors related to MCH	Focus group discussions	Albanian Child Survival Project, Grandmother Project	277	Grandmothers and women with young children <2yrs
Mauritania	2006	To understand the cultural roles and practices that contribute to women's and children's nutritional status	Focus group discussions, individual interviews, observations in Arafat neighborhoods, and group exercises with drawings	World Vision, Grandmother Project	300	Grandmothers, WRA, male community leaders, traditional healers, and midwives
Djibouti	2007	To identify factors that contribute to inappropriate practices related to MCH	Focus group discussions, individual interviews, and group exercises with drawings	Ministry of Health, UNICEF, Grandmother Project	200	Fathers with children <2yrs, women with infants <40 days old, women with children <2yrs, grandmothers, women leaders, health agents, community leaders, and religious leaders
Senegal	2011	To understand the values, roles, and attitudes and practices related to young children, pregnant women, and lactating women	Focus group discussions	USAID, Grandmother Project	453	Grandmother, men, WRA, community leaders, health agents, and traditional healers
Sierra Leone	2013	To understand the values, roles, attitudes and practices related to the nutrition/health of young children, pregnant and breastfeeding women	Focus group interviews	World Vision Germany Nutrition-Health, University of Njala, Grandmother Project	259	Grandmothers, women with children <2yrs, and fathers with children <2yrs

## **Text Boxes**

### **Text Box 1.0 Wise family advisors**

*Based on both observations made in the villages, and comments made by community interviewees, the study team members concluded that in almost all cases grandmothers are highly respected both by adults and children in the community. Young members of the community seek their opinions on different topics related to daily life and those opinions are generally respected in the village. – Laos, 1995*

*Their role as “educator” includes both providing general moral guidance to family members and advising them on practical life issues. Other family members seek and respect their advice given that they have lived a long time and have a lot of knowledge and experience dealing with life’s problems. An important dimension of this role is teaching the younger generation about Uzbek traditions and cultural values. Many grandfathers enjoy telling stories and poems, which help younger family members, understand these traditions and values. – Uzbekistan, 2003*

*The grandmother plays a special role in teaching grandchildren the moral and cultural values of Albanian society. Storytelling is an important tool they use to carry out this educational process. – Albania, 2004*

## **Text Box 2.0 Men ‘Head of the Household’**

*Fathers appear to be particularly involved when it is decided that some action needs to be taken outside of the home such as purchasing drugs or taking the child to the health facility. – Laos, 1995*

*Pursuant to the traditional concept of the role of husbands in family, the husbands said they are "first responsible for their households" and that it is they who must "ensure the well-being of women and their children." They say that is their responsibility to feed the family, educate, clothe women and children and take care of medical expenses in case of illness. – Mali, 2002*

*The main roles of men/husbands in the family are: to work hard in order to provide the family with money and food products; to participate in educating their children; and to provide financial support and logistical support when a family member is sick. – Uzbekistan, 2003*

*"The lives of children and women every day is managed by women. The man is a very far unless there is an emergency and you need resources." -WRA, Djibouti, 2007*

### **Text Box 3.0 Grandmother as domestic chore manager**

*Grandmothers provide delegation and monitoring of family duties in and out of the house with the young wives and husbands of the house. – Senegal 2000*

*Neither the head of the family nor the household heads are involved in managing the daily activities of the family. This responsibility is bequeathed to the grandmother. – Mali, 2002*

*On a daily basis there are numerous domestic tasks to be carried out and within the family someone needs to identify the work to be done and who will do what. According to the interviewees the senior women in the household assure this coordination. – Sierra Leone, 2013*

*“She has the final word in all decisions related to household matters” – Young mother, Albania, 2004*

#### **Text Box 4.0 Grandmother as financial manager**

*According to all interviewees, unlike other family members who are more likely to spend money that they receive, the GMs are both frugal and strategic in the way they use their resources. Grandmothers are especially careful to always have resources 'in the bank' when there are special needs related to their grandchildren or children. –Sierra Leone, 2013*

*As the father-in-law is not involved, however, in the day-to-day running of the household, he delegates responsibility to his wife (the MIL) for budgeting and managing such resources. – Albania, 2004*

*The grandmother manages the money and makes sure that it is evenly dispersed amongst family members. They decide how to ration resources within the family. –Senegal, 2000*

## **Text Box 5.0 Mediator and Protector**

*“The grandmother repairs all that those can’t in the house”- Interviewee, Senegal, 2000*

*“She alone is responsible for the equilibrium in the household”. - Young mother, Albania, 2004*

*“God gives us the courage and common sense to make peace in the family”. - Grandmother, Mauritania, 2006*

*“A family without a grandmother isn’t stable”. – Interviewee, Senegal, 2000*

*“The grandmother brings harmony between different members of the family”. - Husband, Mauritania, 2006*

*“When there is a grandmother in the house you feel safe. If there is no grandmother you are anxious for her return”. – Sierra Leone, 2013*

### **Text Box 6.0 Young mother ‘Duty Bearer’**

*For all of their roles young women are expected to learn from their MIL, to perform their responsibilities according to the traditions of the family of their in-laws and at the same time to teach these same competencies to their older daughters to prepare them for their role in their future family. – Sierra Leone, 2013*

*Based on the organization of family life in this area, daughters-in-law are expected to work closely with their MILs in all childcare and domestic tasks and to accept to play a subservient role in their relationship with their “advisor”, the MIL. – Albania, 2004*

*The daughter-in-law is supervised by her mother-in-law, is expected to follow her orders and to ask her permission whenever she wants to go out, including when she wants to visit her own mother. If, for example, she is pregnant or her child is sick, she is expected to seek and follow the advice of her mother-in-law, and her own mother is involved in such matters to a much lesser degree. – Uzbekistan, 2003*

*In all three ethnic groups studied, the main responsibilities of women of childbearing age include a: give birth to children ensure their health and education, to care for their husbands and contribute to activities and well being of the enlarged family. – Diibouti, 2007*

## **Text Box 7.0 Hierarchical Decision Making**

*As the illness of the child evolves, and especially if the child is getting worse, fathers are usually involved in discussing and getting advice from their wives and other family members, as well as from other “resource persons” outside of the family, such as village health workers, to decide what they should do next. - Laos, 1995*

*For daily monitoring of women before and after childbirth, the husband delegates responsibility to his mother, the grandmother or the other older women in the family because of their expertise in the field. – Mali, 2002*

*The interviews showed that most often the decisions made by men in case of illness are, in reality, based on the advice they receive from women who have much more experience than them in the matter. Normally women, especially counselors who are more experienced, manage childhood diseases initially at home. - Djibouti, 2007*

*Within the family setting, men are expected to seek and to follow the advice received from elder family members regarding all facets of family life. In the case of issues dealing with women and children, men are expected to consult with the senior women in the family, particularly their own mother, and to follow their advice. – Sierra Leone, 2013*



### **Text Box 8.0 Grandmother as the primary advisor for pregnant women**

*With her first child, the young mother relies heavily on the advice and suggestions given to her by others who have more experience, particularly older women who are relatives, neighbors and friends. – Laos, 1995*

*In every village, the traditional midwife is the confidence of the community, because of their extensive experience and wisdom, which is why they are given the pregnant women during childbirth. As they are the grandmothers / mothers-in laws and as such, they are interested and follow the pregnant women in the same way as other grandmothers. – Mali 2002*

*From the beginning and throughout pregnancy is the / GM in the family that monitor, advise and assist the young mother to acquire the necessary attitudes and practices in relation to her food, her daily domestic work, prenatal consultations and iron uptake. – Mauritania, 2006*

*In an interview with a woman who gave birth 10 days before she expresses feelings of dependence on her counselor when she gave birth to her first child, "When I gave birth, I knew nothing. I had to learn everything from my mother". On the other hand, experienced women who serve as counselors for young mothers often shared sense of responsibility of the WRA, "Gradually, the young woman must learn, that's why we (women councilors) are there " – Djibouti, 2007*

## **Text Box 9.0 Grandmother as primary decision maker in child health**

*In case of illness of a child, the various groups interviewed, including young mothers, have clearly stated that the GM plays the preponderant role in the overall management of the disease rather than the mother of the child. – Senegal, 2000*

*In all the villages and the many ethnic backgrounds of the study area, the grandmother plays a central role in the diagnosis and treatment of disease at the family level. According to the husbands, WRA and chief, "The last decision belongs to the GM". – Mali, 2002*

*As with other childhood sicknesses, the grandmother plays a major role in diagnosing the illness and in prescribing treatment within and outside the home, and advising both young women and their husbands what should be done. – Uzbekistan, 2003*

*Grandmothers are involved in diagnosing women's and children's health problems; advising on home treatment; preparing and administering home remedies; sleeping close to the sick child to monitor him/her during the night; advising referral to modern health care providers or popular doctors/traditional healers; accompanying sick child and mother to the modern or popular doctor; advise sons on special resources required for transport or medicines; and monitoring the treatment prescribed by either the modern or popular doctor. – Albania, 2004*

## **Text Box 10.0 Social networks of knowledge and support**

*The Lao Women's Union (LWU) is an important organization in most communities and its role is to inform and mobilize women on various aspects of family and community life. All of the community interviewees agreed that the LWU is an important tool for communicating with women at the community level. – Laos, 1995*

*Informally the grandmothers frequently meet each other, especially in their neighborhood, to discuss such topics as childhood illness, their pregnant daughters-in-law, an up-coming wedding or other topics regarding family problems and wellbeing. In these informal meetings “we share our knowledge and experience” and “we learn from each other”. – Uzbekistan, 2003*

*All of the grandmothers said that, if young neighbor women who do not have mothers-in-law ask for their advice, they are honored and most willing to share their knowledge and to help them in matters related, for example, to pregnancy, breastfeeding or a child is sick. This can be seen as a very positive sense of responsibility that they feel, not only for the women and children in their own family, but also for others in the village. – Albania, 2004*

*Everyone said that it is the grandmothers who have a sense of solidarity with the neighbors and are always ready to help others. If the neighbors have no water, money or food to eat they are the first to be ready to give or lend the little they have. – Mauritania, 2006*

### **Text Box 11.0 Conflicting beliefs between health care workers and grandmothers**

*“Most often they do not follow our advice because they listen more to nurses at home (that is the woman advisor) – Health agent, Djibouti, 2007*

*Health agents do not have the habit of periodically informing grandmothers of the evolution of the work of women. Grandmothers complain that they are not in contact with health agents and together they can help each other. "What health workers know, we do not. Their knowledge is different than ours. In reality it is us, not the health agents who live with women, so we need their knowledge to improve our role". – Mali, 2002*

*According to the interviewees, traditional healers often provide very positive psychological support, for example, to pregnant women and to babies with colic. While the formal health providers must deal with many patients and do not have time for long discussions with their patients, the traditional healers tend to be very patient, encourage their clients to discuss their problems in depth and provide detailed advice on how to deal with their problems. – Uzbekistan, 2003*

*Members of the communities are very sensitive to the attitudes of health workers towards them and their feelings have a significant influence on their attitudes towards midwives and the structures they guard. The men and women interviewed, said that some midwives were "friendly" and "adorable." But especially grandmothers and men have noted that there are often gaps in attitudes and hospitality demonstrated by the midwife.- Mauritania*

*"Often if you do not have a relationship with their midwives, they are not too nice with women or with grandmothers" – grandmother, Mauritania 2006*

*“During consultations midwives do not accept grandmothers returning with their daughters. The new medicine rejects everything that is old and that which represents the grandmother seniority”- grandmother Mauritania, 2006*

## **Text Box 12.0 Openness to learning**

*“If you come to meet with us, we are going to give our ideas and we are going to listen to yours”  
– Grandmother, Senegal, 2000*

*“If we can learn new things, we can better help the young mothers” – Grandmother, Senegal,  
2000*

*“The world is changing and we need to know more about the new ideas about MCH so that we  
can do a better job of taking care of our grandchildren, daughters, and daughters-in-law” –  
Grandmother, Uzbekistan, 2003*

*“We must keep our traditional knowledge but also we should know about the modern ideas. It is  
very important to keep our traditional ways” – Grandmother, Albania, 2004*

*“It is important to review the practices and drop those that are not beneficial” - Grandmother  
leader, Mauritania, 2006*

*“If we are not involved we can't learn new things” – Grandmother, Sierra Leone, 2013*

## **Chapter 4: Public Health Implications and Future Research**

This secondary analysis of research conducted by the Grandmother Project from Laos, Senegal, Mali, Djibouti, Uzbekistan, Albania, Mauritania, and Sierra Leone adds to the literature in support of grandmothers as the voice of authority on MCH issues in the family and the community. Our findings underlie the importance of understanding the socio-cultural norms and culturally designated roles of family members and community decision-making structures when designing maternal and child health interventions. If these key influencers are not acknowledged and utilized, program effectiveness will likely be diminished.

By understanding health literacy in a cultural context, health education interventions can influence not just individual lifestyle decisions, but also raises awareness of the determinants of health. In order to implement programs that are culturally appropriate, health educators must be able to identify and describe cultures and/or subcultures with given populations. According to Kreuter, culture is learned, shared, and transmitted from one generation to the next, and it can be seen in a group's values, norms, practices, ways of life, and other social regularities (Kreuter, Lukwago, Bucholtz, Clark, & Sanders-Thompson, 2003). Factors such as familial roles, communication patterns, beliefs relating to personal control, individualism, collectivism, and spirituality may help define culture for certain groups (Kreuter et al., 2003). By understanding how individuals perceive their own culture, the extent to which they identify with it, and the specific cultural values that are important to them, health communication programs can be more effective in health behavior change.

Maternal child health policies and programs should give greater attention to culturally designated roles and hierarchy related to MCH strategies within families and communities, in particularly to the role of grandmothers. Given that grandmothers play a central role at the family

level both coaching and supervising young mothers and directly caring for young children, they should be explicitly and actively included in the development and implementation of MCH programs. Communication activities for MCH programs should be based on adult education methods in which participants can share their ideas and experiences, and contemplate new ideas for discussion (Aubel & Sawi, 2013) . By approaching behavior change in a cultural dialogue, that respects values and family heritage, individuals or groups are motivated to share experiences and points of view on various situations and problems. The approach does not involve “persuading” or “convincing” community members, but rather it involves listening and respecting community members’ points of view, sharing information, and eliciting critical reflection (Aubel & Sawi, 2013). By using these practices, communities would be more receptive to taking action when they come to their own conclusions about changing behaviors and practices.

Based on the insight of these findings, the researchers of this analysis recommend including grandmothers, grandfathers, young mothers, fathers, traditional healers, and modern health care workers collectively in health programs. As culture and heritage are the foundation from which health beliefs are based on, MCH programming could integrate modern with traditional health practices in a way that communities could adhere to and potentially integrate into their daily behavior practices. By acknowledging hierarchical decision making as a potential intervention, could empower grandmothers and grandfathers in their confidence as the “ultimate decision makers” in families. Health programs that respect the guardians of culture and tradition could alleviate the tension and frustration elders have over their lack of involvement in MCH activities.

The beliefs and practices of communities and families within their socio-cultural and religious contexts need to be the foundation of which MCH interventions are built upon. Often MCH programs focus only on promoting “modern” health practices while ignoring traditional practices (Aubel & Sawi, 2013). Given that grandmothers are the principal advisors in MCH, it is important that MCH programming promotes new practices be directed at senior women within families. By addressing the practices that health care workers view as “negative” and training grandmother advisors on “modern” health issues, facilitates communication and understanding, thus potentially improving MCH outcomes. If MCH programs viewed grandmothers as a resource in MCH decision-making and introduced current health knowledge to them, grandmothers could potentially have greater confidence in their advice and practices regarding MCH.

Decision-making patterns within the household are one of the greatest influences on MCH and within these patterns, gender, age, and experience affect the direction of these decisions. Families and communities rely on the guidance and advice of the grandmothers in myriad aspects of nutrition and care for pregnant and lactating women, newborn infants and young children. By focusing on the knowledge and skills of family members who are most involved in MCH matters, namely grandmothers and mothers-in-law, community participation in MCH strategies could potentially be more effective in improving child survival outcomes. Continuing studies and future research in MCH are needed to fully unlock the potential that family actors, namely grandmothers, have on maternal and child health outcomes.



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## *Appendix*

### **Summary of Studies**

#### ***Laos 1995***

A community study that focused on childhood diarrheal disease (CDD) and acute respiratory infection (ARI) was conducted in 1995 in four provinces of Laos. The methodology for this study included individual in-depth interviews, focus group discussions, and participant observations. The sample population was 418 participants, which included mothers, grandmothers, traditional healers, drug sellers, fathers, community leaders, monks, Laos's women's union members, and teachers (Laos, 1995). The goal of this study was to determine who influences knowledge, attitudes, and practices related to CDD and ARI, to determine who is directly and indirectly involved in advising mothers, and in taking care of sick children (Laos, 1995).

#### ***Senegal 2000***

Since 1998, the Christian Children's Fund executed a project of child survival in close collaboration with two health districts in Senegal in the medical area of Thies, namely Thadiaye and Joale (Senegal, 2000). Specific issues investigated in the study included, grandmother's nutrition-related knowledge and advice related to pregnancy, breast-feeding, and infant feeding during illness. The sample population was 260 participants from 10 different villages, which included grandmothers, women of reproductive age, chiefs of the family, and chiefs of the village (Senegal, 2000).

#### ***Mali 2002***

In 2002, Helen Keller International (HKI) implemented a community nutrition and health project in Mali. This study looked at the roles and influence of key family and community

members, including grandmothers, on practices related to newborn health and at the family decision-making processes related to pregnancy and the care of newborns. Data collection was carried out in August 2002 in the Koulikoro region and the methodology consisted of focus group discussions and individual interviews. The sample population included 559 participants, including grandmothers, women with children under two years of age, men with children under two, traditional male community leaders, and traditional healers(Aubel, 2002).

### ***Uzbekistan 2003***

Since late 1999, Project Hope has been working with health and local authorities in Navoi Oblast in eastern Uzbekistan to help strengthen MCH services (Uzbek, 2003). In order to understand the roles and influences of family and community members on MCH practices, a community study was carried out(Uzbek, 2003). The decision to conduct the study was based on the project staff's belief that in Uzbek society mothers-in-law/grandmothers play an active role at the family level educating, advising, and supervising their own children (Aubel, 2003). Focus group interviews were conducted with 244 interviewees, which included grandmothers, grandfathers, women with young children, men with young children, traditional healers, and *Mahalla* officials(Aubel, 2003).

### ***Albania 2004***

The American Red Cross and the Albanian Red Cross worked in partnership in northeast Albania in Diber Prefecture to implement the Albanian Child Survival Project (ACSP) from October 2003 to September 2008 (Albania, 2004). A rapid qualitative community assessment, *The Grandmother Study: Devotion and Caring*, was conducted in order to assist in the development of community and health facility-based child survival interventions and activities in the three districts in the prefecture (Albania, 2004). Focus group discussion interviews were used



to obtain an in-depth understanding of household dynamics and decision-making practices related to infant and young child health (Albania, 2004). A total of 277 interviewees included grandmothers and women with young children. The assessment methodology focused on an analysis of the roles of grandmothers and other household actors related to priority child survival issues; the interaction among them; and their influence on the practices of WRA and their infants and young children (Albania 2004).

### ***Mauritania 2006***

Since 1984, World Vision has been implementing community development activities on behalf of children and families in ten communes surrounding Arafat, Mauritania (Mauritania, 2006). The results of several previous community nutrition programs, including the Title II Project implemented by World Vision in collaboration with Doulos Community between 2001 and 2005, showed an increase in the knowledge of mothers of malnourished children but no significant improvement either in their nutritional practices or in their children's nutritional status (Mauritania, 2006). World Vision decided to undertake a rapid assessment to analyze the socio-cultural context of malnutrition including the cultural roles and practices that contribute to women's and children's nutritional status (Mauritania, 2006). The data was collected using focus group and individual interviews, observations in Arafat neighborhoods, and a group exercise with drawings (Mauritania, 2006). The sample population was 300 participants, which included women of reproductive age, grandmothers, male community leaders, female traditional healers and trained midwives.

### ***Djibouti 2007***

In Djibouti, a model developed by UNICEF on the determinants of health and nutritional status of children influenced the conceptual framework for this study. The study focused on the

knowledge, attitudes, and practices of family systems and community members in regards to MCH(Aubel, 2007). In collaboration with the Djibouti MOH, women leaders, and UNICEF, the study was coordinated through the NGO, The Grandmother Project. The data was collected through focus group discussions, individual interviews, and a group exercise with drawings in September 2007 (Djibouti, 2007). The population sample was 200 participants, which included fathers, mothers, grandmothers, women leaders, health care workers, and community and religious leaders.

### ***Senegal 2011***

In 2011, the project USAID/Yaajeende, Senegal, qualitative and participatory methods were used to understand the household roles and practices related to MCH nutrition. This work directly involved grandmother and women leaders and was supported by UNICEF and the Ministry of Health. The conceptual framework used in this study pays close attention to the realities and socio-cultural roles developed by the GMP. This study was conducted in April 2011 in the three areas of Matam, Bakel, and Kedougou chosen based on the highest prevalence of food insecurity and child malnutrition. Data was collected through focused group discussions. The sample population was 453 participants, which included women of reproductive age, men, mothers, mothers-in-law, grandmothers, health agents, notables, and traditional healers.

### ***Sierra Leone 2013***

In 2012, World Vision and Grandmother Project carried out a formative research study in the southern region of Sierra Leone to conduct a rapid assessment on the health and nutrition of children and women. The goal of the qualitative study was: to understand the values, roles and influence of different household actors on the advice given and practices adopted related to the nutrition/health of pregnant and breastfeeding women, their newborns and their young children.

Focus group discussions were conducted with a total of 259 community members, including WRA, grandmothers, and men.