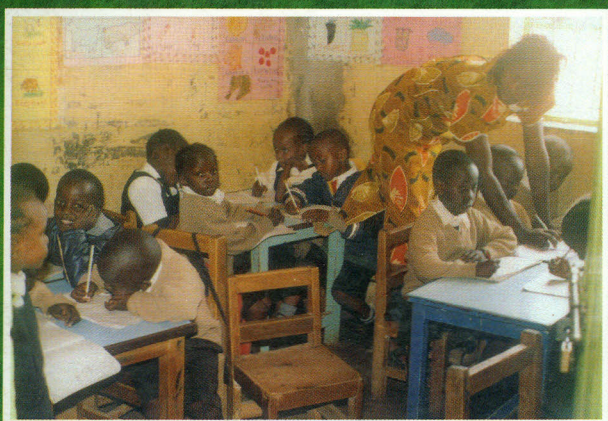


STATUS OF ENVIRONMENTAL HEALTH EDUCATION IN THE EASTERN AFRICA REGION: OPPORTUNITIES, CHALLENGES AND THE WAY FORWARD



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Abstract

The health and well being of expectant women depend greatly on the nutritional intake and moral support received from family and the community. Studies done show that malnutrition before, during and after pregnancy coupled with stress brings complications and, thus, endangers the life of the mother and that of the baby. The study attempted to investigate whether pregnant women involved in this study ate a well balanced diet and whether their level of education and monthly income had any significance to their livelihood. The findings indicated that although the majority of the women had at least some level of education, this did not change the fact that poverty was the determining factor. Since good nutrition, and stress free environment tend to improve birth outcomes, it is therefore important for the Government to take measures to improve infrastructure by ensuring that every woman has access to good health care, create and educate women in income generating activities so as to sustain their livelihood, improve poor sanitation conditions, and promote women's perceptions, family and the surrounding community.

Introduction

Malnutrition contributes to high rates of maternal and infant deaths; therefore governments have an obligation through their political, health and legal systems to address the cause of poor maternal health. It is estimated that around 515,000 women lose their lives each year from maternal causes. For every woman who dies, approximately 30 more suffer injuries, infection and disabilities in pregnancy or childbirth (UNICEF, 1998).

Although economic growth can foster improvement in nutrition, many factors can influence this process. These include: the status of women in society, education and fertility rates, the burden of infectious diseases, governmental commitment at the local and national level to health and nutrition issues, and the development of the primary health, infrastructure. Poverty may be considered as the existence of relationships which permit or promote varying degrees of deprivation among different groups of people in a given community / society. For example, the most affected groups in Nairobi are the jobless / underemployed and most specifically, pregnant women with very scarce resources for their survival. Some characteristics of socioeconomic problems in the communities include lack of water, poor infrastructure, poor schools, people fighting, men and women drinking, and insecurity among the people.

Maternal stress and complications

Most complications seem to be related to the severity of maternal malnutrition, thus mothers who lose more than 10% of their body weight and fail to gain adequate weight before delivery, have a great risk of fetal complications. Research indicates that prolonged stress, malnutrition and dehydration in the mother puts an unborn child at risk for chronic diseases (e.g., diabetes, heart disease) in later life.

Nutrition and prenatal health

Nutrition is a very important factor in the development of a healthy pregnancy. Barges (1994) asserts that undernourished women are weak and often sick. They are likely to have small weak babies and if these women are severely undernourished, their babies have to suckle more to get enough breast milk and their breast milk may be low in some nutrients. Most women who cannot afford a decent meal suffer common nutrition disorders such as anemia, under-nutrition, stunted height and iodine deficiency disorders. Studies by Family Care International (1998) reveals that a woman who becomes pregnant when she is already poorly nourished is much more likely to suffer from complications like infection, severe bleeding, and premature labour than a well nourished woman. According to Arkutu (1998), in many African families, it is a tradition that men and boys eat first, followed by girls and finally the mother. In practice, when the family is poor, this often means that girls and women do not get enough to eat, especially of the foods that help them grow and gain strength. As a result, some girls do not grow as big as they could be.

Problem statement

Studies in prenatal care indicate that cases of both infant and maternal mortality rates are increasingly high among poor women, who have little or no education and little or no income to meet their daily nutritional needs. In Kenya, recent maternal mortality rates (deaths per 100,000 live births) is 1,300 and infant mortality rates (infant deaths per 1,000 live births) is 74 (UNICEF, 2001). In addition, statistics in urban district hospitals indicate 95 deaths per 1,000 births. The negative effect of poor nutritional intake, drinking alcohol and use of illegal drugs are associated with low birth-weight, infant mortality, sudden infant deaths, miscarriage, and childhood illness (Brown 1985). These habits greatly affect the pregnant women's health status. The National Center for Health Statistics (1988) indicates that smoking is associated with being younger, less educated and never-married. Research studies indicate that lack of social support and poor primary relationships cause psychological distress among pregnant women resulting to low birth-weight infants

and the development of pregnancy related complications (Wandersman L., A., & Kahn S. 1980).

Also, cases of stillbirths, neonatal and infant deaths are associated with complications of labour, low birth-weights and maternal illness, infections, and malnutrition (Kirumbi, 1997). According to Muigana (1993) the most vulnerable groups affected by stillbirths and infant deaths include urban slum dwellers and female-headed households.

Methodology

Therefore, this study examined how poverty influences the nutritional status of expectant women attending clinics in Nairobi, Kenya. It focused on prenatal clinics in low income areas of the eastern part of Nairobi where the majority of the low income women live, and used both quantitative and qualitative paradigms. A survey questionnaire, content analysis and observation check lists were used in obtaining data. The researcher purposively selected four areas for this study and these areas include Makadara; Embakasi; Starehe and Mathare slums. The population of this study consisted of 170 pregnant women randomly selected from clinics in the area.

Objectives of the Study

- To establish the socioeconomic and demographic status of pregnant women
- To determine the nutritional knowledge, attitudes and preparedness of pregnant women
- Identify health habits practiced by the pregnant women
- Establish the prenatal health status of pregnant women attending prenatal clinics

Study results and implications

The findings of the study in regard to educational level of respondents is as indicated in the Table 1.

Table 1 Frequency distribution showing respondents level of education

Level of education	Frequency	Percent
No Education	21	12.7
Primary Education	65	39.4
Secondary Education	79	47.9

It is assumed that level of education helps women to understand and learn preventative measures of some diseases which they might contract and thus will affect their health and that of the unborn babies. According to Muigana (1993), high levels of education and widespread literacy contribute a great deal to women's good health, since access to medical services are no longer matters of great concern.

Range of monthly income

The findings of this study indicated that, more than half (57%) of the respondents were earning less than Kenya shillings 4,000 per month while about a quarter (25%) reported earning over Kshs. 6,000 per month (see Table 2). Most of them were engaged in low paying jobs which in most cases are temporary and needed no skills to be hired.

Table 2 Frequency distribution showing respondent's range of monthly income.

Description (Kshs.)	Frequency	Percent
None	6	3.5
less than 2000	50	29.4
2001-4000	46	27.1
4001-6000	27	15.9
6001-8000	23	13.5
Over 8000	18	10.6

Nutritional health practices during pregnancy

The findings indicated that about 41% of the respondents ate two or more servings per day from food group A, 30% from food group B, 76% from food group C, and 71% from food group D (see Table 3).

However, 92% of the respondents who reported that they did not eat anything in food group A, did not eat fish and eggs mainly because of poverty and some cultural taboos - a belief which denies pregnant women essential nutrients for prenatal development. Therefore, the findings of this study indicated that only 23% of the respondents had a well balanced diet.

Table 3 Frequency distribution showing the respondents' dietary intake

Description	1-2 times a wk or less	3-4 times each wk	Usually once a day	2 or more times/day	do not use
Food groups	%	%	%	%	%
A group					
Meat	33.1	19.3	29.2	13.3	6.6
Fish	37.4	12.1	11.0	5.4	34.0
Eggs	32.3	21.0	15.7	10.0	22.4
Beans	42.1	24.4	17.3	10.5	7.6
Chicken	57.2	15.8	4.7	1.8	21.4
B group					
Cheese	17.3	7.6	5.5	3.8	66.1
Milk	11.4	9.1	47.3	23.5	9.2
Yogurt	19.1	7.3	5.7	1.2	68.7
ice-cream	19.5	3.4	9.0	1.2	67.3
C group					
Fruit	4.1	8.3	49.3	36.6	3.1
Vegetables	7.0	11.7	39.5	39.7	3.9
D group					
Whole grain	22.7	18.5	25.2	20.3	15.0
Cereals	21.9	14.1	29.8	21.1	15.4
Bread	8.0	12.0	44.1	30.0	7.1

Smoking/use of illegal drugs

The researcher aimed at investigating whether expectant mothers smoked or used illegal drugs during their pregnancy. The findings indicated that the majority of the respondents (79%) had never smoked / used illegal drugs and only 21% smoked / used illegal drugs.

Recent studies done show that cigarette smoking or even continual exposure to a smoke - filled environment is harmful to both the fetus and the mother; causing retarded fetal growth and a higher incidence of neonatal and infant mortality. Besides aggravating acute and chronic respiratory conditions, smoke also interferes with the body's ability to use vitamin C, a vitamin needed for synthesis of connective tissue in the growing fetus (Fabro & Scialli, 1986;). Also studies done, have revealed that during the extremely critical time when the baby is first being formed, even single doses of otherwise harmless drugs taken by the mother may cause serious deformities of the embryo. For this reason, pregnant women should avoid all drugs except those specifically ordered by their physicians.

Drinking of alcohol

Drinking of alcoholic beverages during pregnancy should be avoided. Recent studies reveal that a pregnant woman who drinks as little as 3 ounces of liquor a day runs a significant risk of bearing a child with congenital defects. Foetal Alcohol Syndrome (FAS) deformities include retarded physical and mental growth and defects of the heart, eye, ear, face, and brain. The risk is greatest among babies of chronic alcohol abusers. According to the findings of this study,

the majority (78%) indicated that they did not drink alcohol and only 22% indicated that they drunk alcohol.

Use of prenatal vitamin

Prenatal vitamin is a food supplement which provides iron and folacin to pregnant women because it is difficult for them to obtain adequate iron and folacin from food alone. So doctors prescribe iron and folacin supplements to pregnant women who have iron deficiency or anemic. The findings revealed that 13 % used prenatal vitamins once a week or less, 14% used several times a week, and 17% used it every day as recommended by their doctors, while 56% did not use it at all because some did not need it. The majority of the respondents of this study were not aware of the importance of using prenatal vitamin, and a few who did, could not afford to buy them even though they were recommended by their health care providers. Some reported using them a bit late in their pregnancies.

Problems experienced by the expectant women

Respondents were asked to share some commonly experienced problems they encountered when seeking for prenatal care and their responses indicated that, 51% of the respondents experienced problems with transportation to the clinics, 48% had child care problems, 33% had to wait too long at the clinic before getting attended, 45% had trouble getting an appointment at a convenient time, and 54% had difficult getting a prenatal clinic they could afford.

In addition, backache, bladder infection, abdominal pains, stress, and anemia were noted to be the common

pregnancy related discomforts which affected most of the respondents in this study (See table 4). This was quite true according to the lifestyle of most Kenyan women live in - that is; strenuous work activities and long hours without good nutritious food, lack of basic and health education, stress of managing the household and children affairs - since most of their husbands stay away from home, or are busy involved in polygamous marriages which could result in sexually transmitted infections including the killer disease AIDS.

Most studies done relate closely to this study in the sense that most women are rarely allowed to influence decisions in the family or community. They often have few rights under traditional laws, and have little control over money or other resources. (Arkutu, 1998, Narayan & Nyamwaya, 1995). Further these problems contribute to women's poor health - i.e. preventing them from getting medical care and limiting the amount of money they can spend on food or other necessities for themselves.

Table 4: Frequency table showing the health condition distribution of the respondents

Condition	Frequency	Percent
Low risk pregnancy related discomforts		
Vomiting	24	14
Nausea	19	11
heart burns	17	10
Varicose veins	25	15
leg cramps	23	14
Constipation	27	16
Hemorrhoids	29	17
Backache	114	67
Edema	20	12
Bladder infection	117	69
STD	24	14
Abdominal pains	105	62
Stress	124	73
Anemia	85	50
High risk pregnancy related discomforts/diseases		
Shortness of breath	18	11
Bleeding	15	9
Blood pressure	13	8
Diabetes	8	5
Tuberculosis	7	4
HIV	6	4

N=170. Multiple responses were allowed

Recommendations

Educate to overcome taboos and other harmful traditional practices, boost their social and economic resources for the betterment of their health, and enlighten women on their reproductive health issues so that they can plan manageable families.

Provide adequate prenatal care to screen pregnant women for anemia and high blood pressure, to inoculate

mother and child against tetanus and to identify high-risk cases for referral to a hospital or a maternal waiting home. All births must be attended by trained personnel so that to ensure clean deliveries and to address possible complications of emergencies.

Promote the education of girls - This should have many further benefits such as raising literacy levels, delaying the age of marriage and childbearing and reducing fertility rates.

Allow women access to and control of local resources - this means to promote and encouraging the participation of women in paid employment

Provide child-care facilities to enable women to work. Daycare services close to the places of women's work area are important to encourage continued breast-feeding

Educate and involve men in child-care and other duties Educating boys and girls in life-skills will be an important contribution-cultural and religious attitudes need to change to recognize the need for gender equity.

Support NGOs and others to work with women in local communities. The groups can help women become empowered to take advantage of their rights and control over families lives.

Rigorous income generating activities be started to help boost the livelihood of women-thus alleviate poverty

Conclusions

Women and girls must be the essential focus in ending undernutrition. Women are the critical link both biologically and socially. Currently women in many parts of the world are hindered in both these areas by gender discrimination. Women on the other hand, are tired and often ill, and far too many of them die. This is a problem not only for them, but also for communities and nations where they live. Much of this illness and suffering could be prevented by enlightening women on health issues and implementing basic skills that will assist them in their domestic work. Equally important, governments and non-governmental organization, including women's groups, are working hard to provide women with the information that will enable them to take care of themselves nutritionally. These efforts are paying off, but much remains to be done.

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