Factors Determining Child Nutrition Practices Among Women In Rural Gambia – An Exploratory Study.

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Abstract

Malnutrition is a public health problem through out the developing world. In the recent past, malnutrition in Africa has been on the increase. Various nutrition interventions have been proposed and implemented in different parts of the world. Health promotion programmes have long been premised on the idea that providing knowledge about causes of illness and choices available will go along way towards promoting a change in individual behaviour. However studies have shown that adequate knowledge does not always translate into appropriate actions. This study set out to identify the factors that may be responsible for the gap between knowledge and action among rural women in Gambia. An interviewer administered structured questionnaire was developed and used as a screener to determine the level of child health and nutrition knowledge of the community mothers and in turn identify the women who would participate in the focus group discussions (FGD). Eight focus groups were conducted and aimed at identifying the factors that determine appropriate child health and nutrition promoting actions among women in this community. The results identified the roles of men and women in the society, support networks, alternative definitions of malnutrition, poverty and health seeking behaviour as important factors. The findings have shown that, transferring appropriate knowledge to individuals is important but not enough to induce appropriate action. There is need therefore to identify and include other factors that may affect the transfer of such knowledge into action. The findings also concur with the fact that malnutrition is a product of complex interplay between many different factors.

Dissertation Authenticity Statement

I confirm that I have read the section B.7.8 On plagiarism as found in the 2005/2006 Student Handbook.

I confirm that the work presented here is my own except where otherwise indicated.

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1 Introduction

Malnutrition is a public health problem through out the developing world. In fact, malnutrition remains a factor in 53% of all the 11 million deaths that occur each year in the world's 0 – 4 year old children(1). Malnutrition is consequently the most important risk factor for the burden of disease in developing countries(1). Malnutrition is associated with increased morbidity and mortality from malaria, diarrhoeal diseases, measles, nutrient deficiency diseases and neonatal difficulties. There are long-term detrimental consequences of malnutrition which include impaired cognitive development, growth impairment and children reaching school age while nutritionally impaired are likely to progress less well(2). Foetal and infant under nutrition has also been identified as a contributing factor in the increasing risk of Obesity (over nutrition) and other nutritional related chronic diseases later in life(3). This relationship is however still debatable with different studies offering conflicting results (4-7).

The term malnutrition which also means, "the lack of proper nutrition" generally refers both to under and over nutrition. Malnutrition is caused by lack of one or more of the nutrients required by the body (macro and micro nutrients). Marasmus, is severe wasting due to an adequate intake of protein but inadequate intake in calories while Kwashiorkor (swelling of arms and legs and change in hair and skin) results from intake of adequate calories but insufficient intake of protein. Marasmic kwashiorkor, is also called protein-energy malnutrition (PEM) is severe wasting in the presence of oedema (1, 8). Apart from marasmus and kwashiorkor (the 2 forms of protein– energy malnutrition), deficiencies in iron, iodine, vitamin A and zinc are also manifestations of malnutrition(1).

Generally, severe protein–energy malnutrition in children is clinically defined by measurements that fall below 2 standard deviations under the normal weight for age (underweight), height for age (stunting) and weight for height (wasting).

These categories are based on the number of standard deviations from the median value of the National Centre for Health Statistics (NCHS)/World Health Organization (WHO) international reference population(9). Children of less than 5 years of age living in the developing countries have been identified as the group at the highest risk of developing malnutrition. Of all these children, about 31% are underweight, 38% have stunted growth and 9% show wasting(1). In this report, the term malnutrition will be used to refer to protein – energy under nutrition.

1.1 Malnutrition in Africa

In the recent past, malnutrition in Africa has been on the increase. The number of underweight children increased between 1990 and 2000 (from 26 million to 32 million), and 25% of all children under five years old are underweight(8). This stems partly from the deteriorating situation in Africa where the sub – Saharan particularly Eastern Africa are experiencing increasing prevalence of under weight with HIV/Aids, poverty, political and social instability being the major contributing factors(3). It is therefore unlikely that the Millennium Development Goal of reducing levels of underweight by 50% will be met by 2015 in Africa(3) .This increasing cases of malnutrition in Africa in the past decade has correspondingly balanced and undermined the efforts and improvements attained in other developing countries like China(1). It is expected that by 2015, the relative contribution of the global prevalence of childhood under nutrition will increase from 16% to 38% for Africa(3)

1.2 Malnutrition in Gambia

West Africa is one of the poorest regions of the world with over 55% of its population living on less than $1 a day (10) . Gambia is a country in West Africa and almost an enclave of Senegal. It is the smallest country on mainland Africa with a population of 1,641,564 people and a GDP-real growth rate of 5.5% (GDP- per capita $1,900) according to 2005 estimates (11).Gambia has a population growth rate of 2.84% and a total fertility rate of 4.6 per woman.

The under five mortality rate in Gambia has reduced from 170 to 129 (per 1000 live births) in the past 10 years but still remains unacceptably high (12). Child mortality has been found to be higher in rural Gambia when compared to urban areas (10). According to the World Health Statistics report released in 2006, of the Gambian children (under 5 years of age in 2000) 19.2% were stunted for age while 17.2% underweight for age. The report also states that 17% of newborns in the years 2000 – 2002 registered a low birth weight(13).Clinic based studies in the Gambia have also indicated malnutrition as a major contributor to childhood mortality (14). At the MRC clinic Keneba out of 558 children seen from the villages of Keneba, Manduar and Katong Kunda between March 2005 and February 2006, 17.38% were severely malnourished (clinical records).

1.3 Factors associated with malnutrition

The conceptual framework on determinants of child hood malnutrition in the developing world recognizes 3 levels of causality corresponding to immediate, underlying and basic determinants of child nutritional status. The immediate determinants include dietary intake and health status of the child. These are in return influenced by the underlying determinants which include food security, adequate care for mother and child and a proper health environment including access to health services. These underlying determinants of child nutrition are further influenced by the basic determinants including resources available to a community/country, political and economic structure of the country/region and the socio cultural environment of the community(15). Malnutrition is therefore inseparable from poverty and within that context a variety of other factors (16). These factors include; political and economic situations, maternal level of education and sanitation, the seasons and climate conditions, food production, cultural and religious food customs, breast-feeding habits, prevalence of infectious diseases, the effectiveness of nutrition programs and the availability and quality of health services (1).

1.4 Malnutrition interventions

Various nutrition interventions have been proposed and implemented in different parts of the world. Due to its multi factorial cause, malnutrition demands multi dimensional approaches. These approaches aim at either preventing or treating the disease. However for the purpose of this report, community-based management and nutrition and health education approaches will be discussed.

1.4.1 Community – based management

In a meeting organised by WHO, United Nations Children's Fund (UNICEF) and the standing committee on nutrition in 2006, Community – based management of severe malnutrition was identified as a possible way to manage a large proportion of severely malnourished children at home using ready to use therapeutic foods. It was concluded that this, combined with facility – based action could prevent many child deaths each year(3).

1.4.2 Nutrition and health education

The use of health education and awareness is a common component of many if not all health intervention programmed around the world. Many international donors and lending agencies, operate on the premise that health education messages promote specific behavioural changes which yields benefit in terms of child survival. Improving the knowledge base of the target population is a strategy for improving health care practices. This is usually done with the hope that such knowledge will be translated into actions. Studies have shown that indeed mother's nutritional knowledge is positively associated with the nutritional status of the children(17).

The implementation of such health and nutrition interventions in rural Africa can be demonstrated in the activities of the MRC Keneba field station – The Gambia.

1.5 The MRC Keneba

Since 1974, the MRC has had a field station in Keneba. This is a rural village about 100 km from the Atlantic coast(18). The field station is formed up of 3 core research villages of Keneba, Manduar and Katong Kunda. These 3 villages are located within a radius of about 10 km. These villages have been part of longitudinal demographic and health surveys system since 1949. Data on maternal pregnancies, birth anthropometric measures and gestational ages has been collected since 1978(19, 20). Currently each of these villages has an approximate population of 2,058, 487 and 588 respectively (clinical records). Morbidity has been documented through attendance at the daily clinics, well - child or call clinics and emergency presentations. With the nearest government health centre (Karantaba) being 15 km away from Keneba and not readily accessible by public transport, there is almost a complete documentation of morbidity in children under 3 years of age residing in these villages(20, 21).

1.5.1 The supplementation centre

The Keneba Nutrition supplementation centre presents an example of both the community – based management and nutrition/health education approaches for the rehabilitation of severely malnourished children. It was established (approximately 20 years ago) to cater for the nutritional needs of the malnourished children from, the three core study villages of this MRC field station. With time, the services have expanded to include treatment of children from other villages within and outside the district. The activities of the centre include; provision of clinical care and nutritional supplementation to severely malnourished children, education of the carers on child nutrition practices, basic hygiene and food preparation methods.

By this approach, the carers stay within the community at night and return to the centre in the morning. Patients discharged from the centre are followed up for one month.

The centre therefore offers both curative intervention for the child (direct care and treatment) and preventative intervention (parent/guardian receives nutrition and health education from the staff of the centre and through the clinic mass media). This double intervention strategy is aimed at tackling some of the multi-factorial causes of the disease (16).

1.5.2 Child nutrition and health programmes

As a nutritional unit, Keneba has for several years now, exposed its study population to nutrition and health education. This it has done directly or indirectly through research and intervention studies hosted by the population in these villages.

Several protein-energy nutrition intervention programmes have been undertaken in this community for a considerable number of years. In 1994, Karen Hoare described a community – based infant weaning programs which adopted local foods to improve nutritional content(22). The project also resulted in the development of a simple but effective demonstration kit which was to form part of a wider health education initiative. This was aimed at reducing the prevalence of malnutrition in these participatory villages**.** Another study involving measuring the impact of structured health education programme on the incidence of infectious disease in young children was undertaken in 1999 in these rural Gambian villages(23)**.** The decline in diarrhoeal diseases in these villages was studied by Poskitt et al in 1999. The results showed a continuous steady decline (approximately 75% decrease in diarrhoeal incidence), though a substantial association between the reduction and nutritional status of the children could not be found. These results emphasized the importance of inadequate dietary intake, as opposed to infection in leading to growth faltering and failure of catch up growth in these poor village children (16, 17).

In this way, the population in Keneba have been exposed to both the community – based management of malnutrition and the education components on breastfeeding, weaning, food contamination, hand washing, hygiene and family planning. These interventions have managed to reduce the risk of dying in all age groups by as much as 5 to 10 times among 0 to 4 year olds in Keneba (23, 24).

These improvements in mortality rates, however, are not necessarily associated with improvements in nutritional status among these children(20).

1.6 Study justification

Worldwide health promotion programmes have long been premised on the idea that providing knowledge about causes of illness and choices available will go along way towards promoting a change in individual behaviour (25). This is because current practices on health information transfer take on the individualistic ethic (where a better informed individual is the most useful and appropriate solution to improving health). This approach often denies broader, social and environmental influences on health(26). It also assume that a one-way flow of information (from expert to layman) is both appropriate and efficacious(25, 26). There is no doubt that such knowledge is a necessary condition for behavioural change but there is evidence that it is rarely sufficient on its own(27). Many studies have shown that adequate knowledge does not always translate into appropriate actions (26). It is important therefore, to understand the factors which determine the translation of such knowledge into action. In order to do this, there is need to understand the determinants of appropriate health promoting actions as seen by the carers with respect to child health and nutrition. This will be very useful in the development of tools for evaluating existing health care interventions such as the Keneba nutrition supplementation centre.

1.7 Study question

We wanted to know the factors that determine appropriate child health and nutrition promoting actions among the rural women in Gambia.

1.8 Study's objectives

1.8.1 General objective

To identify the factors associated with appropriate child health and nutrition promoting actions among the rural women in Gambia.

1.8.2 Specific objectives

1. To determine the level of child health and nutrition knowledge of the community mothers using interview administered structured questionnaire.
2. To establish the factors determining appropriate child health and nutrition promoting actions among the research community using focus group discussions.

2 Methodology

2.1 Study site

This study was undertaken at the MRC Keneba field station in Gambia. Situated in the West Kiang District, Keneba experiences a seasonal agricultural system that revolves around an annual rainy season from July to November and a dry season from November to May(19). Rainfall has dropped by 30% in Gambia in the last 30 years. People living in Keneba and the surrounding villages are predominantly the Mandinka speaking people of West Africa and are mainly Islamic and polygamous.

2.2 Sample frame

The MRC – Keneba clinic database was used to identify mothers of children of less than 3 years of age from the 3 core study villages, who had been seen in the clinic within the past 12 months prior to the study(March 2005 – February 2006). 558 mothers were identified. Since the heights and weights of all the children are collected routinely at the clinic, it was possible to identify two groups of children:

1) Severely malnourished (having -2 SD of the median reference value for weight for height)
2) Well nourished (above the median reference value)

using the NCHS/WHO international reference data. From this criteria we identified 173 mothers to participate in the interview administered structured questionnaire.

2.3 Ethical considerations

The study was approved by the Scientific Coordinating Committee (SCC) of the MRC- Gambia and The Gambia Government/ MRC Laboratories Joint Ethics Committee.

2.4 The Questionnaire

An interviewer administered structured questionnaire was used to collect data from the 103 of the 173 identified mothers. This questionnaire was used as a screener to identify the women who would participate in the FGDs.

It included questions on breastfeeding and weaning, Immunization, diarrhoeal diseases, food supplementation, malnutrition and demographic characteristics of the family constituted the questionnaire (see appendix 1). We tried to validate the questionnaire as best as we could given the time constraint. The questions were discussed with both the public health educator and the nutrition supplementation centre educator at the MRC health facility. The questionnaire was translated into Mandinka and back translated into English. It was then piloted on 24 mothers who were randomly selected from Jali and Keneba villages. This piloting assisted in training the field staff as well as clarifying language and contextual relevance and appropriateness.

2.4.1 Questionnaire data collection

Two experienced field workers were trained to administer this questionnaire. The questionnaire was administered in Mandinka. The field workers and I were blinded to the nutritional status of these mother's children at the point of administering the questionnaire. The interviews lasted about 20 - 30 minutes each. They were administered individually and in private in the homesteads of each of the participants.

I marked and graded the 101 interview scripts. The final marks were entered onto a table in Microsoft word. These results were then sorted into 2 groups; mothers who performed into the upper quartile were grouped as, "knowledgeable" and mothers who performed on the lower quartile were grouped as, "not knowledgeable". The 2 middle quartiles were not involved in the study.

2.5 The Focus Group Discussions (FGDs)

A focus group is a carefully planned discussion designed to obtain perceptions in a defined area of interest in a permissive non – threatening environment. It is a loosely structured discussion among six to ten individuals that is used to gather information on a particular research topic. There is usually a moderator who guides the discussion, encourages participants to talk freely and reveal their thoughts and feelings about the research topic. Usually, the FGDs are repeated with several groups of similar makeup until the discussions no longer reveal anything new and relevant to the study(28).

2.5.1 Participants selection

Purposive sampling was used to select the participants such that participants in each group shared a set of similar characteristics. Based on the mother's nutrition/health knowledge status (from the questionnaire results) and the child's nutritional status (from the clinic records), the following four groups of mothers were identified:

Mother's knowledge status	Child's nutritional status
Good(upper quartile)	Poor (-2 SD and below)
Good(Upper quartile)	Good(above average reference)
Poor(Lower quartile)	Poor(-2SD and below)
Poor(Lower quartile)	Good(above average reference)

The mothers who displayed characteristics fitting into any of the above 4 categories were selected to participate in the FGDs. Two structured non - directive FGDs were conducted among each of the four groups of women identified. Informed verbal consent was obtained for each participant at this point.

2.5.2 Size of the group

For the purpose of this study it was found convenient to invite 8 – 10 mothers for each discussion group. A total of 70 mothers were invited.

2.5.3 The discussion guide

I developed the discussion guide under the supervision of Dr Chidi and with the assistance of 2 experience community nurses. The guide grew directly from the research question. Since the community was unfamiliar with FGDs, we though it wise to set the guide in the "funnel approach" (from general to specific) in order to engage the interest of participants quickly. We felt that very specific questions about the topic towards the beginning would set the discussion on a narrow and too focused trend. The questions were ordered from the more general child nutrition practices like breastfeeding, and trickled down to more specific aspects in child nutrition in this community.

Unstructured open – ended questions were suggested which would allow the respondent to answer from a variety of dimensions and thereafter non – directive prompts were used to facilitate the discussion and get into the complexity of the interesting issues raised (see appendix 2).

2.5.4 The discussions

All the discussions were conducted in an enclosed room providing privacy and good quality of tape recording. Transport and food was organised for all the participants. Mothers had been asked to leave the children at home.

The moderator attempted to create rapport with the participants during the beginning of each discussion through greeting and charting. Group members introduced themselves and told a little about themselves. After the welcome, an overview of the topic was given before the ground rules were set. At all times, consent was sought for tape recording before the tape recorder was put on. All the participants consented to recording hence a tape recorder, a microphone and well labelled audio tapes were used for data collection in each discussion.

The discussion facilitator, the note taker and the observer were all blinded to the groupings of the mothers. This was done to minimize interviewer bias. One of the experienced community nurses facilitated the discussions while the other took notes. I sat in and observed the discussion.

The discussions were facilitated in Mandinka and each lasted from between 45 minutes to 1 ½ hours. The notes taken, the transcripts and the observer's notes were all considered as data. The transcripts were translated by the facilitator and note taker.

3 Data analysis

3.1 Questionnaire

I analyzed the demographic information collected by calculating the means for the age of the mothers, number of children, time taken to complete the questionnaire and the grades acquired for each of the 4 groups of mothers.

3.2 Focus Group Discussions

I entered the 8 transcripts as word documents with each transcript being entered as a separate document. I used thematic framework to analyze the transcripts from the FGDs. I read through the transcripts and identified the emerging themes from the phrases. Using a table created in Microsoft word as shown below, I grouped the phrases by cutting and pasting them onto the theme and further into sub themes and created new themes as they emerged from the data. Four such tables were developed fitting into the 4 groups of participants. The description was done according to the research topic across the focus groups and included patterns, trends and relationships as revealed by the data.

Themes	**Sub themes**	**Phrase**	**Description**
Roles of men and women in the society	Subordinate role of a woman	*"The mother will spend the whole day in the rice field, the breast milk becomes sour. The mother will just give the child the breast without washing it, this can cause diarrhoea and weight loss".*	The mother's regardless of how young the children are have to go to the rice field the whole day. Proper care of the baby during this rainy season may be compromised by the activities of the season.

The themes emerging from each table were compared in order to identify differences.

4 Results

4.1 Participants

A total of 64 mothers participated in the 8 different discussions. Roughly, equal number of participants was recorded in each discussion group.

The table below summarises the nature of participants as indicated by data collected through the questionnaire. These embody the characteristics of the participants in the FGDs.

Groups		**Demographics: Means**		
Mother's knowledge status	Child's nutritional status	Mother's Age (years)	No of children	Grade acquired %
Good(upper quartile)	Poor (-2 SD and below)	35.4	6.19	82.18
Good(Upper quartile)	Good(0 SD and above)	31.14	5.36	79.21
Poor(Lower quartile)	Poor(-2SD and below)	30.44	4.25	62.3
Poor(Lower quartile)	Good(0SD and above)	32.26	4.63	62.95

4.2 The discussions

The themes emerging from the data did not differ according to the mother's knowledge status or child nutritional status; however the facilitators felt that, there were differences in the quantity and presentation of information in the groups. The two groups; poor maternal knowledge status- poor child nutritional status and good maternal knowledge status- good child nutritional status were felt to have produced less quantity of information with few illustrations and examples.

4.3 Discussion findings

Five themes emerged across all discussion groups. All the themes identified and presented are important, though some may carry more weight than others. Most if not all the themes are also interrelated and interlinked either directly or indirectly to one another.

4.3.1 The roles of men and women in the society

The roles of men and women in the society emerged as the main theme across all the subgroup discussions. The 2 roles identified included the subordinate role of a woman/wife and the dominant role of a man/husband.

4.3.1.1 The subordinate role of a woman/wife

This is where women as seen to be secondary, lesser, minor, inferior or subsidiary to a man. From the discussions and in relation to child health and nutrition, this was seen to be a factor in many aspects of the community. In child upbringing, food provision especially in farm work and gardening, in food distribution in terms of food sharing in the house hold, in decision making especially in child spacing/family planning and marriage.

The subordinate role of a woman is evident in the fact that the women are left almost entirely on their own in caring for the children. This forces them to engage in hard laborious work under very harsh conditions both in the farm and in the household without any or with little assistance from their partners. The rainy season is evidently the busiest time of the year for the women in this community. At this time regardless of the child's age, the mothers, are expected to attend to the farm work as well as performing their normal domestic chores accordingly. This leaves little or no time to care for the child as one mother observes, "*When mothers go to the field, the child is left with younger children who are playful and do not care about the food, much more giving the food to the young ones*". The mothers are very much aware of the

dangers of this arrangement as one mother noted, *"During the wet season, a mother can prepare very good food for the child and go to the farms. The child will be left under the care of a maid. The maid may give poor care to the child not feeding him regularly or eating the food herself. In the long run the child will become malnourished if the mother doesn't intervene quickly."*

For those mothers whom for one reason or another have to carry their child to the farm, they "…*make a wooden flat bed for them and a big basin that we use for washing their clothes or if you can buy a baby cot. We also buy waterproof nylon material to protect them in case of the rain*".

Culturally, the woman is expected to care for the children, "...*even if you have 10 children you have to care for them*". This means that, the woman have to juggle many activities at any one point especially during the rainy season. If a mother happens to be admitted at the supplementation centre, "…*the men do not even visit you at the supplementation centre until when you are being discharged."*

4.3.1.2 The dominant role of a man/ husband

This is where a man is seen to be bossy, overbearing, heavy-handed, authoritarian, assertive and or forceful. In child health and nutrition, this dominance of the men was felt to cut across areas of child care and rearing where the husbands were described as, "*not helpful when the wife becomes pregnant",* not sympathetic and irresponsible in the day to day care of the children. The women felt that the men would care only when the child is seriously ill or when the child has grown up and has started to generate income and when ready to be married off, "*I think our men do not feel sorry for us. I think they believe caring for young children is the responsibility of the woman until when the child has left and starts generating income that is when the father will join the mother to enjoy the fruits of the labour or when a man wants to marry their daughter".*

Men were also felt to dominate in the general decision making. Husbands have a final word on child spacing and marriage. If the man disagrees with the woman on an issue deemed serious like child spacing then very harsh disciplinary measures may be taken which may include beating and reporting the wife to her family. This is very humiliating and disappointing to the woman and her family.

The women are therefore forced to compromise with the men even in matters where the men are obviously uninformed in order to redeem their marriage and be spared societal humiliation.

"Just as I had earlier said, we are given to our husbands without our consents and so there is no togetherness in that marriage."

"...If the husband doesn't agree he will go and report the matter to your family (the wife's family) and you will be blamed or he will beat you seriously"

"We think about all these issues like child spacing and having fewer children but our husbands have the last say in them."

"As a wife you feel shy and are ashamed to say no because of the respect given to the husband."

There are however some women who due to fear of their husbands decide on, *"...taking family planning medicine secretly without our husband knowing"*.

In areas of food distribution, as one woman said, *"the men are our husbands and we respect them and so give them a larger share. They are the leaders and so we give them the best parts"*. This is so because *"We owe them respect because they married us. The brought us from our families and paid our bride price."*

There are also some instances where the men have been authoritarian on breastfeeding and weaning practices.

"The mother tells the husband or father that she will wean the child at the age or 2 years or less, if the husband accepts, then you go ahead and wean".

In food production, work load and returns seem to also favour the man where the women have to do farm work and also tend the home vegetable garden while the men (who are not employed) participate in farm work only. The women grow rice in the main farm while the men grow groundnuts, millet and some maize which they get to sell for some returns.

4.3.2 Support networks

Support networks are inclusive of any system organised by the community, the government or non governmental organisation that seeks to offer encouragement, assistance and or aid to the people in the community. In this context, support was seen to be a major factor especially in boosting or demoralising the ability of the mother to do the right thing for the child.

From the discussion, 2 types of support networks emerged

4.3.2.1 Social support

Social support is here defined as a source of encouragement, assistance and aid in family life, child upbringing (caring and rearing). Identified social support networks from the community were close family members and relatives including older siblings to the index child, husbands and in-laws.

The older children are left with the younger children when the mothers go to the farm, "*When mothers go to the field, the child is left with other children".* The elderly members of the community may also be called upon to play this baby sitting role, *"At times we will leave them at home under the care of an elderly person".*

Mothers look up to their own mother(s) or their mother(s) in-law for tips and suggestions on pregnancy, breastfeeding, weaning and food supplementation issues, "*my mother and my mother in law were very useful to me when I was pregnant. They were always at my side caring for the toddler".* This information sharing offers social support to the mothers.

Husbands are seen to offer social support only when the child is seriously ill, *"Some fathers if the clinic is far, they will take the child on a bicycle and the mother will meet them there or other will use ox-carts to carry mother and child to the clinic."* However, in the day to day up bringing of the child, most husbands were felt not to have much involvement.

Their lack of social support was especially felt in the areas of food production where, *"… it is a must for a woman to go to the rice field. If you don't go people (husband, in-laws, co-wives etc) will talk about it"* and child spacing.

There were also a few of the women who noted that now, "…*my husband is really helpful, he goes to the garden with me and takes care of the child especially when I get sick*" though the rest were keen to note that we should, "*Single out such a man in this community. Majority of the men would not*"

It is important to note that this community set support system may be well intended but insufficient. The mothers do realize that leaving their very young children with other children and or the elderly can be very detrimental to the health of their children. They noted that many unhygienic and inconsistent feeding practices usually occurring during these times are compromising to the health of their children.

"For example during the rainy season children are left with old women who cannot care for themselves or the young ones who are playful and the old woman may not cover the food for these children. Women don't have time for their children e.g to give them the proper care especially during the rainy season when every one is busy in their rice fields."

4.3.2.2 Child Health support

Child health support network is inclusive of the people or places that the community members would visit in search of aid and encouragement for their children's health. The MRC clinic and MRC supplementation centre were recognized for their support in child health. All the women felt that the MRC clinic offered free high quality health counseling, diagnosis and treatment to all people and at any time of the day. They felt that, *"When you come with a sick child, they are very eager to receive you, take the child's temperature, heights and weights and send you to the lab for further investigations. From there, you go to the nurse or doctor to examine the child and give him some medication. They also make sure that you administer the medicine as you are told".*

Marabout, herbalists and witch doctors are also important health advisors in this community. They offer spiritual guidance and miraculous healing to sick children.

In instances where money may be required for health services, the women's husbands may offer the finances required for the procedures, *"When the child is sick, the fathers are most of the time the people that give the moral and financial support, then other family members"*.

4.3.2.3 Economic support

Economic support networks included financial and income generating projects support. In a bid to offer economic support to the family, *"Men sell their millet and ground nut and buy more rice because the women's rice cannot take the family through the dry season let alone the whole year. So what they get from the farm is also for the family*". This is so especially where the men have no other source of financial income. This money is not only meant to supplement food but also suppose to assist in times of other financial needs in the family. The women will also, "…*grow egg plant, cabbage, green leaves and we eat most of these vegetables and others we sell"* in order to gain access to money. These efforts however are dependant on seasonality and may be frustrated for example, when during the dry season, *"The wells get dried up, the soil is sandy and falls in easily"*. Efforts to assist in crop production including requests for assistance from non governmental organisations in the past have not been very successful.

4.3.3 Alternative explanations of malnutrition

Before the biomedical explanations to disease, communities had their own names and explanations on the causes of these diseases. Different names and causes of malnutrition have been identified to exist in this community.

4.3.3.1 Malnutrition as an evil spirit

Sometimes, a malnourished child is not just a sick child but a monstrous child who has an evil spirit. A child (usually born with a big head and a small body) may be said to be an evil spirit. This child was transformed into a monster by the devil either in the womb or after birth. *"…especially if the mother have a habit of leaving the child alone"*

"Some people say that after delivering a baby, nobody should see it until when the cord is cut"

"Others say that a pregnant mother should not go either under or behind a big tree or urinate anywhere in the bush. A pregnant mother should not be caught in the bush alone.

Since this evil spirit may be transferred from the child to the other healthy family members, in most times, this child is isolated and neglected to the point of death , *"At times, the devil will disappear by itself but some mothers will take such a child to the bush and place the child somewhere then leave for a few hours. If the mother returns and does not find the child, then she will know that it was really the devil but if the mother finds the child where she left him then she will know that it is a human being, she will take the child home and continue treating it".*

4.3.3.2 Other explanations

Other identified causes of malnutrition as believed in the community include;

"Some people "mandinka" will say it is "montoo" where the chid will be having high fever, "pot" abdomen and brown hair or "tiyoo" which is another disease associated with malnutrition"

"Tiyoo is a condition that occurs during the rainy season when a child is put to sit on the floor or wet ground. Tiyoo is usually treated by the herbalist."

"At times it is said that the child has "Fonoo" (bad wind blown by evil spirits) or "crocodile bamboo".

Childhood ailments including malnutrition are all in, "…*the will of God"* as *"...you may have 2 – 3 children but you don't know whether the 4th child will be the luckiest among your children".*

4.3.4 Poverty

Malnutrition has on many occasions been referred to as, "the disease of the poor". It is no wonder therefore that the women in this community would identify poverty as a factor contributing to their inability to transform knowledge into action.

4.3.4.1 Poverty as lack of food and money

Here, poverty is the state of having little or no money and few or no material possessions. In this community, poverty was associated with either the lack of food or the lack of ability and money to buy food or the lack of a dependable source of food. "*The mothers may want to do or give certain foods or things to the child but cannot afford it, "... this can lead to malnutrition"*

Apart from the lack of food, there are certain activities in the community that have been associated with either the onset or progression of malnutrition that can be traced back to poverty.

"… for some children during the introduction of the weaning foods after 6 months the mothers give less quality foods to their children because of poverty".

"The men going away could be due to poverty…"

"It is all because of poverty. We cannot watch our families die in hunger when we have the ability to work".

"Malnutrition can be caused by poverty especially during the rainy season when there is scarcity of all the food. There is lack of variety of foods".

4.3.4.2 Poverty as powerlessness

Capability approach recognises powerlessness and vulnerability as aspects of poverty. These are feelings that may either be caused by or aggravated further by poverty. In the same way, the feeling of hopelessness and powerlessness (despair and desperation) is a cause and a consequence of malnutrition. Desperate situations sited focused mainly of food production.

"It is beyond us. Each of us would want to stay at home with our children but we have to survive. The only way for us to survive without begging is to farm. We do not like it that way but we have no choice".

"No, pregnant women will not refuse to go to the farm because if you don't go then no one will work on your farm so you will try and go".

The women are aware that the food situation they are in is in need of change, *"…..we want to be with families at home in a better living condition than this"* but felt powerless changing it from within the community, *"We have asked for support from many places but they are yet to respond"*.

Hopelessness seem to have pushed the women to believing that, *" …too much hope is part of greediness"* and that *"Life is trial and error"*.

4.3.4.3 Poverty as vulnerability

Environmental vulnerability as experienced in this community defines poverty. Harsh weather conditions and seasonality were identified as factors that human beings may have little control over. This leads to dry seasons where food becomes scarce and wet seasons which attract seasonal vectors like mosquitoes causing malaria "*When the child is above certain age and they have malaria, they can loose weight"*.

Other insects and animal predators *"… attack the crop and monkeys destroy our plant especially the banana trees"*.

In the dry season, "*Water shortage is also another problem because we do not have enough wells in our gardens"* and *"the wells dry up"*.

Seasonality also affects food production and consumption and force people to change their diet *"In the wet season, we may not get the best ingredients for it. During the wet season, everybody is in the farm, we don't have market women here and the ones we have got here are very few and sell just minor things that are the problem even with fish"*.

Here, the community is clearly at the threat of seasonality. Seasons dictate the activities, food production and child health. The unpredictability nature of seasons defines further the vulnerability of this community which may have undesirable effects.

4.3.5 Health seeking behaviour

Health seeking behaviour is partly linked to people's beliefs and practices. It however becomes a factor in understanding why, when and how the community decides to participate in a particular treatment behaviour and not another.

There is no doubt that herbalists, marabout, witch doctors and biomedical clinics are all options in seeking health consultation and treatment in this community. There are however several reasons as to why one would choose to visit one and not the other. The choice here is seen to strongly be dependant on the perceived cause of the disease in consideration.

This is seen to be true as demonstrated in these quotes, *"…if the child has been bewitched then the child should be taken to the witch doctor"* and *"…. If a child has tiyoo, you go to the herbalist for treatment"*.

Marabout, who are considered as both spiritual and traditional healers would be consulted for issues on; how to stop a child from breast feeding, where, "… *the marabout will recite something on his head and the child will stop breastfeeding with no disturbance at all.*" Or "*The marabout will ask me to bring porridge and if he mixes some spiritual water with the porridge and the child eats that porridge, the child will immediately stop breast feeding"*.

There was however no identified sequence of consultation. Some mothers would consider the clinic first while others would not as is the situation of a "monstrous child" where, "*When we have such a child, we start from the health centre until we have established that we are dealing with a monster"* while in another situation, *"These children when taken to the health facility get better but if they don't then you have to see traditional healers as well"* or even *"The sick child is at times taken to the herbalist if no improvements are noted, then they will go to the clinic*". This demonstrates the belief that the biomedical clinic does not have the answers to all health problems.

5 Discussion

5.1 Study limitations

This was a well planned study. It set out to identify factors that are associated with child health and nutrition promoting practices among the women in rural Gambia. It required that I draft the proposal in consultation with an MRC colleague and apply for ethical approval before arriving in The Gambia. However, once in the Gambia, I had only 8 weeks to develop the questionnaire and conduct the FGDs. The process of questionnaire development demands time and careful consideration(29). Time constraint did not allow for adequate validation of the questionnaire and therefore would compromise the information collected(29). However, the questionnaire provided a frame that helped identify and separate mothers into the 2 knowledge levels.

Secondly, from the FGD's, data was collected in Mandinka and had to be translation before being enter for analysis. This translation process may have introduced bias (30).

5.2 Study findings

The 5 main themes emerging from the FGDs include the roles of male and female in the community (gender roles), support networks, alterative definitions of malnutrition, poverty and health seeking behaviour. These are factors that may influence a mother's ability to practice appropriate child health and nutrition in this community.

To begin with the lack of difference in themes among the discussion groups may be explained in several ways. Firstly, the uncertain validity of the questionnaire may have had an influence on the grouping consequently affecting the findings from each of the FGD thus resulting in identical themes. Secondly, there may have been a lack of variation in other characteristics of the participants.

Demographic data indicate that the average age, level of formal education, number of children, occupation and places of residence of all the participants does not vary. This means that the women live a communal life and are in a position to influence each other extensively.

5.2.1 The roles of men and women in the society

The study findings suggest that the different roles played by the men and the women affect the health and nutrition of the children in this community. The dominant role of a man has been shown to have an influence either directly of indirectly on child health and nutrition. Just like in many communities in rural Africa , the Keneba community is dependent on subsistence crop production. In such communities, there is vulnerability and uncertainty in crop yield brought about by seasonality that affects the feeding attitudes, practices and diets. The association between crop production and gender bias as observed in this study is consistence with findings from other studies (31) where men would produce the cash crops while women would be expected to work on the subsistence crops (mainly grains). These roles interplay such that women will produce food for the family consumption while men will be responsible for the family finances (from the sales of the cash crops) and thus dictate on all decisions that may require finances in the family. In this way, the woman is subordinated to the man. Since the nutritional intakes of the rural households is positively correlated with the crop yields, the variation in yields due to seasonality has been shown to worsen this gender bias (31).

Low birth weight, malnutrition and pregnant mother's nutritional status are closely associated with the progression of childhood malnutrition. In this study, long hours of hard labour in pregnancy were identified as a common thing in this community. Women have been reported to give birth in the farm. Other studies have shown that, because men mediate women's access to economic resources in many parts of the world, women's nutritional status, especially during pregnancy, may depend heavily on male partners and relatives(32).

The positive affiliation between family planning and child health and nutrition has also been established and studies have shown that the fewer the number of children the better the nutrition and health outcome and thus the higher the rate of child survival (33) The situation in this community is such that the men are thought to be rigid and ignorant on issues of family planning. Consistently other findings have indicated that men tend to hinder fertility decline(34). Studies from other parts of Africa have shown that, contraceptive use and effectiveness depends directly on men's involvement(32). This is because of the role that men play in fertility which may be socio - cultural or economic. In most African societies, the payment of bride price- which certifies the woman as a recognised wife- by the prospective husband's family to the family of the bride is meant to compensate her family for the loss of her productive services. This assures that reproductive decisions are the domain of the husband and his descent group(34). In cases of forced and or child marriages, as indicated in the results, it becomes impossible for the women to negotiate in their own reproductivity. This is because the couple has not operated as a decision – making unit since its initiation.

Female – centred methods of contraception may be significantly influenced by male partners, in that men may mediate economic resources required to access these methods or may sanction or directly prohibit women's use of these methods(32). At times, as in this study, the women felt that the men have no concept of the burden of child care due to the lack of direct participation in child upbringing.

Family planning is further complicated by the control of societal and religious norms in Africa. Studies have for example shown higher fertility in Sub-Saharan African Muslim population as opposed to their Christian counterparts(34). A study done on the Pare people of Tanzania described this difference and linked it not to theological positions but to the fact that the different religious affiliation influences different decisions eventually leading to different pathways(34). This may be one way of explaining the inflexibility demonstrated in family planning and the prevalence of the high fertility rate (4.6 per woman) in Gambia.

5.2.2 Support networks

The results of this study have shown that a variety of support networks operate in this community. Like many rural African communities, grandmothers, are well thought to be helpful with child upbringing. Their wisdom is treasured and their authority is felt in many aspects of day to day life(35). Young mothers in these rural villages are still obliged to seek their expertise and authority in child feeding, child health and child spacing. The grandmothers also provide support with child care especially during the farming season and stability in the women's marriage. They command respect from their sons (the women's husbands) such that disagreeing with the grandmother may bring very detrimental consequences to the woman (son's wife). This goes to demonstrate that grandmothers still play a significant role in defining and enforcing practices in the women of reproductive age (WRA) since husbands will also expect their wives to follow grandmother's instructions. Understanding the role of grandmothers and other close relatives in child health and nutrition in different communities may be the beginning of admitting the influence of this group of people in child health and nutrition.

A vast majority of community nutrition and health programs in developing countries focus on WRA and a few explicitly involve senior women or grandmothers. The multifaceted role of older women or grandmothers has been documented in other studies in Gambia(36). Sadly this group of people has not explicitly been involved in many of the child survival interventions. Studies have revealed a series of widely held negative biases regarding the role of older women which tends to discredit their experience and involvement in such programs(35). However, the findings from this study suggests that it does not help to deny, stereotype and overlook the influence that these older women still have on the modern mother and child health (MCH) practices. The next step would be to find ways to positively in cooperate this group of people into the existing and new child survival programs in rural Africa.

5.2.3 Alternative explanations of malnutrition

In order to understand malnutrition and child health in any particular community, substantial knowledge of both the beliefs and practices associated with the disease cause and treatment in that community is essential(37). This understanding gives a direction in initiating programmes and an insight in understanding different reactions that may be experienced from the community. The results touched on some of the alternative traditional beliefs of what malnutrition is and how it could be prevented and treated traditionally in this community. The understanding of such beliefs and practices is aimed at complimenting and possibly improving on the existing biomedical approaches to preventing and treating malnutrition in different communities. As demonstrated in this study, traditional beliefs and practices influence biomedical efforts in that they may delay and or complicate the diseases status of children to the point of death or disability. They may also deplete the financial resources available to families because of the often high cost of consultation and treatment. Such families may later not be able to afford payments for appropriate biomedical intervention.

Beliefs and practices are also responsible for social stigma of the disease as seen in the case of "the spirit/monstrous child". This may lead to negligence in malnourished /underweight children as described in the case of the "monstrous child".

Beliefs and practices when fully understood may be used positively to the advantage of biomedical intervention. For example, in this study, *"Tiyoo which is a condition that occurs during the rainy season when a child is put to sit on the floor or wet ground"* could be used to emphasise the need for proper child care during the wet season. Such beliefs could be identified and exploited in other child health campaigns including bed nets, immunizations, hygiene and proper child care practices for the benefit of the community.

5.2.4 Poverty

Poverty includes many aspects that cannot be measured. In this study, we identified 3 dimensions of poverty.

Firstly, poverty when described as lack of food, lack of a dependable source of food or the lack of money to buy food becomes a direct cause of malnutrition. The percentage of malnourished children under three in this community (17.4%) is still unacceptable and is an indicator of poverty. The women in this community are well aware of this fact. There is evidence of some attempts to diversify and seek for agricultural support in pursuit of alternative sustainable sources of food. This shows that, the community is aware of the causal relationship that exists between food availability/consumption and malnutrition(1).

Secondly, poverty as powerlessness especially as motivated by to gender bias has been suggested in our findings in this community. The women in this community lack a sense of financial control over the household resources which increase inability to take a different position from that of the authority figure in the household. In this community, powerlessness has also been demonstrated in the existing practice of forced and or early marriages. In this case, the woman is robbed of the power to lead a healthy life and enjoy freedom, dignity and self esteem. The human capability concept of poverty defines poverty as not merely in the impoverished state in which the person actually lives, but also in the lack of real opportunity (due to social constraints as well a personal circumstances) to lead valuable and valued lives(38). This indicates the association between powerlessness caused by gender inequality and dominance of men and poverty (39). Powerlessness indicates the denial of choices and opportunities that are basic to human development.

Finally, the concept of poverty as vulnerability has also been identified in the results of this study. Vulnerability is seen especially in the susceptibility of the community's food situation to environmental conditions. The community's survival is shown to be fully dependant on crop production which in turn is reliant on the season. This means that any unpredictable change in seasons may threaten the lives of the community to a great extent. This finding is in consistent with literature (10) that identifies chronic and transitory food insecurity (where people move in and out of food security due to seasonality) as a factor contributing to malnutrition in Gambia.

The relationship between child malnutrition and seasonality in this study is such that during the wet seasons, communities experience the "hungry season" and most children suffer from malnutrition. Our findings have suggested that improper child care practices including negligence and infections during the wet seasons may be responsible for the observed seasonal fluctuation of the disease.

The relationship between poverty and vulnerability is such that while the two are often related, they are not synonymous. It is true that exposure to a particular vulnerable situation does not necessarily mean deprivation, but that exposure in its self becomes a function of an external risk to the internal defencelessness (38).

5.2.5 Health seeking behaviour

The results of this study have identified herbalists, marabout, witch doctors and biomedical clinics as options in seeking health consultation and treatment in this community. The reasons for choice of one and not another in this community was seen to be strongly dependant on the perceived cause of the disease in consideration. For this finding, literature has suggested various broad categories of barriers and determinants of this behaviour. These categories have included geographical, social, economic, cultural and organizational factors(25). This categorization is in consistent with our findings in that, culturally, the status of women and the distribution of household resources as identified in this study may become a barrier and a determinant to health seeking in this community.

Another aspect of health seeking behaviour is the identification of a pathway or the processes at work in making the decision. This study however was unable to establish any particular pathway or a health seeking patterns in the community. Findings in many studies suggest that for some illnesses, people will pick a consistent particular pathway however other studies with results consistent to our results that have revealed that women may follow different pathways for different conditions depending predominantly on the role of the husband, social networks and cultural customs(25). There is evidence that the choice of traditional and folk medicine has potentially profound impact on health. This calls for the need to be more sensitive to the realities of health care seeking behaviour in health interventions.

6 Conclusions

This was a well planned study that aimed to identify factors responsible for child health and nutrition promoting actions among rural women in Gambia. Though the questionnaire development process was imperfect, the grouping established using the questionnaire was able to identify the factors which are consistent with findings from other studies in Africa. The findings have shown that, transferring appropriate knowledge to individuals is important but not enough to induce appropriate action. There is need to identify and include other factors that may affect the transfer of such knowledge into action. The findings also concur with the fact that malnutrition is a product of complex interplay between many different factors. This accentuates the call for a multidisciplinary approach in the fight against malnutrition.

Finally, for a more detailed understanding of these factors, I would recommend conducting studies focusing on individual themes as identified in the findings of this study.

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9 Appendices

9.1 Appendix 1 – Knowledge screening questionnaire

Factors associated with appropriate child nutrition practices among women in rural Gambia – an exploratory study

Screening questionnaire **Time started: _ _|_ _**

Child's name: ________________________________Child's Age: _____________No of children: ______

Mother's name________________________ Mother's Age: _______ No of times married: ______

Study ID: ________________West kiang No: ____________________Village ________________

Highest level of education attained: Arabic______ None formal_______ Formal Grade________

Name of interviewer: __________________________________

1. **What should a child be fed on during the first 4 months of life?**
   a. Breast milk, cows milk and water
   b. Breast milk only
   c. Breast milk and water
   d. Breast milk, mono and water

2. **How many months should a child be fed on breast milk only?**
   a. Six months
   b. Two years
   c. Two months
   d. One year

3. **What should happen to a child who is less than one year old and whose mother is pregnant?**
   a. Be stopped from breastfeeding
   b. Continue to breastfeed
   c. Should be sent to the grand mother
   d. Should be removed from the house

4. **At what age should a child start taking weaning foods?**
   a. Four - six months
   b. Two years
   c. Two months
   d. One year

5. **If a child is passing watery stool at home, what should the mother do for the child?**
   a. The mother should immediately rush the child to the hospital
   b. The mother should start sugar salt solution or ORS if available
   c. The child should be given antibiotics to kill the germ causing the diarrhea
   d. The child should be isolated from other children

6. **How many times a day should a child be fed?**
   a. Three times a day
   b. Five times or more a day
   c. Less than three times a day
   d. Only when the child cries

7. **What is the importance of immunization?**
   a. It prevents diseases in the child
   b. It makes the child eat better
   c. It helps the doctors to carry out research on the child
   d. I don't believe it is important

8. **What is the reason for attending call clinic?**
   a. Checking to see that the child is growing well and for Immunizing the child

b. I do not understand the purpose of the call clinic
c. Allowing doctors collect blood for research
d. Bringing mothers to MRC for MRC work to go ahead

9. What causes diarrhea?

a. Feeding a child with unwashed hand
b. When a child has bad stomach
c. A bad marabout casting spells on the child
d. Looking at the child with an evil eye

10. What should one do after cleaning a child who has passed stool?

a. The person should wash her hand with soap and water
b. The person should use her cloth to wipe the hand
c. The person should immediately feed the child
d. It does not matter whether the hand is washed or not so long as the hand looks clean

11. In order to prevent diarrhea, which of the following should one do? (answer yes or no)

a. putting a charm round a child's waist______________________
b. getting a very powerful marabout to pray for the child__________
c. washing the hand before feeding the child____________________
d. going to MRC clinic regularly______________________________
e. Heating the child's food well_______________________________
f. Giving the child cold mono_____________________________
g. Allowing the child to feed himself_________________________
h. Feeding the child left over food so that it will not waste___________

12. Answer yes or no

a. Brown hair is normal and nothing to worry about ______________
b. If a child is refusing to feed, I should look for medicine to make her eat ___________
c. A child that is passing watery stool should not be fed because her stomach is dirty ____
d. If a child is not passing stool, the child should be pumped to pass stool _____________
e. If a child is sick, I should first go to a marabout for help ________________
f. It is good to take a child to the clinic only when other helps fail _______________

13. What can be added can be added into rice and mono to make it healthier?

a. ____

b. ____

c. ____

d. ____

e. ____

14. What signs will tell me that a child is not getting good food?

a. ____

b. ____

c. ____

d. ____

e. ____

Time finished: _ _|_ _

9.2 Appendix 2 – Discussion guide

<u>Focus Group discussion guide</u>

<u>Introduction</u>

Team introduction and a brief introduction of the project: Some of you might know some of us but for those who do not know us, our names are ………

We are a team from MRC Keneba. We are currently involved with a child nutrition project. This is a project which is trying to look at the relationship between what the mothers know and how what they know affects the way their children grow and develop.

To begin with, we had to find out what the mothers know and so we exposed all of you to an interview.

As we had explained earlier, in this project no samples are to be taken. The only thing we will want to do is to take the measurements of your children after the discussion.

Introduction into the ground rules of the discussion

Usually during such discussions, there are a few rules to be observed.

1. All the views that we give are very important since these are our children and we know them better than anyone else so what we would like to ask is when one is speaking please let us give her time to speak until when she is finished then another one can speak.
2. Please feel free to speak your opinion. I will not point out anyone to speak since we are all adults just feel free to speak we will all give you the time. This is not a competition and we don't all have to agree but need to respect each others opinion during the discussion.
3. Since this is a discussion, we would like it if all of us can participate and speak. We would like to have the opinions of everyone so for the sake of this discussion, we are all equal, and no one knows more than the other.
4. During this discussion, we will not be using anyone's name for anything. We however need to identify what every one of us says so that is why we will pin up a number on you and use that number to identify you.
5. We would like to ask for consent from you to use the microphone and tape recorder that you can see here to record the discussions. As you can see, one of us will be writing down the proceedings but as the discussions become hotter, the hand becomes tired. All the views are very important to us so that is why we would like to record. We will only use the tape to fill in the blanks that the note taker will have left. We will not be sharing the tapes with anyone who is not involved in this study. After wards, all the tapes shall be erased.

6. In order to show that you have given us the permission to discuss and tape the discussions; we will ask you to choose among yourselves 2 volunteers to sign this agreement. We will then leave one with you and go with one for our records.

(2 volunteers to sign the consent forms)

Discussion

- Weaning practices/ breast feeding
- What do we understand by breastfeeding
- Is it really important to breastfeed?
- In this community when you want to stop a child from breastfeeding how do we do it?
- Is it really important to do this?
- How doe the mother contribute in this process
- Pregnant mother and breastfeeding (why not?)
- Good food
    - How would you define good food?
    - Example of good food in this community
    - How do we identify children with signs of not getting good food?
    - How come we still have children in this community who have signs of not getting good food
    - What other diseases are associated with these children
    - What are the reasons for not being able to provide good food

- Since we live in a village and we are not alone, assuming that you are at home with your child and s/he takes ill what do you do?
    - What if people advice you on an action you disagree with? Normally, what do we do?
    - Case scenario (How would you advice a fellow woman who comes to you with a situation where they feel they have gone through all the proper channels but feel like they are not getting helped?

- What do you think can be done to eliminate this problem completely?

Conclusion

We are very grateful that you agreed to come over for this discussion. Does any of you have a question before we officially close the discussion? *(Allow time for questions of any sort*).