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An outcome and process evaluation of the PAMSCAD supplementary food program at Ayeredee in the Brong Ahafo region of Ghana, West Africa

Kofi Bobi Barimah
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An Outcome and Process Evaluation of the PAMSCAD Supplementary Food Program at Ayeredee in the Brong Ahafo Region of Ghana, West Africa

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ABSTRACT

This research was an evaluation of the impact of a nutrition program on women at Ayeredee in the Nkoranza district of the Brong-Ahafo region of Ghana, West Africa. As a part of Ghana's emphasis on primary health care, the program is aimed at improving children's nutritional status and preventing malnutrition, disease and death. Specifically, the Program of Action to Mitigate the Social Cost of Adjustment (PAMSCAD) supplementary food program was examined to determine whether the goals of the program are being met. An empowerment agenda which focused on both process and outcome was used as the conceptual framework for the evaluation. The objectives were to collect descriptive data on both empowerment outcomes and processes, to determine the relationship between the former and the latter, and to understand in more depth the context, process, and outcomes of the program through qualitative interviews and observations. A total of 66 mothers and nine service providers were involved. The results indicated that the respondents evaluated outcomes more positively than the processes. In terms of process, the majority of the women were satisfied with the location and services of the centre; but they women had mixed feelings about the technical quality and conduct of the service providers; and they did not have much control over the planning and the implementation of the program. In terms of outcome, the women were confident about the health and

nutrition skills that they had acquired; they had improved access to food; they showed a strong sense of confidence; and they were satisfied with the program. In terms of the relationship between process and outcome, the processes of Provider Conduct and Self-determination were most strongly related to the outcomes. In order to improve the efficiency of the services at the centre, I identified appropriate roles for community psychologists which entail engaging in genuine community involvement.

ACKNOWLEDGEMENTS

This evaluation would not have been possible without the assistance and support of my thesis advisor and committee members, friends, colleagues at community psychology program, and an international agency. I am very grateful to the International Development Research Centre (IDRC) for the Young Canadian Researchers Award that enabled me to travel to West Africa to pursue this research. My sincere thanks go to my advisor Geoff Nelson and committee members Mark Pancer and Isaac Prilleltensky. I appreciate the support and assistance of the Brong-Ahafo Regional Ministry of Health, the Centre Management Committee at Ayeredee; and the Paramount Chief of the Sunyani Traditional Council Nana Bosomah. A special thanks to my colleagues in the community psychology program at Laurier.

Over the years, I have been inspired and encouraged by GIFTY. To her, I say "thank you".

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INTRODUCTION

"Kwashiorkor" which has found its way into the English dictionary was derived from "Ga", which is a native Ghanaian language. Kwashiorkor is a term reserved for severely malnourished infants and children resulting from a deficiency in dietary protein. The mere fact that the English name for a malnourished child comes from a native Ghanaian language (West Africa) may help to elucidate further the seriousness of malnutrition in Ghana and Africa as a whole. Studies have shown that children who are not given nutritious food after weaning suffer from Kwashiorkor. This research intends to investigate what steps are being taken to control or eliminate malnutrition in the Brong-Ahafo (B/A) region of Ghana, West Africa.

This research is about primary health Care, nutrition and empowerment. The idea behind primary health care is to prevent the occurrence of noted diseases in communities. In this case, the interest is in the primary prevention of Kwashiorkor. Specifically, the Program of Action to Mitigate the Social Cost of Adjustment (PAMSCAD) at Ayeredee in the Nkoranza District of the Brong-Ahafo region of Ghana will be examined to determine the extent to which the goals of the project are being met. The PAMSCAD project which is a supplementary food program is jointly run by the Nutrition Division of the B/A Ministry of Health, PAMSCAD secretariat, and the World Food Program.

Literature on primary health care, empowerment and the nutritional status of children around the globe, but especially in Ghana, will be reviewed. This review will be followed by an evaluability assessment of the PAMSCAD project. The objectives and the conceptual framework of this research will be presented together with the organization of the research. The objectives of the research are (1) to collect descriptive data on the service delivery process of the PAMSCAD project through quantitative methods (2) to collect descriptive data on the outcomes of the PAMSCAD project through quantitative and qualitative methods (3) to determine the relationship between the empowerment outcomes and processes (4) to gain a greater depth of understanding of the context, process, and outcomes of the project through qualitative observations and focus group interviews.

The present research has adopted an empowerment agenda and, to this end, nearly all of the items in the conceptual framework seek to tap the level of control the women have over the nutritional status of their children. I will also be describing the research procedure and how results were analyzed. This will be followed by an overview of the whole research process, and recommendations for the smooth running of the Ayeredee Nutrition Centre.

PART ONE:

REVIEW OF LITERATURE

THE CASE FOR PRIMARY HEALTH CARE

The World Health Organization (WHO) considers health to be of primary importance and, to this end, the year 2000 has been set aside by this organization for the achievement of decent health for all human beings on earth. Hitherto, Airhihenbuwa (1990) has stated that WHO intends to reach this goal through the complete implementation of primary health care programs around the world.

Definition of Primary Health Care

Many scholars have attempted to define health and for the purpose of this research, four of these definitions will be quoted. WHO defined health "as more than the mere absence of disease, but as a state of complete physical, mental, and social well-being" (WHO Chronicle 1:29 1944). Health is defined as a

> state characterized by anatomic integrity, ability to perform personally valued family, work and community roles, ability to deal with physical biology and social stress, a feeling of being, and freedom from the risk of disease and untimely death. (Stokes, Noren, & Shindel, 1983, p. 34)

Perhaps the simplest definition of health is "the perfect, continuing adjustment of an organism to its environment" (Wylie, 1970, p. 100). Hicks (1976) has this to say about the provision of health services:

> It is often helpful to consider the health services available to the sick and the infirm in two parts, namely (a) those that are provided in hospitals of

> one kind or another and (b) the services that are provided by general practitioners, nurses, health visitor and other staff in the doctors' surgeries, in clinics, in special institutions for the handicapped and impaired and in the patients' homes. The advantages and the disadvantages of separating the treatment and care in the hospitals from the provision of treatment and care in the community have been argued many times. (Hicks, 1976, p. 1)

According to Hicks, service provided in the community or at the patient's home is primary health care. He notes further that the dividing line between the hospital services and the services provided by the primary team can be made quite sharp, although in practice there is a blurring of the boundary. Patients are referred to hospital specialists by the general practitioners for examination, assessment and treatment as out-patients and also for immediate admission because of the seriousness and urgency of the patient's condition. Referring to the British system, Hicks noted that after treatment in the hospital, patients are discharged back to their homes to be taken care of by the general practitioner. Since the emphasis is now on reducing the length of stay of patients in the hospital, Hicks has concluded that "this after-care work of the primary health care team could become a substantial component of the total health care load in the community" (Hicks, 1976, p. 1).

"Primary care is first contact care that provides the patient's entry into the health care system" (Stokes et al., 1983 p. 35). The primary health care services are the front line of the health services. These services include all those

provided outside hospital by family doctors, dentists, retail pharmacists and opticians - the family practitioner services and community nurses, midwives, health visitors and other professionals allied to medicine - the community health services (An agenda for discussion presented to parliament by the Secretary of State for Social Services, Wales, Northern Ireland, and Scotland by command of Her Majesty, August 1986). According to a report submitted to a provincial government of Canada,

> primary care includes not only those services that are provided at first contact between the patient and the health professional, but also responsibility for promotion and maintenance of health and for complete and continuous care for the individual including referral when required...The functions of health personnel in the primary health care group include prevention, health promotion, health maintenance, consultation, education, diagnosis, treatment and rehabilitation. (Report of Ontario Council of Health, 1976, p. 24)

The latter report also notes that the provision of primary contact for the public with the health system should be 24 hours a day, seven days a week. This idea is also shared by Hicks (1976) and Ryan and Brieger (1991).

Matilda Pappoe of the Department of Community Health, University of Ghana Medical School defines primary health care as,

> essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community can afford. (Pappoe, 1987, p. 30)

Given Ghana's present economic situation, I will be basing

most of my views on primary health care in this thesis on the latter definition, which reflects the realities in Ghana as well as most developing countries. Furthermore, Pappoe's definition assumes that the community will fully participate at an affordable cost based on their own cultural experiences. Most programs in the developing nations have failed because the initiators did not consider the cultural values of the indigenous people (Airhihenbuwa, 1990).

The role of community-based health workers received international legitimacy with the Alma Ata Declaration on primary health care in 1978 (WHO/UNICEF 1978) which stressed the need for "bringing health care as close as possible to where people live and work". (p. 1) This declaration is believed to be the key strategy for attaining the goal of health for all by the year 2000 (Airhihenbuwa, 1990). Primary health care was adopted as the bedrock of the health delivery system in Ghana in 1977, and the aim has always been to extend health services to 80% of all Ghanaians by 1990 (Pappoe, 1987).

At this juncture, one may ask why primary health care has been singled out as the strategy for achieving health for all by the year 2000. Many scholars in the health sciences have demonstrated that many deaths that occur in both the developed and the developing nations could easily have been avoided if steps had been taken to prevent them. The following examples may elucidate their stand further: "Over the last 20 years,

research has clearly indicated that many health problems can be traced to lifestyle factors or environmental factors that can be modified" (Michael, 1982, cited in Pancer & Nelson, 1990). Cardiovascular disease (CVD) is the major cause of death in Canada, as compared to other developed countries such as France, Japan, and the Netherlands (Nicholls, Nair, MacWilliam, Meon, & Mao, 1986). About 20% of the mortality rate in the U.S. is accounted for by environmental factors, heart diseases, cancer and stroke (Michael, 1982, cited in Pancer & Nelson, 1990).

Despite improvements in health achieved in sub-Saharan Africa over the last two decades, the health situation in this region is still horrible. Many deaths are still attributable to causes which could have been avoided through the provision of simple appropriate care (Vogel, 1988). Despite the potential for prevention, neonatal mortality in developing countries has resulted in an estimated 800,000 (30-60%) deaths per year worldwide (Hinman, Forster & Wassilak, 1987). In Nigeria, a recent international review of the Expanded Program on Immunization (EPI) estimated tetanus toxoid coverage at 30%, and estimated Neonatal Tetanus accounts for 49% of deaths caused by diseases preventable by immunization (Federal Ministry of Health report, 1989, cited in Dickin et al., 1991). Malaria has gradually become a major health hazard in over 100 Third World countries, and although endemicity varies greatly depending on the country, it is estimated that nearly

80 million clinical cases occur annually in sub-Saharan Africa (WHO 1987, cited in Vecchiato, 1991).

The Ghanaian Health Situation

In Ghana, infants die at a rate seven times more than in Canada and the US (Nimo, 1980). This author notes further that the average infant mortality rate is 130 per 1000 live births. It is interesting to note that the rate for US or Canada is 15-17 per 1000. Nearly 130,000 women and children die each year in Ghana from diseases which could easily have been prevented (Nimo, 1980). The six most noted causes of death among infants are diarrhoea, bronchial pneumonia, malaria, measles and malnutrition (Kwashiorkor and marasmus) (Fosu, 1991). I have been wondering why many children continue to die in Ghana when simple immunization programs can prevent these deaths. For instance, despite the prevalence of certain diseases in 1981, only 22% of Ghanaian children were fully protected against diphtheria, whooping cough and tetanus (Fosu, 1991). The author indicated further that the immunization rates for polio and tuberculosis were 25% and 67%, respectively. Only God knows what happened to those who were not protected.

One of the strategies adopted by the Ghanaian health authorities in conjunction with the Children's Defence Fund (UNICEF) is the Expanded Program on Immunization (EPI). The basic aim of this program which forms part of the "Child

Survival Revolution" is to vaccinate all children against the six vaccine preventable diseases already indicated (Fosu, 1991). In the Brong-Ahafo region, the EPI is an on-going process resulting in the reduced death rates caused by these preventable diseases. For instance, during 1981-1991 only 168 people died out of 1,167 reported cases of cholera (B/A Ministry of Health report, 1991). This report has given the credit to the Expanded Program on Immunization. The report indicated further that only seven died out of 518 reported cases of measles. The same report notes that despite these improvements, there are some problems with the EPI in the Brong-Ahafo region resulting in the death of innocent people daily.

The Role of Primary Prevention

Given the nature of the health problems confronting the world today, what then is the role of the primary health worker? As noted earlier on, the functions of personnel in the primary health group include prevention, health promotion, health maintenance, consultation, education, diagnosis, treatment and rehabilitation (report of Ontario Council of Health, 1976). Primary prevention is a relatively new concept in psychology. Most simply stated, prevention workers attempt to reduce the incidence of physical or psychological maladjustment (Heller, Prince, Reinharz, Riger & Wanderman, 1984; Wallack & Wallerstein, 1987). Prevention is central to

the mission of public health (Wallack & Wallerstein, 1987). This concept (prevention) came to the mental health field relatively late, having been borrowed from public health, a field in which prevention had a rich and distinguished history (Heller et al., 1984).

According to Airhihenbuwa (1990) "a conceptual model for health education programs in developing countries must address cultural sensitivity and cultural appropriateness in program development" (p. 54). Paul (1955) indicated that an important aid to understanding health-seeking behaviour in any culture is grounded in beliefs and practices held by people within a community. Therefore, community members should assess the unmet health needs in the community and be part of the health education program planning, implementation, and evaluation (Airhihenbuwa, 1990; Pancer & Nelson, 1990; Ryan et al., 1991; Vecchiato, 1991; Wallack & Wallerstein, 1987).

Appropriate Role for Health Workers

As community health professionals, we need to recognize that we are currently practising within a system which keeps people powerless and dependent upon our services, and that letting go of our controlling role may prove to be difficult (Bremner, Crawford, & Minsky, 1988; McKnight, 1987; Pinderhughes, 1983). The person with power should relate to the client in such a way that the latter may feel comfortable as an equal partner (Baker, 1976).

If true power transfer were to occur and equality were to be established, then the program participants should be allowed to identify the problems and suggest solutions (Bremner et al., 1988). When this has been established, the professional must encourage the people to reflect upon their own personal experiences with a view of seeking the solutions within those experiences (Arnold & Burke, 1983; Farlow, 1987; Freire, 1973). Lord and Farlow (1990) note that:

> as health professionals, we should view ourselves as facilitators of empowerment rather than as teachers of health, we will come to see health promotion as assisting people, not to change their illness-producing behaviors, but to gain more control over certain aspects of their lives." (p. 4)

Stirling and Reid (1992) speak of "participatory control" which refers to "a process in which a person may increase his/her sense of control through their relationship with another" (p. 204). This implies that people are expected to increase their effectiveness in controlling their activities by interacting in an atmosphere that helps their control. These authors believe that there should be a mutually beneficial relationship between all parties in the empowerment process.

EMPOWERMENT IN HEALTH CARE

Community psychologists are very keen on the need to empower people to take charge of their own lives, as opposed to professionals or scientists behaving as if they have all the answers to problems (Rappaport, 1981). In general terms, empowerment refers to the possibility that people can more actively control their own lives (Rappaport, 1981; Riger, 1980). Applying the concept of empowerment to health, the World Health Organization (WHO) indicated in 1986 that for any person to achieve his or her fullest health potential, s/he should have absolute control over matters pertaining to their health. Our capacity to control our health becomes ineffective when we cannot bring basic resources, such as food, shelter, working conditions, and personal relationships under control (Walt & Rodnell, 1988). There is a difference between being held responsible for one's health and being enabled to take control of it (Lord & Farlow, 1990).

While the concept of empowerment has had tremendous intuitive appeal for some health care workers, there is ambiguity about the meaning and key dimensions of empowerment. Researchers have different definitions of empowerment, which has tended to lead to conceptual confusion. Lord and Farlow (1990) have noted that empowerment can be conceptualized in terms of process or outcome at different levels of analysis (i.e., individual vs. community). Working in the area of family support, Moncrieff Cochran and his colleagues have

focused on the process aspects of empowerment in their definition:

> Empowerment is an intentional ongoing process centred in the local community, involving mutual respect, critical reflection, caring, and group participation, through which people lacking an equal share of valued resources gain greater control over those resources. (Cornell Empowerment Group, 1989, p.2)

Zimmerman and Rappaport (1988) note that empowerment is a multilevel construct, but their definition of psychological empowerment focuses on the individual and outcome dimensions of the concept. They describe empowerment as:

> a construct that links individual strengths and competencies, natural helping systems, and proactive behaviours to matters of social policy and social change...While empowerment is a multilevel construct that may be applied to organizations, communities, and social policies, psychological empowerment is the expressions of this construct at the level of individual persons...Psychological empowerment may be generally described as the connections between a sense of personal competence, a desire for, and a willingness to take action in the public domain. (Zimmerman & Rappaport, 1988, pp. 726 & 746).

Research by Lord and Farlow (1990) and Kieffer (1984) has focused on psychological empowerment. They have found that people who become empowered experience personal growth, including the development of new skills and increased self-esteem; they gain a sense of control, mastery and self-efficacy; and they become politicized, taking action on important social issues that affect them and their communities. Related to these empowerment outcomes are the following empowering processes: gaining information, having a

mentor and social support, and participating in community groups and activities.

Prilleltensky (in press) has outlined components of empowerment, which includes both process and outcome. Distributive justice, which is the essential empowerment outcome, refers to the "fair and equitable distribution of resources and burdens in our society" (pp. 6-7). Resources can be material, social,and psychological. The two key processes to achieve distributive justice are: self-determination, which is the inherent value of people deciding on their own which courses of action they wish to take, and collaborative and democratic participation, reflecting the ideal that vulnerable people should be part of the decision-making.

Brickman, Rabinowitz, Karuza, Coates, Cohn, and Kidder (1982) provided four models of helping and coping which are characterized by whether or not individuals are held responsible for their problems and whether or not they are held accountable for their solutions. These models are named moral, compensatory, enlightenment, and medical, respectively. In the moral model, a person is held responsible for both problems and solutions. In the compensatory model, a person is not held responsible for his/her problems but responsible for solutions and s/he is also believed to need power to do this. In the medical model, a person is responsible for neither problems nor solutions but is rather seen as requiring treatment. In the enlightenment model, a person is seen as

responsible for problems but as unable or unwilling to provide solutions. In the latter model, the person is said to need discipline. It appears that the compensatory model is the best for primary health care because it avoids "blaming the victim" and gives people responsibility for the solution.

NUTRITION AND HEALTH OF CHILDREN

The literature on primary health care has revealed that prevention is better than cure. Furthermore, the best way to help people to prevent diseases of any kind is to empower them to take full control over their lives. Individuals who do not eat balanced diets are more likely to suffer from diseases related to malnutrition. Children and infants appear to be most vulnerable to Kwashiorkor since they always rely on their parents for nutritious food. To this end, all societies both developed and the developing have been striving to feed their citizens as a way of maintaining healthy populations. This may be partly due to the fact that without healthy human beings, there cannot be national development. Although nations around the globe have been fighting acute hunger, much needs to be done as far as subtle forms of hunger are concerned (Sai, 1984). Sai notes further that "forms of 'hunger' such as chronic undernourishment and individual or mixed deficiencies of nutrients are yet to be considered a serious threat to national development" (p. 61). Despite this realization, nearly 2/3 of the developing nations' population (1.3 billion) experience some degree of caloric undernutrition (Austin, 1984), leading to protein shortage which retard the growth capacity of children in particular. It has been observed that the latter condition accounts partly for the high infant mortality rates in developing countries (Austin, 1984).

Austin notes further that undernourished children are more

likely to be infected with diseases like measles as a result of a reduction in their bodies' resistance to diseases. It is interesting to note that although there is usually enough food in the world to go round, people in certain countries of the world go hungry. According to the World Military and Social Expenditures 1991 report, " the world produces enough food to feed adequately more than the current global population, but 950,000 people are chronically malnourished" (Sivard, 1991, p. 5). I am really concerned that in the midst of plenty of food, others are hungry. Again, this research will attempt to address some of these issues. A very recent study in Canada revealed that nearly 30% of nine year old children surveyed were not eating balanced diets daily (Bidgood & Cameron, 1992). These authors also reported a similar trend in the US whereby nearly 1/4 of children were not eating breakfast regularly.

Studies have indicated that poor eating patterns of children have had negative effects on their perceptual, cognitive, and psychological well-being at school (Bidgood & Cameron, 1992). It should, however, be noted that the reasons given for children missing meals are different from the Ghanaian situation. Both the parents and teachers of the children in the Bidgood and Cameron study indicated that the children missed meals/snack because of lack of time, dislike for a particular food, or simply forgetting to eat. In contrast, however, not enough food is available in Ghana for

the children to eat.

Nutrition in Ghana

" BRITAIN HANDED OVER a well-fed Ghana to idiots who created starvation amidst plenty" (Senyah, 1992, p. 1214). The author took this statement from the May 24, 1992 issue of "London News of the World". Senyah believes that this statement applies to most African countries and 1 have mixed feelings regarding this statement, with some reservations to be discussed later on in this section. The nutritional status in Ghana is so serious that 1 am not surprised that, last year, Accra (the capital city of Ghana) was the venue for the World's Food and Agriculture Organization's (FAO) council meeting (Senyah, 1992). The author indicated that:

> the meeting will examine the challenges posed by hunger, poverty, population growth and environmental decline. It follows last month's World Food Council session in Nairobi where ministers expressed their alarm at the total number of the world's malnourished children which has increased in the 1980's, especially in Asia and Sub-Saharan Africa. (p. 1214)

The fact that there have been two rapid World Food Council meetings on the world's malnourished children in two African cities highlights the seriousness of this problem in Africa. The latest one was held in Accra, Ghana (between July 24-26, 1992). It has been observed that malnutrition accounts for a large number of infant and child deaths (Fosu, 1991). The author indicated that people tend to over-look this problem because the causes of these deaths are not recorded on death certificates. In 1970, an average of 500 cases of protein calorie malnutrition were treated in Accra alone

(Sai, 1984). The author indicated that the total cost for these 500 cases was $120,000 and if we take the cost for the nation as a whole with 10 regions into consideration, the cost may be around $500,000 per year.

Confronted with budgetary trends over which the Ministry of Health has no control, there has been a decline in the quality and quantity of services provided. This explains the rationale behind the primary health care activities in Ghana. There have been so many explanations about the causes of malnutrition in Ghana and although all of them do not converge, there is a general agreement that they can all be grouped under natural and artificial causes.

I will begin with some of the "artificial" causes. The statement at the beginning of this section regarding "idiots" causing malnutrition in Ghana appears to be on the side of artificial causes. Since independence from Britain in 1957, there have been five military take-overs and the leaders of these military governments have been spending large sums of money on arms in order to deter would-be coup plotters at the expense of sound agricultural policies. Despite the fact that some of the policies of these military dictators have contributed to the present nutritional status of Ghana, it is unfair to blame them solely for the problems. The poor storage facilities in Ghana also account for malnutrition. As a matter of fact, nearly 10-30% of all food grain produced in tropical Africa are never consumed due to poor storage systems (Sai,

1984). As a Ghanaian, I have observed that there are some sociological factors involved. For instance during pregnancy, women are not expected to eat certain types of nutritious food. In Ghana, a sick person is not expected to eat "normally". A sick person who consumes all of the food given to him/her will not be taken seriously. Furthermore, Ghanaian women reserve the most nutritious parts of the food for their husbands to the detriment of children who need nutritious food the most.

Natural causes also account for a significant portion of malnutrition in the country. The majority of farmers who are mostly peasants living in the rural parts of the country rely on rains for the cultivation of their crops. Whenever there is low or no rainfall, the nation is in for trouble. A classical example is what happened in 1983 when there was drought and bush-fire coupled with the arrival of nearly half a million Ghanaians who had been deported from Nigeria. The food situation was so severe that majority of Ghanaians grew very lean with "artificial spaces" (evidence of weight loss) around their necks. As a joke, these "artificial spaces" were named "Rawlings Chain" after the military leader of Ghana Ft./Lt. J.J. Rawlings. Most people left the country for neighbouring states in search of food. I spent a month in Nigeria for the same reasons.

In the Brong-Ahafo region, the problem of malnutrition is being tackled by both governmental and non-governmental

organizations as well as international agencies such as the World Food Program and Freedom From Hunger Foundation (USA). These are collaborative programs involving the local communities. The World Food Program in conjunction with the Nutrition Division of the Ministry of Health is providing food for the supplementary food program- Program of Action to Mitigate the Social Cost of Adjustment (PAMSCAD) in 12 communities in the Nkoranza District of the region. The Freedom From Hunger Foundation in conjunction with the local people in Kintampo is also operating an education with credit program to empower poor mothers to fight chronic hunger. According to the Foundation's 1991 report, resources and information are provided to poor women to encourage positive changes in their lives. Eventually, it is their expectation that the indigenous women would be able to take full charge over their affairs without their assistance. By the end of 1992, the Kintampo project would be fully in the hands of the local people. This appears to be an empowering process.

PART TWO:

EVALUABILITY ASSESSMENT OF PAMSCAD PROJECT

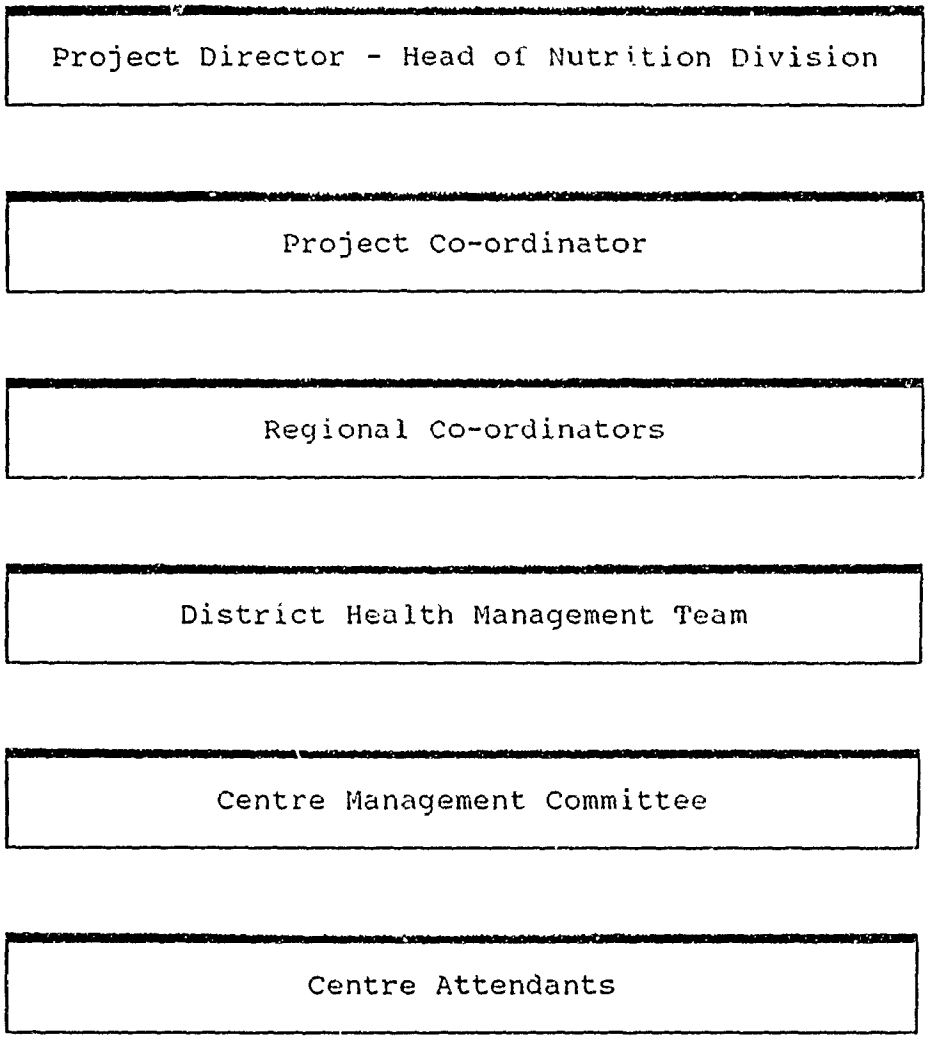
INTRODUCTION

Brong-Ahafo is one of the 10 regions in Ghana, West Africa with the second largest population density of 30 per square kilometre (Ghana Population Census, 1984). The population of this region in 1990 was nearly 1.3 million (National Commission for Democracy, 1990). The 1984 Census indicated that the high rate of 3.3% in population growth per annum is due to the combined effects of higher birth rate over death as well as the attraction of people to this farming centre. Brong-Ahafo region is very rich in two of the main foreign exchange earners of Ghana, namely cocoa and timber. The friendly atmosphere in the region coupled with the availability of fertile lands for agricultural purposes are particularly attractive to people from the other regions and neighbouring Ivory Coast. Unfortunately, the region has not been able to meet the demands of its residents in terms of food requirements. This has resulted in a situation whereby most of the people are undernourished. Noted among some of the causes of malnutrition are poor storage facilities, low agricultural production, poor weaning practices, poverty, food taboos and cultural habits, infectious diseases and teenage pregnancies. The Brong-Ahafo Ministry of Health has nutrition programs in place in various districts of the region to combat or reduce the high incidence of malnutrition. There are two main objectives of these nutrition programs:

> (1) To assess the extent of malnutrition in the various districts in Brong-Ahafo region (2) To reduce the percentage by 5-10 annually. (B/A Ministry of Health report, 1990/91 p. 6)

The Program of Action to Mitigate the Social Cost of Adjustment (PAMSCAD) is one of the strategies being utilized to reduce malnutrition in 12 communities in the region. The main objective of this supplementary food program is to reduce malnutrition in the communities in three years time.

ORGANIZATIONAL FLOW CHART OF SERVICE PROVIDERS



RESPONSIBILITIES OF SERVICE PROVIDERS

1. Project Director:

 * responsible for the complete implementation of the program.
 * see to the procurement of items (e.g., cooking utensils)
 * make money available to Project Co-ordinator

2. Project Co-ordinator:

 * co-ordinate all PAMSCAD activities in regions participating in the program
 * liaise with the Project Director to make money available for the communities.
 * ensure that activities of the program are properly executed.
 * submit statement of accounts from the Regional Nutrition Officers to the project Director.
 * organize regular meetings with the Regional Nutrition Officer and the Regional Co-ordinators on the progress of the program.
 * pay monthly and quarterly visits to the communities.
 * prepare project logistic requirements (local purchases).

3. Regional Co-ordinator:

 * co-ordinate program activities in the districts.
 * work closely with the Project Director.

4. District Health Management Team:

* monitor the growth of the children in the program.
* update the Regional Nutrition Officer and the PAMSCAD secretariat on the weights and heights of the children in the program.
* help in the evaluation of the program.
* train community nutrition management committee.

5. Centre Management Team:
* supervise the Centre Attendants in their daily duties.
* directly responsible for the daily running of the program.

6. Centre Attendants:
* work closely with the mothers in the daily preparation of the food for the children.
* record the weights and the heights of the children.

The Centre Management Team and the Centre Attendants are the front-line workers of the program.

DESCRIPTION OF DESIGNATED POPULATION

The participants in the PAMSCAD program are preschoolers between 0-5 years and their mothers. These are selected after a base-line survey on the nutritional status of the children and socio-economic data on the whole community. Through clinical examination and anthropometric measurements, the weights and heights of the children are recorded. The child should be moderately or severely malnourished and the mother should be poor before s/he may be selected for the program. A total of 200 children are selected from each of the 12 communities, for a total of 2,400.

GOALS OF PAMSCAD

The goals were identified through reviewing the documents of the program and reports of the Nutrition Division of the Ministry of Health in the Brong-Ahafo region. Finally, the goals were double-checked with the stakeholders. The following are the goals:

* to establish community nutrition centres in the districts.
* to increase the energy and protein intake of children.
* to enhance the knowledge, attitudes and practices of mothers in the following areas:

- family planning
- malnutrition anaemia
- infectious diseases like diarrhoea
- management of protein energy
- weaning

The long-term goals are to reduce incidence of infant mortality, illness, and disease.

COMMUNITY NEED

According to the 1990 annual report of the Brong-Ahafo Ministry of Health:

> malnutrition is worse in children and mothers. This situation is due largely to the non-availability of adequate food and nutritious food and cultural practices in relation to food. (p. 2)

To this end, the following needs have been identified in the B/A region by the Nutrition Division of the Ministry of Health:

* the need to establish community nutrition centres where malnourished children can supplement their diets;

* the need for more information on good nutrition management to be made available to vulnerable mothers with a view of empowering them to take full charge of their children's nutritional requirements;

* the need to educate mothers about primary health care especially family planning and disease prevention; and

* the need to create awareness on the importance of feeding children properly.

These needs are in line with the PAMSCAD's long term goals already identified.

MAJOR PROGRAM ACTIVITIES

The development and implementation of the PAMSCAD supplementary feeding program involves five main stages:

1. Field preparation
2. Base-line data collection
3. Program implementation
4. Monitoring
5. Evaluation

Field Preparation

Before starting any food supplementary program in a community, nutrition officers from the Ministry of Health visit the place to meet chiefs and elders as well as the Village Development Committee to brief them about the program and to seek their advice and co-operation. Subsequent visits are also paid to ensure that structures such as management teams, community farms and the location of the nutrition centres are in place. Finally, there is a signed contract between the nutrition division, PAMSCAD secretariat and the community.

Base-line Survey

This is carried out to determine the extent of malnutrition in each community. The main objective of this exercise is to assess the nutritional status of the children in the communities upon which the selection of the participants will be made. During this period, the nutrition

officers study the feeding patterns of the children and the extent to which these contribute to malnutrition. Furthermore, the socio-economic status of the households and its effects on the nutritional status of the children are also noted. The chiefs, elders and key informants in the communities are also interviewed on issues such as their reactions to the supplementary food program, levels of food production and their storage, basic problems facing them and the measures taken to solve them, potential for the success of the program and any other concerns they may have.

Program Implementation

There are four main aspects involved.

1. Establishment of community nutrition centres

The target community is expected to provide a structure or a building for the centre. In cases where new structures will have to be built or old ones rehabilitated, the community is expected to provide labour. The utensils and other equipment needed for the running of the program will be procured by the service providers.

2. Food supply

The World Food Program provides food through the Regional Nutrition Officers to the communities. Vegetables, fruits and other foodstuffs are purchased from the local markets. The mothers in the program cook the food in turns at the nutrition centre under the supervision of the front-line workers (Centre

Attendants and the Centre Management Team). Supplementary food is provided at the centre from Mondays through Fridays. The daily portion designed to satisfy 75% of the daily energy and protein intake requirements of the children are as follows:

- 180 gm of cereals maize
- 30 gm fish
- 50 gm legumes
- 50 gm sugar
- 15 gm oil.

3. Growth monitoring

All the children in the program are given individual weighing cards. Initially, the moderately malnourished children are weighed once a week and the severely malnourished ones are weighed on a daily basis to determine their rate of progress. The mothers are also counselled about appropriate measures to be taken.

4. Nutrition education/communication activities

In order to create awareness for the need to feed children properly, a massive nutrition education component has been integrated into the program. All the mothers whose children are in the program attend nutrition classes. The issues addressed in these classes include the following:

- food groups and their functions
- infant and young child feeding

- prelacteal feeding
- exclusive breast feeding
- breast feeding management
- weaning
- preparation of nutritious weaning foods
- causes of malnutrition
- modification of the family food into suitable meals for children
- prevention and treatment of diarrhoea and anaemia
- immunization
- family planning
- diet during pregnancy and anaemia

A point worthy of note is that the mothers in the program are allowed to prepare the meals themselves in turns at the nutrition centres. In all, two balanced meals are prepared daily by the mothers for their children except on weekends. It appears to me that by allowing the mothers to prepare the meals under minimum supervision, they get the opportunity to practice some of the skills acquired at the nutrition classes. This is a form of "participatory control" (Stirling & Reid, 1992). The authors indicated that people increase their sense of control through such mutually beneficial relationship. However, what is not very clear is: "who decides what food is to be given to the children, the mothers or the nutrition officers?". These are some of the issues to be addressed in the research.

The training of the District Health Management Team (DHMT) and the Centre Management Team covers the following areas:

- overview of the program, objectives and the activities
- program management
- basic nutrition
- importance of growth monitoring and nutrition surveillance
- management and control of nutrition diseases

PROGRAM MONITORING

A surveillance system is in place in each community to monitor the nutritional status of the children. The DHMT collects data on the weights and heights of the children on a monthly basis from each community. These data are sent to the Regional Nutrition Officers with copies to PAMSCAD secretariat. The DHMT also monitors food distributed to the various centres.

EVALUATION

The service providers themselves have been evaluating the program every year. There are two components of this exercise: (1) project delivery and (2) impact on participants. The latter examines the number and percentages of children who gained weight and height, the number and percentage of those who do not gain weight and height, the number and percentage of children with diarrhoea, and the number and percentage of children who died in the year and causes of death.

The former component examines the performance of the DHMT and the Centre Attendants in the program. The results of the evaluation are discussed with each target community at a durbar (workshop) of Chiefs, elders, mothers and the community members. At these durbars, discussions centre around how to solve any noted problems for the succeeding year. The next evaluation was due December 1992. All the stakeholders decided on an outside evaluator for a change, and it is to this end that this outcome and process research was carried out.

MANAGEMENT INFORMATION CURRENTLY BEING COLLECTED

* Weights and heights of the children in the program: These are collected on a monthly basis by the DHMT and sent to the Regional Nutrition Officer with copies to the PAMSCAD secretariat.
* Distribution of food to the centres: Records are kept daily.
* Number of children attending each month: Records are kept on an on-going basis.
* Number of children who died in the course of the program: This is done yearly.
* Activities of all the service providers: On-going.
* Financial transactions: On-going.

RATIONALES LINKING PROGRAM ACTIVITIES WITH ITS GOALS

There are three main rationales linking the program activities with its goals: (1) the rationale for activities that are aimed at the malnourished children and their mothers, (2) the rationale for activities aimed at the community as a whole, (3) and the rationale for health promotion and primary health care activities.

The Nutrition Division of the B/A Regional Ministry of Health is cognizant of the fact that Ghana as a nation intends to achieve better health for all its citizens by the year 2000 through the full implementation of primary health care. However, their base-line surveys have indicated that there is a prevalence of malnutrition in various districts of the

region. Activities aimed at various communities involving chiefs, elders and community members to increase their awareness on the need to reduce malnutrition by supplementing the diets of the needy is a step in the right direction.

The 1990 annual report of the B/A Regional Ministry of Health indicated that women and children were vulnerable to malnutrition. Similar studies in the same region have confirmed this notion (Freedom From Hunger Foundation, 1990). The choice of mothers over fathers for nutrition education is therefore a reasonable decision. It has been observed that mothers in Ghana have strong influence on the nutritional status of their children. This happens when the mothers run their own petty trading businesses. The Freedom From Hunger Foundation indicated in a recent position paper that:

> In one study conducted in Ghana, the mother's participation in trading was found to have a strong influence on the nutritional status of children than father's trading activities, even when the form of the income was the same and he earned a larger absolute amount. (1990, p. 3)

In effect the Freedom From Hunger Foundation is confirming a widely held notion among Ghanaians that women normally spend their extra money on the welfare of their children, whilst men in most cases spend theirs on entertainment, alcohol and tobacco. By educating and engaging various communities in primary prevention health promotion activities, the Ministry of Health is in effect applying the "prevention is better than cure" ideology. The soundness of this strategy lies in the fact that many diseases

associated with malnutrition could have been avoided through the provision of simple appropriate care. The rationale behind prevention activities emanate from the fact that there are not enough facilities and trained personnel to manage the Ghanaian health system. Day in and out experienced doctors leave the country in search of "greener pastures" in the developed world. For instance, between 1981-84, the total number of doctors in the whole of Ghana declined from 1,700 to 800 (Vogel, 1988). It is very interesting to note that even if all the 1,700 doctors had stayed in Ghana, how could they have effectively serve a population of nearly 14 million ? Vogel noted further that given budgetary constraints in Ghana, the authorities "recognize that every dollar spent on salaries is less dollars available for penicillin" (1988, p. 60). The need for primary health care in the Brong-Ahafo region cannot be overestimated.

FUNDING SOURCES

1. Ministry of Health (Nutrition Division)
2. PAMSCAD secretariat
3. The World Food Program
4. Contributions from local community

BUDGET

The total budget for all the 12 communities is ¢55,666,400.00 ($134,459.9).

EVALUABILITY OF THE PAMSCAD PROGRAM

Posavac and Carey (1992) indicated that a program is said to be evaluable when the following conditions are met:

- there is agreement and clarity about the services being offered.
- the goals are measurable and concrete.
- the rationale linking the services to the intended goals are reasonable.

Based on the discussions so far, the PAMSCAD program is clearly articulated with clearly defined, concrete, and measurable goals. The rationales linking the program activities with its goals seem plausible. Furthermore, all service providers and the community members have a common agreement about the intended outcomes. The PAMSCAD program is therefore evaluable.

PART THREE:

PRESENT RESEARCH

ORGANIZATION OF RESEARCH

Some evaluators have recommended the involvement of stakeholders in the planning and implementation of evaluations as a better way of ensuring the maximum utilization of the results (Patton, 1990; Posavac & Carey, 1992). Citing Bryk (1983), Posavac and Carey indicated that stakeholders are:

> those who are personally involved in the program, who derive some or all of their income from the program, whose future status or career might be affected by the quality of the program, or who are the clients or potential recipients of the program. (1992, p. 28)

The stakeholders in the PAMSCAD program are: the Head of Nutrition of the Ministry of Health, Project Co-ordinator, Regional Nutrition Officers, PAMSCAD secretariat, District Health Management Team, Centre Management Committee, Centre Attendants, mothers of the children in the program, the chiefs and elders, and the Village Development Committee. In line with the stakeholder approach, evaluation questions were developed in consultation with the service providers. Through extensive correspondence, I was informed of the specific areas of the project that they wanted evaluated and the intended benefits. For instance, I was not asked to spend much time on the first goal of the program (establishing community nutrition centres) since those structures are already in place.

An empowerment agenda framework, which focuses on both process and outcome, and which incorporates many of the ideas of the aforementioned researchers (refer to part one) , will be used as the conceptual basis for the evaluation of the PAMSCAD program. The conceptual model for the evaluation of PAMSCAD is presented in Figure 1. This conceptual model is based on empowerment literature, and the work of a graduate student at the Community Psychology program at Wilfrid Laurier University in Waterloo, Canada (Johnston, 1991).

Figure 1

Conceptual Model for the Evaluation of PAMSCAD

Empowerment Processes	Empowerment Outcomes
(1) Self-determination (a) self-described needs of consumers considered in program design and implementation	(1) Psychological resources (a) sense of control (b) confidence (c) knowledge & skills
(2) Collaborative and democratic decision-making (a) dissemination of information and opportunities for decision-making	(2) Material resources (a) access to food
(3) Information and Support (a) access/convenience (b) technical quality (c) provider conduct	(3) Satisfaction and health outcomes (a) satisfaction (b) family health and nutrition

Based on the needs of the stakeholders, there will be an outcome and process evaluation. An outcome evaluation is concerned with whether there have been any noted changes as a result of a program. Although different stakeholders may have different interpretations regarding noted changes, a program is said to be generally successful when desirable changes may be safely attributed to the program.

In terms of outcomes, I am interested in determining whether or not the program has helped to increase the psychological and material resources of the women in the program. A measure of satisfaction is also included, as I assume that high levels of psychological and material resources will be associated with high levels of satisfaction. Thus satisfaction is another indicator of program success. It is conceivable that PAMSCAD is simply a food distribution program which promotes dependency on the program and thus does not increase psychological resources. Or, it is possible that PAMSCAD is effective in teaching skills (breast-feeding techniques and family planning) and promoting confidence and a sense of control, but that it does not deal with the fundamental issue of increasing access to food. By considering both the psychological and material aspects of empowerment outcomes, it is possible to determine which, if any, dimensions of empowerment are affected by the program.

The main focus of process evaluation is on how something happens, as opposed to outcomes or results (Patton,1990).

According to this author:

> process evaluations are aimed at elucidating and understanding the internal dynamics of how a program, organization, operates... A process evaluation requires sensitivity to both qualitative and quantitative changes in programs throughout their development; it means being intimately acquainted with the details of the program. Process evaluations look not only at formal activities and anticipated outcomes but they also investigate informal activities and unanticipated interactions. (1990, p. 95)

The process part of the evaluation is concerned with how the program operates. Based on my review of the literature and correspondence with the stakeholders, I believe that self-determination, collaborative decision-making, and information and support are key factors which could lead to the above mentioned empowerment outcomes. The sub-components of each of the process and outcome factors are described more fully in the methodology section. In a paper entitled "Research methods and the empowerment social agenda", Rappaport (1990) indicated that:

> to choose empowerment is to choose an option in the favour of the poor, the powerless, and the dispossessed. By design, one will often be on the side of inmates, mental patients, ethnic and racial minorities, economically poor people, the physically limited, and, in many cases, women . Research guided by an empowerment agenda will therefore use methodology consistent with such goals. The context of the research will be the context of the people of concern, and the assessment methodology that is used will frame the issues and see the world from their view point. (1990, p. 59)

The choice of powerless poor mothers as the focus of the studies is in line with the empowerment agenda. This does not

mean that the concerns of the other stakeholders have been ignored. After all, the questionnaires for this study were developed in consultation with the service providers and not the mothers in the program. Furthermore, the service providers were engaged in focus group discussions.

OBJECTIVES OF RESEARCH

The four main objectives of this research are:

(1) To collect descriptive data on the service delivery process of the PAMSCAD project through quantitative methods. The emphasis is on the empowerment processes outlined in figure 1. Namely self-determination (operationalized as the degree to which mothers believe that their needs were considered in program design and implementation), collaborative and democratic decision-making (operationalized as dissemination of information and opportunities for decision-making), and information and support (operationalized as access/convenience of the program, competence and conduct of PAMSCAD workers). Frequency and percentage data were calculated for this objective.

(2) To collect descriptive data on the outcomes of the PAMSCAD project through quantitative and qualitative methods (focus groups). Again, the emphasis is on the empowerment outcomes outlined in figure 1 namely mothers' satisfaction, psychological resources (operationalized as sense of control, confidence, knowledge, and skills) and material resources (operationalized as access to food). Frequency and percentage data were calculated for this objective.

(3) To determine the relationship between the empowerment processes and empowerment outcomes of the PAMSCAD.

Regression analyses were performed for this objective. There were five regression models, one for each outcome variable. The seven empowerment process variables were entered into the equations as independent variables, using the stepwise method, to determine the best predictors of the outcomes.

(4) To gain a greater depth of understanding of the context, process, and outcomes of the nutrition program through qualitative observations and focus group interviews. While the quantitative information should provide some breadth of understanding, the qualitative data should provide further insights into the nature of the nutrition program.

PARTICIPANTS

A total of 66 mothers were involved in the evaluation. These were selected from Ayeredee, which is a community in the Nkoranza District in the Brong-Ahafo Region. In consultation with the stakeholders, Ayeredee was selected because it was one of the first nutrition centres to be established in the Nkoranza District. Being the first nutrition centre, the stakeholders thought that it was ready for the evaluation. A probability sampling method was used to select 66 mothers from a population of 200. This method has the advantage of indicating the chances that sample findings are not different from the population. Secondly, enough elements may be selected from each relevant population. Specifically, a version of the systematic sampling method was used. This method appears to be simple since all the names of the participants are in the files of the service providers. In this case, I selected every second name on the list starting from the first one to the last one. This implies that numbers 2, 4, 6, 8, 10, 12 ... 132 were selected. Of course this means that the people on the latter part of the list had no chance of being selected.

Nine service providers were involved in the focus group interviews. Seven of them are members of the Centre Management Committee and the other two are the Centre Attendants (all females).

Description of Participants and their Community

All the mothers in the program are poor women living in Ayeredee in the Nkoranza District of the Brong-Ahafo region. The majority of them are peasant farmers with a few of them being petty traders. Most of them are illiterates with some having basic middle school education. The community does not have most basic necessities of life. For instance, the following amenities are not available in most cases: electricity, pipe-borne water, telephone, hospitals or clinics, and schools, to mention a few. The narrow "feeder-roads" which link this community to the capital city (Sunyani) where most basic amenities can be found are not usable during rain seasons and thus these people are sometimes cut-off from the rest of the country. The transport sector is in the hands of individuals who charge exorbitant prices in order to service their vehicles plying these routes.

As a result of lack of electricity in this area, there appears to be little entertainment or socialization after 7 pm, since it may be dark by then. In the night people are seen with lanterns run by kerosene or torchlights run by batteries. There are no telephone services and the residents may have to walk many kilometres before arriving at the nearest post offices. It is an open secret that post offices in rural areas in Ghana are often ignored as a result of poor transportation services. In these areas communication with the rest of the country is usually very difficult. To make things worse, there

is no good drinking water in this area. In most cases rivers or streams are the only source of water. Given the fact that most people do not have time to boil these sources of drinking water, water-borne diseases are common.

There is no hospital at Ayeredee. The residents rely on a "one-room" clinic which is run by a volunteer health worker. The nearest hospital is at Nkoranza (district capital) which is about 20 miles away. The other eleven communities in the district also rely on this hospital making the resources at the latter very limited. Most trained doctors refuse to work in the "rural areas". There is only one Regional Hospital situated at Sunyani serving nearly 1.3 million people in the region. To make things worse, this hospital is situated between 150-300 Km from Ayeredee. In short, many people with health-related problems die on their way to the Regional Hospital at Sunyani. It is against this background that this research was conducted.

Table 1 below contains demographic information on the participants of the empowerment survey.

Table 1

Demographic Information on Participants

Age of child	Years	Frequency	%
	1	3	5.2
	2	16	27.6

	3	9	15.5
	4	16	27.6
	5	14	24.1
Age of mother	16-25	14	24.1
	26-35	39	67.2
	36-45	2	3.4
	46-55	2	3.4
	56-65	1	1.7
Marital status		Frequency	%
Single		4	6.9
Married		54	93.1
Educational level	Frequency		%
Primary		38	65.5
Middle		4	6.9
Technical		4	6.9
illiterates		12	20.7

OUTCOME MEASURES

Evaluators use outcome measures as tools to determine the extent to which a change can be attributed to a program. Posavac and Carey (1992) have indicated that:

> In order to show that something causes something else, it is necessary to demonstrate (1) that the cause precedes the supposed effect in time (2) that the cause covaries with the effect and (3) that no other alternative explanations of the effect exit except the assumed cause. (p. 159)

These scholars have cautioned against the use of wrong measures despite the fact that it is not easy to select them. Some evaluators believe that one should have clear criteria in mind when selecting outcome measures (Ciarlo et al., 1981; Posavac & Carey, 1992). According to the former evaluators, "ideal" criteria for selecting a measure should include the following: appropriateness to the client, validity and reliability, sensitivity, cost-effectiveness, simplicity and understandability. Last, but not the least, a measure should be quick and easy to administer. Based on the concerns of Ciarlo et al. (1981) and Posavac and Carey (1992), the following outcome measure has been selected for the purpose of evaluating the stated goals of the PAMSCAD supplementary food program.

Measure: Participant Empowerment Survey

This measure was developed by the present researcher based on the thesis of a fellow student submitted to the Department of Psychology in partial fulfilment of the requirements for the MA degree (Johnston, 1991). Johnston's original version had 67 items without any distinctions between the scales. However, the modified version for the study has 79 items with sub-divisions. There are four main sections: the empowerment process, empowerment outcome, general health rating, and personal information. The General Health Rating section asks the mother to rate her child's nutritional status on 6-point scale from "very healthy" to "very unhealthy". The Personal Information section deals with data on the sex and age of the child, educational background of the mother, marital status, and age.

The empowerment outcome section (Appendix 1, section 2) has five sub-scales: general satisfaction, seeking knowledge, sense of control, confidence, family health and nutrition, access to food, and personal information. All the scale items have been structured in both positive and negative dimensions to control response biases or "acquiescent response style" (Kidder & Judd, 1986). Based on the Likert-type of scale, participants rated each statement on a 6-point scale: agree strongly, agree, agree somewhat, disagree somewhat, disagree, and disagree strongly. The scoring of the items was based on the nature of the response given. Positive answers have high

scores and negative answers have low scores. The scores range from 1-6. For instance, strongly agree has a score of 6 and strongly disagree has a score of 1.

The General Satisfaction subscale contains seven items asking participants to rate their satisfaction with the services being provided by PAMSCAD. One of the items is: "At the nutrition centre, my child receives as much care as I feel s/he needs".

The Seeking of Knowledge subscale has six items intended to find out how the participants have been asking questions about their children's nutritional status. One of the items is: "I ask questions about the nutritional status of my child when I do not understand it".

The Sense of Control subscale which was adopted from Wallston et al. (1976) has 10 items (cited in Johnston, 1991). These items are meant to investigate the mother's sense of control over their children's nutritional status. One of the items is: "If I take care of my child, I can avoid malnutrition".

The Confidence subscale has four items designed to find out the level of confidence mothers have regarding their children's nutritional status. This is one of the items: "I believe that I have the skill necessary to take good care of my child's nutritional needs".

The Access to Food subscale has six items intended to find out the amount and quality of food available to the

participants outside the supplementary food program. One of the items is: "My family does not get enough food outside the program".

Scale Reliability and Validity

Given the fact that this measure was developed specifically to evaluate the PAMSCAD program, the scales are yet to be proven in terms of reliability and validity. However, appropriate steps were taken to ensure reliability and validity. I computed Cronbach's alpha for the subscales for estimates of internal consistency. The table below shows the reliability estimates.

Table 2

Cronbach's Alpha for Empowerment Outcomes

	Initial items	Final items	Alpha values
Empowerment Outcomes			
1. General Satisfaction	7	5	.86
2. Seeking Knowledge	6	4	.61
3. Confidence	4	3	.85
4. Sense of Control	10	5	.75
5. Family Health/Nutrition	3	3	.59
6. Access to Food	6	4	.68

Table 2 depicts the scale reliabilities for the items in the empowerment outcomes using the Cronbach's alpha. Items that reduced reliability of the subscales were dropped. For

instance, the initial items under Sense of Control were nine and the final number of items was five (refer to Table 2). This means that the items were reduced from nine to five in order to ensure a higher reliability for the subscale. The reliability estimates range from .61 to .86. Johnston (1991) in a similar evaluation involving the Woolwich Community Health Centre in Ontario, Canada had a range of .44 to .76 for similar subscales. The present evaluation had a reliability of .85 for the Confidence measure, while Johnston reported .63 for her evaluation of the previously named community health centre.

The present evaluation had a reliability estimate of .86 for the General Satisfaction measure, while Johnston had .44 for the same measure. It appears to me that this evaluation had a higher reliability value for the latter measure (as compared to Johnston's) partly because of the dual roles of the Ayeredee nutrition centre. This centre also serves as a "day care" for the participants in addition to supplementing the diets of the malnourished children.

The table below depicts the correlation matrix for the outcome measures intended to elucidate the criterion validity for the measures.

Table 3

Correlation Matrix for Outcome Measures

	1	2	3	4	5	6
1. Satisfaction	-					
2. Seeking Knowledge	.49	-				
3. Confidence	.72	.43	-			
4. Sense of Control	.00	.19	.05	-		
5. Health & Nutrition	.53	.32	.60	.10	-	
6. Access to Food	.46	.30	.45	.43	.20	-

All correlations $p \geq .32$ are significant at alpha = .01.

From the table, it can be seen that Satisfaction related well with three of the outcome subscales namely Seeking Knowledge (.49), Confidence (.43), and Family Health and Nutrition (.53). All these relationships were significant at the .01 level. Only the Sense of Control subscale did not show any relationship with any of the other outcome measures.

PROCESS MEASURES

Participant Empowerment Survey

This measure (Appendix 1, section 1) was also developed by this researcher based on Johnston (1991). The process measure has five subscales: Accessibility and Convenience, Technical Quality, Provider Conduct, Self-determination, and Dissemination of Information and opportunities for decision-making.

The Accessibility and Convenience subscale has five items meant to evaluate the participants' satisfaction with the accessibility of the available services at the centre. One of the items is: "The nutrition centre is conveniently located".

The Technical Quality subscale has six items intended to find out how satisfied the mothers are with the competence of the service providers. For instance, one of the items is: "The health worker who sees my child appears to be competent".

The Provider Conduct subscale consists of nine items designed to elicit the mothers' satisfaction with the behaviour and caring attitudes of the service providers. One of the items: "I am always treated with respect at the nutrition centre".

The Self-determination subscale has eight items intended to find out the extent to which the mothers' needs and opinions are taken into consideration at the nutrition centre.

The Dissemination of Information and the Opportunities for Decision-making (at the centre) subscale has seven items.

This is intended to assess the mothers' satisfaction with the opportunities available in the centre to participate in decision-making. This is one of the items: "the staff at the centre encourage me to be involved in making decisions about my child".

Scale Reliability and Validity

The process measure, like the outcome one, has also not been tested and so there are no data on its validity or reliability. However, appropriate measures were taken during the survey to ensure validity and reliability. Again, I computed Cronbach's alpha for subscales for reliability. The table below shows the reliability estimates for the empowerment processes.

Table 4

Cronbach's Alpha for Empowerment Processes

	Initial items	Final items	Alpha values
Empowerment processes			
Access/convenience	5	4	.53
Technical Quality	6	6	.51
Provider Conduct	9	6	.72
Self-determination	8	6	.85
Dissemination of Info.	7	4	.57

The above table shows that the reliability estimates for the empowerment processes range from .51 to .85. Any item that reduced the scale reliability was dropped. For instance, the initial number of items for the Provider Conduct subscale was nine, and the final number of items was six. This means that the number of items was reduced from nine to six in order to ensure a higher reliability for the subscale (refer to table 4).

Johnston (1991) in a similar evaluation involving the Woolwich Community Health Centre in Ontario, Canada found a reliability estimate of .67 for the Access/Convenience process measure. The present evaluation also had the same figure (.67).

Johnston had an alpha of .63 for the Technical Quality empowerment process. The present evaluation had a value of .51. I am not surprised that Johnston had a higher value for the Technical Quality subscale, given the fact that the Woolwich Community Health Centre that she evaluated is run by paid, qualified doctors and nurses. In contrast, the Ayeredee Nutrition Centre is operated by volunteers with basic nutrition and health knowledge.

Table 5 below shows the correlation matrix for the process measures intended to elucidate the criterion validity of the items in the measure.

Table 5

Correlation Matrix for Process Measures

	1	2	3	4	5
1. Access/Convenience	-				
2. Technical Quality	.22	-			
3. Provider Conduct	.45	.27	-		
4. Self-determination	.32	.10	.67	-	
5. Dissemination of Info.	.40	.17	.53	.69	-

All correlations $p > .32$ are significant at alpha = .01.

From Table 5, it can be seen that with the exception of the Technical Quality subscale, all the correlations between the other subscales are significant.

Nutrition and Health Knowledge Skills Questionnaire

This measure (Appendix 2) was developed by the researcher to assess the extent of skills and knowledge that the mothers have acquired as a result of their involvement with the PAMSCAD program. Specifically, the objective is to find out how much they have gained from the educational programs. There are 10 questions and the mothers and the service providers are expected to express their opinions during Focus Group interviews. In the case of service providers, parallel questions based on Appendix 2 were used. One of the questions is: "have you become more aware of preparation of nutritious weaning foods? ...if 'YES', how?, if 'NO', why not?". A parallel question for the service providers reads like this: "in your opinion, do you think the mothers have become more aware of the preparation of nutritious weaning food?...If 'YES', how, if 'NO', why not?"

EVALUATION DESIGN

Each of the measures discussed were administered in a simple post-test only design. To determine whether minimum standards of an outcome are being achieved, the post-test only design is useful (Posavac & Carey, 1992). These authors indicated further that this design is also helpful when the objective is to know how well participants are going through a program. Since the evaluation objective is to determine whether the goals of the PAMSCAD project are being met this design appears to be appropriate. This stems from the fact that the evaluation intends to assess the impact of the project on the mothers in the program.

RESEARCH PROCESS

Pre-entry Stage

My main career objective is to apply my practical and theoretical knowledge in community psychology to everyday problems in disadvantaged communities in the developing world. Specifically, I am interested in primary prevention. It is therefore natural that I thought of evaluating a program primary health care program in Ghana, West Africa in partial fulfilment of the requirements for the Master of Arts in psychology at the Wilfrid Laurier University. To this end, I wrote a letter to the Brong-Ahafo Regional Secretary of Health requesting all data on primary health care activities in the region. The former was very helpful by mailing some data on the named subject to me. After going through the data, I selected the Kintampo District Health Management Team/Freedom From Hunger Foundation nutrition program.

When I started the evaluability study of the previously named nutrition project, I realized that the Kintampo District Health Management Team was not ready for my evaluation. Although I was very disappointed, I never gave up. I went through the available data and with the help of the Brong-Ahafo Regional Secretary of Health, I decided once again to evaluate the PAMSCAD project because it was due for evaluation in December 1992. Furthermore, the stakeholders were willing to cooperate with me on this evaluation.

Having decided on the PAMSCAD project, the major concern

of my thesis committee was how to fund the evaluation in Africa. The budget was nearly twenty thousand dollars ($20,000). Fortunately, I am eligible for the Young Canadian Researchers Award which is administered by the International Development Research Centre. My thesis committee members realized that I had to work extra hard in order to get this award. I also had to meet various deadlines in order to graduate on schedule. Through their encouragement and support, I left no stone unturned in this endeavour.

Through extensive correspondence with the Brong-Ahafo Ministry of Health, University of Ghana, and the Department of community Development in the Brong Ahafo region, I obtained the necessary data that enable me to present an acceptable proposal that earned me the Young Canadians Researchers Award for 1993.

Given the fact that an empowerment agenda is being pursued, the research was an action-oriented one. Rappaport notes that,

> To be committed to empowerment is to be an action-researcher-one who identifies, facilitates, creates. That is what action-researchers do. To say that we do this with respect to contexts is to make a theoretical, a methodological, and an action statement. (1990, p. 55)

In order to identify, facilitate and create empowering processes in the community under study, the research was done in the natural settings of the selected community. This was helpful because studying people outside their natural settings imposes some restrictions on their normal activities. Having

decided on the setting, the next step in the empowerment process was to collaborate fully with all the stakeholders even before the actual research started. To this end, the following steps were taken towards true participatory research.

Entry Stage

I left Canada on February 2, 1993 for the field location. My first meeting was with the Paramount Chief of the Sunyani Traditional Council who was already aware of the evaluation. My next meeting was with the Brong-Ahafo Regional Secretary of Health who in turn introduced me to the Brong-Ahafo Regional Nutrition Officer. The latter who is the Regional Co-ordinator of the PAMSCAD program was outside Ghana when I started the evaluability assessment. The Regional co-ordinator with the help of the Nkoranza District Nutrition Officer selected the Ayeredee nutrition centre for the evaluation.

Initially, when I entered the Ayeredee community, I was received with mixed feelings by some of the members of the Centre Management Team who were not sure of the motive behind the evaluation. The evaluation took place at a time when the supplementary food program had been suspended due to a shortage of food from the World Food Program. Furthermore, there were allegations of diversion of food ingredients and embezzlement of funds against some of the service providers. Against this background, some of the residents felt that I was sent from Canada to "audit" the activities at the nutrition

centre. Probably the involvement of the World Food Program in the project contributed a great deal to their fears.

The onus was therefore on me to convince some of the stakeholders that I was really there for genuine participatory research with a view of improving on the services at the nutrition centre. The majority of the residents that I interacted with did not understand why I travelled all the way from Canada to this remote part of the country for such an evaluation. However, after discussing my career objectives (as indicated earlier) with them, coupled with the fact that I come from the same region to a large extent made me worthy of trust.

In order to improve my credibility, I increased my presence at their social activities and meetings unrelated to the evaluation. During the first two weeks at Ayeredee, the only people I knew were the service providers who had been accused of the diversion and embezzlement of funds. Those who strongly believed these allegations felt that I would "write the report in favour of those people". The thought of this made me feel uncomfortable although I did not ever think of such an idea. At that juncture, I had to make a decision. The big question for me was "should I involve myself in the politics of this community?". One part of me told me to fully investigate these allegations since this formed part of the observations at the nutrition centre. Since this appeared to be a sensitive issue central to the smooth running of the

centre, I did not know where to begin giving the limited time at my disposal in Ghana. The other part of me told me t o ignore those allegations because my time was limited. In this case should I assume that the service providers are innocent or guilty?

As a brand new "evaluator", I was confused and I needed the opinion of my advisor urgently. Upon reflection, I then understood why my thesis committee members were concerned about how I was going to react to unanticipated problems, given the distance between us (Canada to Ghana). In the absence of my advisor, I consulted the only evaluation textbook that I took along. This is what Posavac and Carey (1992) had to say regarding unexamined values by the evaluator,

> the evaluation may also be rendered less valid if values are assumed by the evaluator without examination. Sjoberg (1975) suggests that evaluators typically accept the existing power structure and adopt its values with little reflection. For example, embezzlement is not treated as a major crime because, according to Sjoberg, it is middle-and upper-class crime... He has argued forcefully that the needs of all groups with a stake in the evaluation cannot be met if the evaluator has implicitly adopted the values of the most powerful group involved with the evaluation. (Posavac & Carey, 1992, pp.98)

In this case, I did not agree with Sjoberg's stand that embezzlement should not be treated as a major crime because it normally emanates from the activities of middle and upper-class people. As stated earlier, to adopt the empowerment agenda is to be on the side of the poor and powerless. In this

evaluation, I chose to be on the side of the poor mothers in the program who were allegedly being exploited.

If I had ignored this sensitive issue, I would have "implicitly adopted the values of the most powerful group involved with the evaluation" as argued by Sjoberg. Finally, I decided to be involved in finding out the truth about these allegations in a low profile. At a community meeting, a special committee was appointed to investigate and report to the whole community. At this meeting, I made it very clear that I was only going to rely on the findings of this committee which may be attached to the final report of this evaluation as an addendum if they (Ayeredee community members) so wish.

Against this background, I realized that community members had been divided into two main camps. These comprised of (1) those who believed the allegations of embezzlement and were demanding the removal of some of the service providers and (2) those who did not believe (or did not care about) the allegations and wanted all the service providers to remain at the centre. A point worthy of note is that the responses given by the participants in this evaluation more or less depended on their perceptions of the political situation, and which of the two camps to which they belonged. This will be discussed later on in the Results and Discussion section of the thesis.

I met with the PAMSCAD Evaluation Team made up of Regional Nutrition Officer, the District Health Management

Team (DHMT), project officers, and the Centre Management Committee to discuss the details of the evaluation. The team also assisted me in hiring a Research Assistant who is well connected with the community and has relevant qualifications to assist in a research of this nature. Formal permission was sought from the sampled mothers to take part in the research. There was no deception. Right from the beginning, participants were fully informed about the objectives of the evaluation and the part that every one was expected to play.

The day before the survey, the chief's messager (popularly known as the "Village crier") walked through the whole community beating the "gong-gong" (a metal instrument which is hit with a piece of wood to produce vibrating sounds within the community). The beating of the "gong-gong" signifies that there is an important message from the chief. At the sound of this vibrating instrument, members of the community including men, women, children and elders rush outside their homes in numbers to listen to the message. A point worthy of note is that the sound of the "gong-gong" travels very far within the community. The chief's message centred around my evaluation. Through the "village crier", the chief invited the community members for a meeting at an open place. At this meeting I was formally introduced. After the introduction, I took the opportunity to fully inform the members present about the objectives of the evaluation and asked for their co-operation. The residents of Ayeredee were very happy that I will be

discussing the results of the evaluation with them in their own community.

The participants were involved in the scheduling of the survey. They were engaged either at nutrition centre, their homes or at my lodging place. The times and locations were chosen at the participants' own convenience.

Work Stage

Observations. This was supposed to be the first step in the action-oriented strategy. In the original proposal, I intended to be involved in the activities of the program as a participant- observer for a three week-period. All the mothers in the program were to be informed about the objectives of the observations and how long they would last. However, when I arrived for the evaluation, the supplementary food program had been temporarily suspended due to a shortage of food from the World Food Program. Despite this, I had the opportunity of observing some of the activities of the centre on two occasions. Within the community as a whole I made observations on a daily basis throughout my involvement with this community. All the observations were overt. These overt activities had a broader focus covering both planned and unplanned activities outside the nutrition centre.

During these observations, participants' gestures, movements, emotions were noted down in a small "journal of activities". I used this journal (which was a small note-book) to record important observations emanating from my daily

interactions with the mothers, the community members, and the service providers. In my view, this was the only way of remembering essential details. The recordings in the small note-book was always done out of sight of the participants in order to avoid any intimidations. Furthermore, the way service providers interacted with the mothers, and opportunities for participating in the decision-making process were also noted. As much as possible, arriving at conclusions without double checking from the service providers or the mothers was avoided. To this end, I combined observations with short interviews to clarify issues. These interviews took the form of asking the mothers short questions regarding important observed behaviors or patterns. There was a clear distinction between what actually happened and my own perception of the situation. The language of communication was the local language of the community which is Akan.

Surveys. This took the form of a face-face interview. The Akan translated version of the measures in Appendix 1 was administered. The Regional Nutrition Officer went through all the items in the measures and made some useful suggestions which led to the deletion of some of the items that appeared to be irrelevant or inappropriate. For instance, I was advised to delete an item that compared the services at the Ayeredee nutrition centre with that of the other eleven nutrition centres. The Regional Nutrition Officer's concern was that the participants at Ayeredee do not know what goes on in the other

centres. I found this to be a legitimate concern. On the advise of this officer, I substituted "health worker" for "nutrition officer" since there are no nutrition officers dealing directly with the participants at the centre. After these changes, the service providers appeared to be more comfortable with the evaluation process. Before each interview, the participants were asked to sign or thumb-print the bottom part of the Consent form after the contents have been read to them. The Consent form assures them of confidentiality; and their rights to refuse to participate or stop the interview any time that they felt threatened or uncomfortable. The objectives of the evaluation have also been addressed in the form (Appendix 3). The consent form was prepared strictly in accordance with the Canadian Psychological Association ethical guidelines (which are also accepted in Ghana). Furthermore, the proposal for this evaluation went through the Wilfrid Laurier University Research Ethics Committee for approval. The participants were expected to select one of the six statements presented which best described their opinion on the items presented. In all, each person was expected to respond to 79 items. I recorded the appropriate responses on the survey tool.

Focus group interviews. Some of the mothers and service providers were involved in the focus group interviews. There were two focus group interviews involving nine mothers (in one group) and nine service providers in the other group. In the

case of the mothers, there was a random sampling of those who did not take part in the survey. The focus of these interviews was on the nutrition and health skills that the mothers have acquired as a result of their involvement in the PAMSCAD project. The 10 questions in Appendix 2 (service providers had parallel questions) were used and the order of presentation depended on the nature of the discussions emanating from the process. All mothers and service providers were given equal chance to make known their opinions. However, the facilitator ensured that the interviews were focused on the issues under discussion. After going through all the issues, participants were given the opportunity to discuss any pertinent issues that were not covered at the discussions. Before the interviews, permission was sought from the mothers and the service providers to tape record the discussions. The Research Assistant recorded some of the important points in the discussions. The focus group interviews involving the service providers was conducted at the nutrition centre. The one involving the mothers took place at the place where I was lodging. Akan (language of the local people) was used throughout the discussions.

After the focus group interviews, the tape recorded interviews were transcribed and then translated into English for analysis.

Feed-back Stage

This will take place by the end of December 1993 at Ayeredee. It will be in the form of durbar of Chiefs, elders, mothers in the program, community members, PAMSCAD secretariat, the Brong-Ahafo Ministry of Health, and myself. The exact date will be determined at the convenience of the stakeholders. This will be after the latter have studied the results of the evaluation. Based on this thesis, the results of the evaluation will be communicated to those present in simple Akan language. I anticipate that by presenting the results in the local language the majority of the community members would be able to contribute meaningfully.

Although I made it clear right from the beginning that there would be a feed-back session as indicated above, the community members as well as some of the service providers did not believe it. I do not blame them, because many researchers have involved them in similar studies without making known their results to them. I strongly believe that any program evaluation without a feedback to the stakeholders is useless and disempowering (as far as the participants are concerned). If evaluators refuse to share their findings with those whose lives are affected by a program, how can needed changes be made towards improving the efficacy of a program? Zammuto (1982) notes that feedback from program evaluation helps a great deal in improving effectiveness of programs. Posavac and Carey (1992) have rightly pointed out that "human behavior is

adaptive only when people obtain feedback from the environment" (p. 11). My promise to return to Ghana solely for the feed-back session is unheard of in this community. It appears to be a great challenge for both of us. There is no doubt at all in my mind that the residents of Ayeredee are patiently waiting for this occasion.

RESULTS AND DISCUSSION

Analysis of Data

Data from the Participant Empowerment survey were analyzed using frequencies and percentages and linear regression with the stepwise variable selection procedures.

Data from the focus group discussions and the observations were analyzed by using content analysis. Before this, the tape recorded interviews were transcribed by trained personnel with the instructions not to summarize, but to present information "as is". For security sake, there were three copies, and the original copy was kept at a safe place since transcribers in Ghana usually do not have the luxury of storing data on computers. The content analysis approach tries as much as possible to identify examples, themes or patterns in the quotations that are essential or useful for the evaluation. The quotations were classified according to themes or patterns. According to Patton (1990), organizing data into manageable categories is the basic purpose of content analysis. Direct quotations that go together in terms of goals, skills or any related information were identified and analyzed. The same thing was done to the field notes on the observations. In this case similar patterns regarding emotions, gestures, decision- making and co-operation between the mothers and the service providers were grouped together. The results of the analysis (refer to Tables 6 to 9) and discussions have fully been documented below.

Table 6

Empowerment Processes Frequencies and Means

	SA	A	AS	DS	D	SD	
A. Accessibility/Convenience	1	2	3	4	5	6	Means
1. Appointments on time?	0	49	6	0	3	0	2.26
*3. Difficult to be accepted	3	9	3	5	28	10	2.69
*4. Difficult to get help	4	13	0	9	31	1	3.09
5. Centre has everything needed	2	36	14	0	1	1	2.49
Subscale total							10.53
B. Technical Quality							
1. Health worker competent	1	46	7	0	4	0	2.31
*2. Health worker not thorough	2	22	1	6	25	2	3.38
*3. Worker gave food unnecessarily	0	10	2	8	37	1	2.71
*4. Nutrition info not enough	0	14	2	3	28	0	3.03
5. Attendants appear competent	0	33	12	8	5	0	2.74
6. Workers advise about nutrition	11	34	0	0	11	2	2.52
Subscale total							16.69
C. Provider Conduct							
1. I am treated with respect	6	43	4	2	3	0	2.19
3. Talked about other areas	4	23	4	5	15	7	3.45
*4. My involvement being tested	0	30	2	0	24	2	3.59

6 Feel I can discuss any problem	4	36	1	2	14	1	3.83
*7. Workers insensitive to beliefs	0	50	1	2	4	1	4.04
8. Child's problem kept private	0	37	4	2	8	0	3.32
Subscale total							19.00

D. Self-determination

*1. No opportunity to be involved	6	32	0	2	14	4	4.03
*2. I have enough say at centre	0	23	5	3	24	3	3.64
3. Community members ideas asked	1	32	8	6	9	2	2.93
4. Staff ask me for ideas	0	31	1	0	24	2	3.40
5 Staff asked me for ideas	11	19	3	0	8	20	3.50
8. I feel I have a lot of say	0	34	7	0	15	2	3.03
Subscale total							20.53

E. Dissemination of Info.

*3. Workers often use big words	0	5	1	0	34	18	1.98
5. Workers explain why my child	6	34	2	0	16	0	2.78
*6. I'm not included in decisions	3	24	9	2	19	1	3.78
7. I'm encouraged to be involved	1	32	4	4	13	4	3.14
Subscale total							11.68

(* = reverse coded item)

SA = strongly agree, A = agree, AS = Agree somewhat, DS = disagree somewhat, D = disagree, SD = strongly disagree

Table 6 above shows the frequencies and means for the

various items in the empowerment processes, namely accessibility/convenience, technical quality, provider conduct, self-determination, and dissemination of information and opportunities for decision-making. Items that reduced with the reliabilities of the subscales were dropped from the analysis.

Access/convenience

As can be seen from Table 6, 49 participants representing 84.5% indicated that most of their appointments at the nutrition centre were on time. The majority of the participants disagreed that it is difficult to be accepted into the PAMSCAD program (28, 48.8%). This stand is strengthened by the fact that another 10 participants (17.2%) also strongly disagreed. It appears to me that the entry requirements to the program may be an obstacle to some of the mothers. Apart from the age limit (1-5 years), a child must be malnourished (as determined at the base-line survey), and the mother must have a low income before an applicant is accepted into the program. During the focus group interviews, the service providers indicated that both the mother and the child must also show proof of immunization before being accepted into the program. This may also be an added problem. In effect therefore, a would-be participant must show that her child is "sick" or "at risk", and at the same must admit that she is poor before she can be accepted into the program. These conditions are stigmatizing and not in the interest of primary health care as indicated by Pappoe that "essential health care be made universally accessible to individuals and families in the community" (1987, p. 30). I have been wondering what will happen to a middle-income mother whose child is malnourished. In this case should the malnourished child be denied access to the services of the nutrition centre simply because the mother

is not poor? Studies in the Philippines involving similar nutrition programs indicated that those who were excluded from the program resented the special attention being given to the selected few (Dineros-Pineda, 1992). In the later study, those who were not selected for the program refused to have anything to do with the program. Similar sentiments were expressed at Ayeredee during my observations. Pancer and Nelson (1990) have advocated for full community participation as one of the guidelines to ensure the success of community-based health promotion programs.

All the same, I am surprised that some mothers are finding it difficult to enter the program given the fact that the program has not yet maximized its full capacity of 200. It does not surprise me that participants in most cases do not get emergency help when needed. This is because the nutrition centre is run by all volunteers who in most cases are not readily available for consultation.

Technical Quality

46 participants (79.3%) agreed that the health worker at the centre is competent. 33 participants (56.9%) agreed that the two female Centre Attendants appear to be competent. However, there appears to be mixed feelings regarding the participants' perceptions of the way their children are examined prior to their involvement in the program. This stems from the fact that 22 participants (37.9%) agreed, and 25 of them (43.10%) disagreed in answer to the following item "the health worker was not very thorough when examining my child". I take consolation from the fact that despite this concern, the health workers based their assessments on enough information as far as the majority of the participants are concerned. I base my optimism on the responses of the participants to this item: "I felt that my child's nutritional status was determined without enough information". 28 participants (48.3%) disagreed with this item as against 14 (24.1%) who agreed.

Despite the fact that a majority of the participants feel that the service providers appear to be competent, there are mixed feelings regarding the quality and quantity of health and nutrition information being provided at the nutrition centre. Some of the mothers think that they are not receiving enough information. My involvement with the centre has given me the opportunity to be familiar with the educational backgrounds of the members of the Centre Management Team. Most

of the latter (who are volunteers) have basic elementary school education coupled with only basic knowledge on health and nutrition. Probably, their best may not be enough for some of the participants who are also aware of their (service providers) educational backgrounds and training. There is the need for ongoing training for the health workers. The need for a reasonable number of well-trained staff at different levels of the primary health care process has been forcefully argued (Airhihenbuwa, 1990; Pappoe, 1987; Ryan et al., 1990). Citing Muriel Skeet, Ryan et al. (1990) indicated that,

> it is alarming to contemplate the number of these lay people whom we have placed in positions of authority; who work without adequate supervision; who distribute advise without knowledge; and who sometimes further their own interests at the expense of the sick. Community health workers should be an asset to the health services but they will be so only so long as they are properly selected, trained, and supervised. (p. 125)

Although initial training is essential for the long-term effectiveness of health workers, there is the need for constant supervision and education (Ryan et al., 1990). According to these authors, the selection of illiterate trainees needs rethinking. Ryan and his colleagues believe that illiterate trainees "would fare better with an apprenticeship model of training where there is regular reinforcement of learning" (p. 129).

Airhihenbuwa (1990) holds a contrary view to that of Ryan and his colleagues on the selection and training of illiterates for primary health care activities. According to

the former author,

> a major assumption in promoting literacy is that it is synonymous with education. To be literate means to be able to read and write while being educated means to acquire knowledge and tools that help one to think freely and make informed decisions. While literacy is certainly an important factor in reaching the goal of health for all, this importance varies among cultures because people do not necessarily have to be able to read and write in order to make informed decisions...Moreover, the notion of "literacy for all" as a panacea for improved health status is evidently misguided as can be seen in the example of Tanzania with a literacy rate of 90 percent. (Airhihenbuwa, 1990, p. 60)

I have identified myself with Airhihenbuwa, because I strongly believe that full participation in primary health care means that every member of the community must be empowered irrespective of educational background.

Provider Conduct

43 participants (74.1%) agreed that they are always treated with respect at the nutrition centre. It is good news that 37 participants (63.8%) agreed that their children's problems are kept private and confidential. Given the fact that the Ayeredee community is a multi-religious one (Christians, Muslims, traditional Africans, atheists, to mention a few), I have been wondering about the impact of religious beliefs on the smooth running of the nutrition centre. My main concern is that 50 participants (86.2%) indicated that the workers are insensitive to their religious

beliefs. I am tempted to believe that since 74.1% of them have already agreed that they are always treated with respect at the centre, the religious factor may be down played.

There are mixed feelings about how the participants perceive the conduct of the service providers at the centre. Given the political climate surrounding the operation of the centre during the evaluation, I am tempted to believe that each participant based her opinions on whether she perceived some of the service providers to be corrupt (as alleged) or not. There were also conflicts between some of the mothers and the service providers regarding the payment of 200 cedis per head per month towards the running of the centre. These factors may have contributed to the mixed feelings indicated by the mothers. During short interviews with the service providers I became aware that some of them had problems collecting money from some of the mothers who feel that the food should be provided free of charge.

The conduct (alleged diversion of food ingredients) of some of the service providers at the Ayeredee nutrition centre may tie in with the concerns of Ryan et al. (1990) that sometimes health workers further their own interests at the expense of the sick. It is conceivable that some of the workers may have diverted some of the food ingredients for their personal use at the expense of the malnourished children. It is also conceivable that the service providers may have acquired enough health skills, but lack human

relations to deal with the mothers who are all adults. Freire (1973) in his "education for critical consciousness" has demonstrated how illiterate adults may be successfully educated (through their full participation) on matters pertaining to their survival.

The relationship between health workers and participants is crucial for the complete implementation of primary health care. Frank (1973) notes that cordial relationship, social support, and the personal characteristics of good therapists, teachers or healers are very important in the "healing process". Based on the concerns of the aforementioned authors, there is the need for an ongoing training and supervision of the health workers at the centre towards improving the relationship between the volunteers and the participants.

Self-determination

32 participants (55.2%) agreed that "the centre does not provide them and other participants of the opportunities to be involved in planning and management of the centre". Furthermore, there appears to be mixed feelings as far as this item is concerned: "people like me have enough say about how the centre is run". 23 participants (39.6%) agreed as compared with 24 (41.4%) who disagreed. None of the participants strongly agreed, but three of them (5.2%) strongly disagreed to the latter item.

It is interesting to note that 32 participants (55.2%)

agreed that the workers consider the health needs of the Ayeredee community as a whole by asking community members their opinions. Although 20 participants (34.5%) strongly agreed that the workers did not ask for their input before the program was started (with 5, 8.6% just agreeing); 11 of them (19%) strongly disagreed with another; three (5.2%) somewhat disagreeing.

A significant number of the participants do not feel that they have much control over the planning and implementation of the program. This is disturbing as far as true empowerment is concerned. Some scholars (Prilleltensky, in press) feel that self-determination is one of the essential components of empowerment needed to bring about "distributive justice". Maybe the service providers have been telling the mothers what to do instead of providing the right atmosphere for them to be fully involved in the planning and implementation in the centre's activities. Under such conditions the mothers are being forced to be fully dependent on them. This sort of arrangement is contrary to the principle of "participatory control" advocated by Stirling and Reid (1992). According to the latter, there must be a mutually beneficial relationship between all parties in the empowerment process.

Pappoe (1987) notes that without full participation of community members, one cannot claim to be engaged in primary health care activities. This is also in line with Lord and Farlow's (1990) assertion that health workers must see

themselves as facilitators of empowerment and create the right environment for the powerless to take full control over matters related to their survival.

Dissemination of Information and Opportunities for Decision-making

42 participants (72.4%) agreed that the workers answer questions about their children's nutritional status completely. I am therefore surprised that 18 of them (31.0%) agreed to this item,: "the health workers and the Centre Attendants did not give me all of the information that I thought should be given".

The number of participants who disagreed and strongly disagreed to this item "the health workers and the Centre Attendants often use words that I do not understand", were 34 (58.6%) and 18 (31.0%), respectively. I am not surprised at these responses since all the participants indicated to me that the medium of communication at the centre is Akan (which is the local language of the Ayeredee community).

A point worthy of note is that 41 participants representing 70.69% agreed that the workers should spend more time explaining their children's nutritional status and diet to them. Maybe the service providers have been spending most of their time feeding the children to the detriment of dissemination of much needed nutrition information. In line with the empowerment agenda, I fully agree with the poor

mothers who are very determined to take full control over their families nutritional status. After all, "distributive justice" which is the essential empowerment outcome entails "fair and equitable distribution of resources and burdens in our society" (Prilleltensky, in press, pp. 6-7).

24 participants (41.4%) agreed, and 19 (32.8%) disagreed with this item: "the workers at the centre do not include me when making decisions about my child's nutritional status". Given the number of participants who agreed with the above item, I was expecting to see a similar pattern of responses (based on the same principle of the mothers not being involved in the decision-making process at the centre) as far as this item is concerned: "the workers at the centre encourage me to be involved in making decisions about my child". To my surprise, 32 of them (55.2%) agreed and 13 (22.4) disagreed. I have two thoughts on these conflicting responses. First, maybe I confused the participants when I framed the same item in the opposite direction in my attempt to avoid or control response bias or "acquiescent response style", as suggested by Kidder and Judd (1986). Second, it is conceivable that although the service providers have been encouraging the mothers to be involved in the decision-making process, the decisions are most of the time manipulated by them (service providers). Having been involved with the nutrition centre for nearly three months, it appears to me that the service providers decide on their own "what is to be done" and then

present it in a form of guided discussions for the final approval of the participants. Although I do not rule out my first thought, the second thought seems most likely.

There are mixed feelings as far as access to enough health and nutrition information is concerned. Some of the mothers feel that they do not have enough information on health and nutrition. Most of them indicated that they want the service providers to spend more time on providing health information instead of trying to change certain aspects of their nutritional patterns. In this role, health professionals should view themselves as "facilitators of empowerment rather than as teachers of health" (Lord & Farlow, 1990, p. 4).

Summary of Empowerment Processes

The responses of the participants to the empowerment processes indicate that there are mixed feelings as far as their relationships with the service providers are concerned. Some of the mothers think that it is difficult to be accepted into the program; they are not getting enough health and nutrition information; there is a mixed review of the conduct of the service providers; and they do not have much control over the planning and implementation of the program. The fact that some of the mothers are finding it difficult to be accepted into the program is a matter of great concern because primary health care is supposed to be universally accessible to everybody without any obstacles (Pappoe, 1987).

It appears to me that the most important aspect of any empowerment agenda is the relationship between the participant and the service provider. Appropriate steps must be taken to ensure that the participant may feel comfortable as an equal partner (Baker-Miller, 1976). I am afraid that this is not what is happening at the nutrition centre under study. A review of the participants' responses to the empowerment process measures shows that the service providers at Ayeredee appear to be caught up in the traditional professional practice which keeps people powerless and dependent on their services.

Although it is difficult for professionals to give up some of their power (Bremner et al., 1988), it will be in their best interest to encourage participants to be actively involved in the planning and implementation of their programs with a view of empowering them. Research by Lord and Farlow (1990) and Kieffer (1984) found that people who become empowered experience personal growth, including the development of new skills and increased self-esteem; and they become politicized, taking action on important social issues that affect their lives. I am very interested in the revelation that people who become empowered also become politicized. This stems from the fact that in the last part of this thesis, I will be imploring community psychologists and community members to be actively involved in political activities in order to understand the nature and dynamics of

oppression.

RESEARCH OBJECTIVE # 2:

Description of Empowerment Outcomes

Table 7

Empowerment Outcomes Frequencies and Means

	SA	A	AS	DS	D	SD	
A. General Satisfaction	1	2	3	4	5	6	Means
1. I'm satisfied with care	11	34	5	0	5	3	2.36
2. Child receives as much care	6	35	7	0	7	3	2.59
3. Centre is good for community	49	7	0	0	1	1	1.28
6. Child's health has improved	11	40	0	0	4	1	2.09
7. Family's status is better	11	38	0	3	3	1	2.14
Subscale total							10.50
B. Seeking Knowledge							
1. I ask questions about child	4	29	1	4	15	3	3.11
3. I frequently seek info. on my	0	20	16	12	7	1	3.16
4. I am up to date on events	9	34	0	4	9	0	2.46
*6. I let workers decide on child	7	40	2	0	5	2	4.68
Subscale total							13.41
C. Confidence							
1. I have skills to take good	13	34	7	0	0	0	2.12
3. I am confident that in 10 yrs	10	34	5	3	5	1	2.35
4. In 10 years my child is	10	28	11	3	5	1	2.45

Subscale total							6.91
D. Sense of Control							
*4. No matter what I do if my	5	11	0	1	33	8	2.79
*5. Most people do not realize	0	11	12	0	21	1	3.19
*6. I can only do what my worker	4	34	3	0	16	1	4.22
*8. Children who don't get malnutrition	1	35	1	2	11	8	3.81
9. Malnutrition results from carelessness		5	32	4	1	16	0	2.85
Subscale total							16.86
E. Family Health/Nutrition							
1. Child's nutritional status improved	13	39	1	0	3	2	2.09
*2. Child's status didn't improve	14	17	0	1	24	2	3.83
3. Child's nutritional status	16	32	4	6	0	0	2.00
Subscale total							7.92
F. Access to Food							
1. I have better access to food	0	27	10	1	19	1	3.26
*2. Family doesn't get enough	0	5	0	0	49	4	2.19
*3. If PAMSCAD stops, I wouldn t	0	7	0	7	32	12	2.28
4. PAMSCAD has brought more food	26	24	1	0	5	1	1.90
Subscale total							9.63

(reverse coded item)

SA = strongly agree, A = agree AS agree somewhat, D disagree, DS disagree somewhat,

SD = strongly disagree

Table 7 shows the frequencies and the means of responses of the various items in the empowerment outcomes namely general satisfaction, seeking knowledge, confidence, sense of control, family health and nutrition, and access to food. Items that reduced the reliabilities of the subscales were dropped from the analysis.

General Satisfaction

34 participants (58.6%) indicated that they agreed with the statement "I am very satisfied with the nutrition care my child receives at the nutrition centre". Another 11 of them (19.0%) also indicated that they strongly agreed with the above statement. 49 participants (84.5%) strongly agreed that the nutrition centre is good for the community. 69.0% of the participants agreed that their children's health has improved as a result of their involvement with the PAMSCAD supplementary food program. 65.5% also agreed that their families' nutritional status is better as compared to the time they became involved with the program. Accra, (the capital city of Ghana) was the venue for the 1992 World Food Agriculture Organization's (FAO) council meeting (Senyah,1992). The meeting examined the challenges posed by hunger, poverty, and population growth, and environmental growth. At this meeting, participants were concerned about the rate of increase in the world's malnourished children. Against this background, it is good news that there has been

improvements in the health and nutritional status of the children in the Ayeredee supplementary food program. This is also encouraging given the fact that malnutrition accounts for a large number of infant and child death in Ghana (Fosu, 1991).

Nearly all the participants think that the nutrition centre is good for their community. They are also very satisfied with the services being provided at the centre. This is not surprising since people in rural communities in Ghana are also satisfied with any "benevolent" help from private and governmental organizations (Pappoe, 1987).

Seeking Knowledge

Exactly 50% (29 participants) agreed that they have been asking questions about the nutritional status of their children. It is very interesting to note that 40 of them (69%) agreed with the statement that "usually, I let the health workers and Centre Attendants decide what is best for my child". I do not think that this type of situation helps the empowering process. It rather encourages the mothers in the program to be dependent on the service providers. Despite this disturbing revelation, 34 participants (58.6%) agreed with the statement that "I keep up to date on the events happening at the nutrition centre". It is also encouraging that 26 participants ag eed that they are actively involved in decisions about their children's welfare.

Most of the mothers have not been asking questions about their children's health and nutrition. In most cases, the mothers allow the service providers to decide what is best for their children. Again, this sort of relationship between the former and the latter does not lead to "participatory control" as advocated by Stirling and Reid (1992). Adult education is a different concept in education that requires different approaches. Freire (1973) has extensively documented his experiences as a popular educator in Latin America which were positive. I see no reason why such methods can not be employed at Ayeredee where the majority of tne participants are semi-illiterates. There must be an ongoing training in this regard to expose the service providers to effective ways of involving the powerless in the decision-making process.

Confidence

None of the participants (0%) either disagreed, strongly disagreed, or somewhat disagreed as far as this statement is concerned: "I believe that I have the necessary skills to take good care of my child". On the other hand, 34 (58.6%) agreed with this statement while another 13 participants (32.8%) strongly agreed. Nearly 60% of the participants surveyed were very optimistic as far as their children's future health and nutritional status is concerned. 34 participants representing 58.6% agreed that they were confident that in ten years time, their children will be as healthy as they are

today.

Nearly all of the participants are confident that they have acquired some skills necessary to take good care of their children. It is therefore not surprising that most of them feel that in ten years time their children would be as healthy as they are today. The participants' indication of confidence as a result of the skills they have acquired is a healthy sign for true empowerment. Lord and Farlow (1990) noted that people who become empowered experience personal growth, including the development of new skills and increased self-esteem. Zimmerman and Rappaport (1988) have linked the acquisition of confidence with "a sense of personal competence, a desire for, and a willingness to take action in public domain" (Zimmerman & Rappaport, 1988, p. 746). If empowerment refers to the possibility that people can more actively control their own lives (Rappaport, 1981; Riger, 1980), then it appears to me that one has to be confident about his/her skills or situation, before s/he can take full control over his/her life. The fact that the mothers are confident with their acquired skills as a result of their involvement with the program is in line with my anticipated results that PAMSCAD may be effective in teaching skills such as preparation of nutritious weaning food, and breast-feeding techniques.

Sense of Control

33 participants (56.9%) disagreed with the idea that no matter what they do, if their children will be malnourished, they will be malnourished. By rejecting this fatalistic idea, the majority of the participants are in effect saying that if they take fuller control over their children's health and diet, they can avoid malnutrition in their children.

It is interesting to note that 34 participants (58.6%) agreed with the statement that "I can only do what my health worker tells me to do". If this is the case then I am concerned about how much control the mothers have outside the nutrition centre. From the above discussion, it appears that the mothers in the PAMSCAD supplementary food program feel that external forces have greater influence on the nutritional status of their children. In the long run, an empowered person must be able to gain more control over certain aspects of their lives (Lord & Farlow, 1990; Zimmerman & Rappaport, 1988). Furthermore, WHO indicated in 1986 that for any person to achieve his/her fullest health potential, s/he should have absolute control over matters pertaining to his/her health. Walt and Rodnell (1988) think that our capacity to control our health becomes ineffective when basic resources such as food, shelter, and working conditions cannot be brought under control. The need for absolute control over resources is therefore crucial for empowerment.

Family Health and Nutrition

Nearly all the participants think that there have been significant improvements in their families' health and nutrition which can be safely attributed to their involvement in the supplementary food program. This implies that there has been a reduction in the incidence of Kwashiorkor at Ayeredee. This is in line with PAMSCAD's main objective of reducing malnutrition in selected areas in the Brong Ahafo Region of Ghana. Furthermore, the reduction in the incidence of malnutrition at Ayeredee will be a welcome news to the World Food and Agriculture Organization. This organization has been concerned about the health and nutritional status of children in the developing nations especially in Africa. These concerns led to two rapid meetings in Africa in 1992 involving agricultural ministers from various countries (Senyah, 1992). The first meeting was held in Nairobi (Kenya), and the second one was in Accra (Ghana).

Given the fact that, nearly 2/3 of the developing nations' population (1.3 billion) experience some form of caloric undernutrition (Austin, 1984), the improvement in the health and nutritional status of the participants at Ayeredee appears to be significant. This stems from the fact that, caloric undernutrition leads to protein shortage which retards the growth of children. Studies in Canada (Bidgood & Cameron, 1992) indicated that poor eating patterns of children have negative effects on their perceptual, cognitive, and

psychological well-being at school. If Ghana is to escape from poverty in the near future, then she needs healthy and strong children for national development.

Access to Food

27 participants (46.6%) agreed that their involvement in the program has led to better access to food. 19 participants (32.8%) disagreed with this notion. During the focus-group discussions following this survey (to be discussed later on in this part), I realized that the participants were not very sure whether I was interested in better access to nutritious food for the children who need it or to the community as a whole. Probably this may be one of the reasons why the Brong Ahafo Regional Nutrition Officer advised me to substitute "provided more food to the community" with "provided more food to the children who need it".

49 participants (84.5%) disagreed with this statement: "my family does not get enough food outside the PAMSCAD program". Only five of them (8.6%) agreed with the above statement. 32 participants (55.2%) disagreed together with another 12 (20.7%) who strongly disagreed that if the PAMSCAD supplementary food program is terminated, they will not get enough food for the their various families. Only seven of them (12.1%) agreed with this notion.

Only one participant (1.7%) strongly disagreed that the PAMSCAD program has brought more food to the children who need

it. On the other hand, 26 of them (45.6%) agreed. In addition to this number, another 24 (42.1%) agreed that more food has been made available to the children who need it.

Most of the mothers think that PAMSCAD has provided more food to the children who need it. They do not think that there would not be enough food for their families if PAMSCAD terminates its supplementary food program. My involvement with this community for nearly three months makes me feel that the poor rural folks have sufficient food to feed themselves. After all nearly all of them are peasant farmers, and this type of farming is mostly for local consumption.

The first problem as far as I am concerned has to do with lack of adequate information regarding nutrition and health. In my view, the mothers at Ayeredee need more enlightenment on the importance of balanced diet for their child. My experience in this community shows that the mothers have been giving the nutritious parts of their meals to their husband to the detriment of their children's health. In a similar study in the Philippines, Dineros-Pineda observed that,

> cultural values and practices also affected food intake. Intra-family distribution places young children automatically at a disadvantage since husbands and boys are fed before women, girls and young children. usually, the husband's preference determines what type of food will be bought. (1992, p. 208)

There is the need to involve the men in the planning of the families' diets to favour children who need nutritious food the most. WHO's idea of "health for all by the year 2000" implies that people must take absolute control over all

matters pertaining to their health, such as food, shelter, and clothes (WHO, 1986). I strongly believe that with the right information on balanced diet, the families would be in a position to find local substitutes for most of the foreign foods being provided by the World Food Program.

The children in the PAMSCAD program have been made dependent on rice which is not a staple food in this area. The result is that most of the children have been refusing to eat certain types of the local foods such as yam. It was very interesting to observe the negative attitudes of some of the children towards the local foods when the supplementary food program was suspended due to a shortage. Surely, community workers must be wary of iatrogenic effects of their activities in rural communities.

The second problem is that most of the mothers do not have enough money to purchase most of the food recommended and provided by the World Food Program. Dineros-Pineda (1992) also noted a similar trend in the nutrition program in the Philippines. In order to alleviate this problem, there is the need to provide the mothers with opportunities to engage in income-generating ventures to enable them to purchase some of these nutritious food if local substitutes cannot be found. The Freedom From Hunger Foundation indicated in their 1990 annual report that women in rural areas of Ghana are capable of feeding their children properly when they are financially sound.

Summary of Empowerment Outcomes

The outcome measures appear more positive than the process measures. The PAMSCAD supplementary food program must be commended for improving the health and nutritional status of malnourished children at Ayeredee. This has led to a reduction in malnutrition, disease and death. It must be noted that malnutrition accounts for a large number of infant and child deaths in Ghana (Fosu, 1991). One Ghanaian scholar was specific when he indicated that 130,000 women and children die each year in Ghana from diseases which could easily have been prevented (Nimo, 1980). Perhaps one of the most significant outcome of the PAMSCAD program is its dual role (from the participants' point of view). The nutrition centre also serves as "Day Care" centre for the mothers who are peasant farmers. This latter role appears to be confounding with how satisfied the participants are with the centre's intended function, which is to supplement the diets of malnourished children.

As I anticipated, the PAMSCAD program appears to be a food distribution centre which makes the recipients dependent on their services. In my view, the program does not deal with the fundamental issue of increasing access to food in the community. Most of the participants are satisfied with the supplementary food program, and the "free food" it provides. The outcome of this program appears to be confirming Pappoe's fears that,

> generally the typical rural community in Ghana has been conditioned through time, to be dependent on

> government to meet its needs for basic social amenities, to manage without these when not forthcoming, and to passively accept whatever government is "benevolent" enough to provide. Nevertheless, this level of dependency which seems to have permeated our rural societies should be considered counter-indicative to the concept of primary health care. (1987, p.30)

Although WHO indicated in 1986 that people can achieve their full health potential only when they have absolute control over all relevant resources (including food, shelter, and their relationship with the service providers), it appears that absolute control by rural folks is an illusion. Given the level of poverty in the rural areas of Ghana (including Ayeredee), one cannot fully blame the rural folks for being dependent on the government for everything. Interdependence between the former and the latter may be more appropriate here than absolute control. In my view, an effective interdependence between rural communities and their central governments is more likely to lead to "distributive justice" which in the opinion of Prilleltensky (in press) is better for the powerless. This author believes that control is good for the privileged. The issue at stake here is that how can a person control what s/he does not have?

RESEARCH OBJECTIVE # 3:

Relationship between Empowerment Processes and Outcomes

Table 8

Regressions of Dependent and Independent Variables

Dependent	Independent	Beta	R^2	t	F
Satisfaction	Self-determination	.61	.38	5.39	F(1,47) 29.05
Seeking Knowledge	Provider Conduct	.72	.53	7.28	F(1,47) 53.02
Confidence	Provider Conduct	.44	.19	3.43	F(1,49) 11.77
Sense of Control	Technical Quality	.45	.26	4.03	F(2,48) 16.43
	Self-determination	.38	.41	3.40	
Family Health	-	-	-	-	
Access to Food	Self-determination	.37	.18	3.06	F(2,49) = 10.85
	Technical Quality	.37	.32	3.02	

All t and F values are significant and alpha = .01. The F values are the statistics for the total model.

Table 8 contains the results of the regression analyses. The independent variables are the program processes, while the

dependent variables are the empowerment outcomes. I believe that the outcomes are causally linked to the processes. However, in this type of correlational study, it is not possible to assess the direction of causality. From the table, it can be seen that there is a significant linear relationship between Self-determination and Satisfaction, $F(1,47) = 29.05$, $p \leq .01$. The table shows further that 38% of the variance in Satisfaction is accounted for by Self-determination. Provider Conduct was related to Seeking Knowledge and Confidence. There is a significant linear relationship between Provider Conduct and Seeking Knowledge, $F(1,47) = 53.02$, $p \leq .01$. Furthermore, 53% of the variance in the latter is accounted for by the former. There is also a linear relationship between Provider Conduct and Confidence which is significant, $F(1,49) = 11.77$, $p \leq .01$. Furthermore, it can be seen from the table that 19% of the variance in the latter is accounted for by the former. In the case of Johnston's evaluation, the Provider Conduct element was eliminated because of the following reason as indicated by Johnston (1991):

> regression analyses of the models indicated that the variable "provider conduct" was confounding with "dissemination of information and opportunities for decision-making" in the therapeutic relationship (DI-OD-TR). Kleinbaum, Kupper,and Muller (1988) recommend dropping the confounding variable from an analysis to increase precision. Consequently,I removed the variable "provider conduct" from the regression analysis. (p. 120)

In the present evaluation, there was no need to eliminate the Provider Conduct item since it was very important.

There were two empowerment processes namely Technical Quality and Self-determination that were related to Sense of Control. These linear relationships were significant, $F(2,48) = 16.43$, $p \leq .01$. Also 26% of the variance in Sense of Control is accounted for by Technical Quality. Furthermore, 41% of the variance in the former is accounted for by Self-determination.

While none of the empowerment processes had any impact on the Family Health and Nutrition outcome, two out of the empowerment processes Self-determination and Technical Quality also were related to Access to Food. These linear relationships were significant, $F(2,49) = 10.85$, $p \leq .01$. Again, 32% of the variance in Access to Food is also accounted for by Self-determination and Technical Quality.

A critical examination of the regressions shows that Self-determination, as a process variable, was most strongly related to three of the outcome measures, namely Satisfaction, Sense of Control, and Access to Food. I strongly feel that if the mothers in the PAMSCAD supplementary food program are satisfied, have greater sense of control over their children's nutritional status and have a better access to food, then it appears that what Prilleltensky (in press) indicated should be taken very seriously. According to this author, Self-determination is one of the key processes to achieve "distributive justice". As indicated earlier, "self-

determination" is the inherent value of people deciding on their own courses of action they wish to take. This is also in line with the findings of Lord and Farlow (1990) and Zimmerman and Rappaport (1988). According to the former authors, an empowered person normally decides on his/her own courses of action to be taken. The latter authors have also linked self-determination with "a sense of personal competence, a desire for, and a willingness to take action in the public domain" (Zimmerman & Rappaport, 1988, p. 746).

Table 9

Correlations Between Empowerment Outcome and Process Measures

	Empowerment Processes				
	A/C	TQ	PC	SD	DI
Empowerment Outcomes					
Satisfaction	.13	.22	.53	.62	.52
Seeking Know.	.47	.03	.72	.30	.41
Confidence	.21	.33	.39	.36	.72
Sense of Con.	.30	.47	.40	.37	.22
Health & Nut.	-.03	.18	.21	.02	.18
Acc. to Food	.19	.40	.37	.36	.17

A/C = Access/Convenience TQ = Technical Quality

PC = Provider Conduct SD = Self-determination

DI = Dissemination of Information

All correlations $\geq$ .32 are significant at alpha =.01.

Table 9 shows the correlations between the empowerment outcome and process measures. All the correlations which are greater than or equal to .32 are significant at .01 level. The correlations range from -.03 to .72.

The highest correlation of .72 was recorded twice. The first was between Seeking Knowledge and Provider Conduct. I am surprised that the former correlated well with the latter. My concerns are based on the fact that there were mixed feelings about the conduct of the service providers. Furthermore, the majority of the mothers indicated that they normally do not ask questions on their children's health and nutritional status. The mothers in most cases allow the service providers to decide on what is best for their children. Frank's (1973) ideas on "persuasive healing" indicates that the personal characteristics of the healer (provider conduct, in this case) is crucial for the healing process (impacting health and nutrition information). Despite these inconsistencies, the high correlation between Provider Conduct and Seeking Knowledge helps the empowerment process. A review of the empowerment literature (Lord & Farlow, 1990; Stirling & Reid, 1992; Zimmerman & Rappaport, 1988) indicate that a true empowerment process involves a strong cordial relationship between Seeking Knowledge and Provider Conduct The other highest correlation was between Confidence and Satisfaction. With the exception of Family Health and Nutrition, the correlations between Provider Conduct and the other

empowerment outcomes and processes were significant at .01 level. The Family Health and Nutrition outcome did not have any significant correlations with any of the empowerment processes at the .01 level. One would have expected that at least one of the processes to correlate well with the Family Health and Nutrition outcome. The fact that the latter was more positive (improvement in the health and nutrition of the children) as compared with the processes (mixed feelings) may perhaps throw more light on Pappoe's (1987) observation that rural folks in Ghana tend to be satisfied with program outcomes irrespective of the nature of the processes involved.

RESEARCH OBJECTIVE # 4

Description of Context, Process, Outcomes through Qualitative Observations and Interviews

OBSERVATIONS

I lived in the Ayeredee community for nearly two months. When I entered this community the supplementary food program had been suspended due to a shortage of food from the World Food Program. Under such circumstances, it was impossible for me to be involved as a participant-observer at the nutrition centre. On two occasions, I observed the interactions between the centre attendants and the Centre Management Team, on one hand, and the mothers and their children, on the other hand. These observations took place during the base-line data collection (refer to PAMSCAD's major program activities). The base-line data collection was carried out to determine the extent of malnutrition in the community. The main objective of this exercise was to assess the nutritional status of the children between ages 0-5 at Ayeredee. The selection of the children for the next stage of the program was based on this information.

During this data collection, the health worker with the help of the Centre Management Team examined the children for any signs of malnutrition. The children were also weighed and their heights were recorded. Each participant had an individual recording sheet. New recording sheets were also

provided for would-be participants. The interactions between the service providers and the mothers appeared to be very cordial. Based on the previous height, weight and other related health information, the service providers and the mothers discussed the progress of the children in an open and candid manner based on mutual respect for each other's views or observations.

In an attempt to satisfy my curiosity, I randomly selected five of the mothers available at the nutrition centre and engaged them in short conversations. My aim was to find out whether the mothers understood what the whole exercise (base-line survey) was about. All of the mothers I engaged indicated that the exercise was a way of finding out whether there have been any improvements in their children which could be attributed to their involvement in the program.

I observed that most of the children were very disappointed that the supplementary food program had been suspended. Furthermore, the children in the PAMSCAD program were reluctant to attend the only Day Nursery in the community temporarily while the program was suspended. I asked one 4 year-old boy about why he did not want to attend the Day Nursery and this was his response: "that school will not give me rice to eat. We always eat yam or plantain in that school. I want to eat rice at the Day Care". It appears that the majority of the children in the PAMSCAD program (popular known as "Day Care" among the community members) were used to eating

the rice and canned meat and fish which is provided by the World Food Program.

During my third week at Ayeredee, I informed the Centre Management Team of my intention to visit their community farm. To my surprise, I was told that there was no community farm. I was informed that a community farm was started, but lack of enthusiasm and poor farm management led its demise. It is interesting to note that the PAMSCAD supplementary food program is based on the assumption that the residents of Ayeredee are supposed to establish a community farm to supplement whatever is being provided by the World Food Program. In place of the community farm, the participants have been contributing 10 cedis per child per day. Some of the participants have been complaining about this added burden of paying money. Some of the participants have either refused or are unable to pay this money. The impression I had (which was later verified with some of the mothers) was that the majority of them believe strongly that the food is to be given to the children who need it free of charge.

As at the time I left Ayeredee, there were not any serious discussions towards reviving the community farm. I anticipate that the issue of establishing a community will be given top priority at the feedback session involving the Chiefs, elders, service providers, community members as well as the mothers. This feedback session will be in December, 1993.

I was impressed about the location and structure of the nutrition centre. Through communal labour and local resources, the residents have been able put up a decent structure to house the nutrition centre at a convenient location which is easily accessible to the residents. It appears to me therefore that the goal of PAMSCAD which is to "establish community nutrition centres in the districts" (refer to goals of PAMSCAD) has been met by the Ayeredee community.

At the community meeting where I was introduced to the Ayeredee community, I observed that some of the community members had serious concerns about the management of the nutrition centre. Some of them accused the service providers of embezzlement of funds and diversion of food ingredients provided by the World Food Program. These people used this forum to air their concerns to members present at the meeting. Later on through informal discussions with some of them I realized that there were others who did not show up at the meeting for the same reasons. In order to avoid arriving at my own conclusions based on my perception of the situation I double-checked with about 10 of them. This took the form of short interviews. These interviews will be further elaborated in part four of this paper where I will be reflecting on the whole evaluation process.

On the whole, I feel that the majority of participants, residents as well as the service providers are satisfied with the services being provided by PAMSCAD through the nutrition

centre. Probably, their satisfaction is based on the health and nutritional status of two of the participants. Both the service providers and the mothers in the program cited the case of these children as evidence of the benefits of the program. According to them, these two children were so malnourished that they could not even walk, but thanks to the supplementary food program they are now healthy. Although I did not see these children prior to their involvement in the program, I had the opportunity to see and examine them. I also had some discussions with their mothers who confirmed what I heard from the service providers.

The overt observations which were combined with short interviews for clarification of participants' gestures, actions, and movements enabled me to gain a greater depth of understanding of the context, process, and outcomes of the nutrition centre. As a participant-observer, the residents felt comfortable dealing with me. Thus, I was able to gain insights into the nature of the supplementary food program which was not possible with survey (quantitative). For instance, had it not been for my active involvement as a participant-observer, I would have found it difficult to understand why a mother who thinks that the PAMSCAD program has not provided enough food to the needy children, will at the same time object to the provision of more food to the community. From my observations, I can easily recognize that this mother belongs to the camp that is not in favour of the

present Centre Management Team. Thus, the observations helped to enrich my depth of understanding.

The observations also gave me an insight into why the mothers and the residents at Ayeredee prefer to call the nutrition centre "Day Care". The fact is that, the participants who are mostly semi-illiterates are more comfortable as compared to "The Program of Action to Mitigate the Social Cost of Adjustment Nutrition Centre".

Johnston (1991) in a similar evaluation of a community health centre has documented the importance of participant observations in understanding the context, process and outcomes of that setting. Posavac and Carey (1992) indicated that participant observations increase the credibility of the evaluator. The value of qualitative research to the empowerment agenda has been argued by some scholars of empowerment (Lord & Farlow, 1990; Rappaport, 1981). Rappaport notes that community workers should not behave as if they have all the answers to problems. They should rather employ some observational methods as a means of clarifying any misconceptions they may have formed about powerless people. Lord and Farlow on the other hand indicated that empowerment can be conceptualized in terms of outcomes and processes at different level of analysis. In my view, this includes observations at the individual and community levels.

FOCUS GROUP INTERVIEWS

Breast-feeding Techniques

All the mothers and service providers involved in the discussions indicated that there have been significant improvements in the breast-feeding skills of the mothers which can be attributed to their involvement the program. The following statements of two of the mothers may perhaps elucidate their views further,

> we were thought that after, we should give the baby breast milk for four months... I did not know the exact time to wean my baby.

> we have been thought that during the first week of delivery, we should not allow anybody to breast-feed our baby. We have to breast-feed the baby ourselves so that the baby will enjoy the initial reddish milk which is very good for the child's development. We should make sure that the baby enjoys this initial reddish breast milk at all cost.

One of the service providers spoke for all his colleagues when he indicated that,

> there has been very great improvements. At first, the mothers felt that if there is no breast milk after delivery, they have to get milk or coconut juice which may result in diseases. We have educated them how to react under such circumstances. Also, immediately after delivery, most of the mothers were not giving the initial breast milk which is reddish to their children. They considered this to be bad for the baby. We have educated them to understand that this reddish milk is a natural gift from God which is vital for the development of the baby. At present, all the mothers have been giving this breast milk to their children.

Immunization

Nearly all the mothers indicated that they now have a

better understanding of the importance of immunization as a way of preventing diseases. The following statements were made by two of the mothers in this regard,

> the immunization is good. Sometimes, the children are born with diseases like measles. If you follow advise and vaccinate your child, it helps to eliminate the diseases. It also continues to protect the child from other diseases.

> when I vaccinated my child, it eliminated the measles and led to another disease. The doctor told me that the second disease was hidden in the child's body. The vaccination helped to bring out this hidden disease. I always vaccinate my children.

All the service providers indicated that of late the mothers in the program have developed special enthusiasm for the Expanded Program of Immunization (EPI). Here are two of the statements made by some of them,

> the EPI team has been visiting here for the immunization. At first, most of the mothers did not want to engage in this exercise. Their normal excuses were not having enough time and not having enough money to pay for the cost. Before we started this program, we made it mandatory for all the children to be immunized before being accepted into the program. After attending some of our classes, the mothers understood the importance of immunization. They now come out of their houses willingly whenever the EPI team visits this community. Also when there was an outbreak of measles, it was the mothers themselves who approached us and requested for immunization. They now understand that immunization prevents diseases.

> now pregnant women have been immunizing in numbers. As a result, there has been a reduction in the prevalence of the six notable diseases associated with Kwashiorkor.

Despite the importance of immunization to the mothers

some of them had some concerns which have been preventing them from embracing this exercise whole-heartedly. Some of the mothers indicated that,

> the children are normally injected on their thighs and this sometimes affects their ability to walk properly later on in life. It can even make my child become a cripple. Some of the doctors too are not well trained. They sometimes inject on the veins which leads to added medical bills making the whole exercise useless. The children at times end up with swollen arms.
>
> we are told that we as parents should also take part in the immunization exercise in order to avoid transmitting diseases to the children when we breast-feed them. However, after vaccination, I can not operate my sewing machine due to pains from my arms. Because of this, I am afraid to take part. I usually dodge when the immunization team comes to this village. I have not been immunizing my child of late.
>
> I feel that most of the drugs that are brought here for the immunization exercise, expire before they are brought here. Even if you immunize, you can still get the disease. Last time I did not immunize and I did not get any disease when there was an outbreak. My friend did, but she got the disease all the same.

Personal Hygiene

All the mothers agreed that there has been an improvement in the way they clean their households and dress. Most of them indicated that they now give their children clean clothes and they themselves have been putting on neat clothes both within and outside the centre. Furthermore, they have been washing vegetables and cooking ingredients before preparing their meals. Some of them indicated that,

> we were told that early in the morning, we have to bath our children, wash their faces and clean their

> teeth before bringing them to the centre, We have been doing this everyday.
>
> we were told that we as parents should also be clean when preparing food. We should not allow flies to be around the cooking area. When we see that a child is playing in the dust, we have to wash his/her hands before eating. We should also have to wash our hands and vegetables such as garden-eggs and okra before we cook.

The health workers and the centre attendants indicated that at first some of the mothers used to bring the same clothes that they use on their farms to cook at the centre. By setting example, the centre attendants enlightened those involved about the importance of personal hygiene. The children in the program were asked to wear special uniforms which are always kept clean by the mothers. Furthermore, the children are required to wear sandals or slippers to the centre. They also use spoons to eat at the centre. Here are some of the comments that some of the service providers made,

> we taught the mothers personal hygiene. How to wash their hands before preparing food for their family. This has really helped them.
>
> we taught them how to brush their children's teeth every morning. Also the mothers have been told to bath their children every morning and put on clean cleans before coming to the centre to cook. I think that they like because anytime that they come here, they are always clean and in nice clothes. There is also general cleaning of the nutrition centre every Friday morning to ensure clean environment.
>
> when we plant our crops, we use chemicals and so we have thought them the importance of washing all food items before being cooked. These days, I have observed that they have all been washing their garden-eggs, peppers and okras before cooking.

Food Types and Their Functions

All the mothers indicated that they now have a better understanding of the various food types and their role in the orderly development of their children. Some indicated that they are more aware of the fact the absence of some of them in children's diet may lead to Kwashiorkor. This is what some of them had to say regarding the various food types,

> at first, I did not know that I can mix groundnuts, beans and maize together to produce a nutritious diet for my child. Now I am more aware that these food items which are easily available in our community are good for my child's growth. I am also aware that honey and eggs are good for my child.
>
> I was told that when weaning my baby, I should combine maize, groundnut and beans and grind them together to prepare porridge for my child. I have also been made aware that because this diet contains groundnut, there is no need to add milk if I can not afford. Since the child cannot eat the same food everyday, I have to be changing it. I now know that rice can also be used as porridge. If the child starts to walk, you can also give him/her "banku" and okra soup. The child should be given a variety of nutritious food.

The service providers were very happy that after teaching the mothers the functions of the various food types in the body, there have been significant improvements in the health and nutritional status of nearly all the children in the program. A case in point is the success story of two children who were alleged to be unable to walk properly prior to their involvement in the program. Here are some of their views on the current situation,

> I believe that the mothers have learned something useful from the lessons that have been giving them on the functions of the various food types.
>
> we can know that they have learned something

> because we thought them that there are three main food types (1) one that gives weight (2) one that gives blood and (3) one that develops the body. Given the fact that the World Food Program does not provide groundnuts, beans and "nkontomre", the mothers have been readily bringing these ingredients to the nutrition centre to supplement the children's diet. To me they now understand the importance of these food items. They have also been told not to eat rice without adding good stew. My visits to some of the houses indicated that most of the mothers have been practising what we teach them. Furthermore, when I ask them why they have been eating certain types of food, they give satisfactory answers.
>
> there were two children who could not walk properly in this community due to malnutrition. When these children joined the program and their mothers followed our advise regarding the various food types and their importance, these children started walking normally just after two months. They are now very healthy. Other parents have been encouraged by this to bring their children into the program.

The focus group interviews like the observations also enabled me to gain a greater depth of understanding of the context, process and outcomes of the program. The mothers have acquired skills in breast-feeding techniques, immunization, personal hygiene, and food types and their functions. They have however not been exposed to family planning and diet during pregnancy as outlined in the educational program.

The health and nutrition skills acquired by the mothers have helped to prevent malnutrition, disease, and death. This is good news for the success of primary health care in Ghana given the fact that, the infant mortality rate in the country is 130 per 1000 live births (Nimo,1980). Furthermore, the children in the program have been immunized against the six

noted causes of death among infants namely, diarrhoea, bronchial pneumonia, malaria, measles, and malnutrition as reported by Fosu (1991).

Given the high rate of 3.3% in population growth in the Brong Ahafo Region, which is one of the highest in Ghana (Ghana Population Census, 1984), I am surprised that the service providers did not make family planning a top priority in their educational program.

SUMMARY AND CONCLUSION

Responses to the outcome measures appear more positive than responses to the process measures. The mothers in the program appear to be dependent on the services of the providers. However, as I previously stated, one cannot fully blame the rural folks for being dependent on the program for food. Interdependence between the former and the latter may be more appropriate here. As far as I am concerned, interdependence between the mothers and the service providers is more likely to lead to "distributive justice" which in the opinion of Prilleltensky (in press) is better for the powerless. Most of the mothers are confident that they have acquired enough health and nutrition skills to take good care of their children. Sometimes, some of them have some doubts about their ability to take good care of their children's health and nutrition.

The majority of the mothers who participated in the evaluation are married (93.1%). Most of them (65.5%) have primary school education, and 20.7% of the participants are illiterates. The participants and the residents at Ayeredee are very satisfied with the services being provided by the PAMSCAD supplementary food program. The nutrition centre which is conveniently located for the residents is popularly known as "Day Care". The nutrition centre also serves as a Day Care centre for the mothers who are mostly peasant farmers.

The majority of the mothers indicated that the health

workers and the centre attendants should spend more time explaining the health and nutritional status of their children to them. Furthermore, most of them indicated that they usually let the health workers decide on what is best for their children. This latter relationship between the mothers and the health workers raises the question of how much control the mothers have over the health and nutritional status of their children. The results indicate that the mothers have little or no control over the planning and implementation of the program. Although most of the participants agree that the PAMSCAD program has increased the children's access to food, they want the program to provide more food to malnourished children in their community.

As far as the empowerment agenda is concerned, "self-determination" as a process measure, significantly related to several of the empowerment outcomes. Currently, there is no community farm to support the nutrition centre. All the service providers and the mothers indicated that there have been great improvements in the latter's skills in the areas of breast-feeding, preparation of nutritious foods, personal hygiene and prevention of malnutrition. The acquisition of these skills has helped to reduce malnutrition, disease, and death.

The feed-back session will take the form of a durbar of chiefs, elders, stakeholders and myself before the end of December 1993. The recommendations I will make are as follows:

(1) The mothers must be provided the means to engage in income-generating ventures like small scale cottage industries (pottery, sewing, cooking etc.) Those already engaged in farming must be assisted to increase their outputs through the application of modern methods of production. The Freedom From Hunger Foundation has implemented a similar credit with education program in the Kintampo district of the same region (Brong-Ahafo).

(2) The health and nutritional status of the children must be seen as a community problem and not as an individual affair. To this end, all malnourished children (irrespective of age) must be involved in the supplementary food program. They must be accepted into the program irrespective of their parents socio-economic status. Furthermore, all malnourished children in the Ayeredee Day Nursery (this is different from the "Day Care") must be allowed to enjoy the facilities at the nutrition centre without any obstacles.

(3) The need for balanced diet for all community residents, especially children must be forcefully emphasized at nutrition classes. The men (who in most cases influence the quantity and quality of food to be served to members of a household) must be encouraged to attend nutrition classes. I believe that if the husbands are made more aware of the causes and dangers of malnutrition, they are more likely to ensure that their

children get their fair share of nutritious food.

(4) The idea of a "community farm" must be taken seriously and critically examined to determine the enthusiasm and commitment of the community residents to this venture.

(5) If the community decides to operate this supplementary food program on a long-term basis, then there is the need to hire permanent health and nutrition workers to improve the efficacy of the services at the nutrition centre.

PART 4

CRITICAL REFLECTIONS ON THE EVALUATION

In this part of the thesis, I will identify an appropriate role for community psychologists in the empowerment process at the Ayeredee nutrition centre based on my personal experiences there. I will end by imploring community psychologists to actively involve local residents in the planning and implementation of community development initiatives in developing countries.

Suggested Role for Community Psychologists

In order to intervene appropriately, community psychologists must be aware of the real causes (both remote and immediate) of the problems of the target communities. To this end, I implore them not to rely solely on official reports or records. Community psychologists must examine the target communities very critically. For instance, the B/A Ministry of Health 1991 report attributed the causes of malnutrition in the region to poverty, poor storage facilities, food taboos, low agricultural production, to mention a few. I have some doubts about whether these are the actual causes. Upon critical examination, I have come to the conclusion that the conditions described by Dineros-Pineda (1992) regarding her experiences in the Philippines are also present in the Ghanaian situation. According to this author:

> On closer examination, it became evident that the oppressive nature of the political system was

> responsible for the alarming spread of the poverty-dependency syndrome among the population, denying people to organize not only for political purposes but also for community-initiated development projects and social problem-solving. This led to a general condition of powerlessness and apathy among people of the disadvantaged and marginal sectors of society. (Dineros-Pineda, 1992 p.203)

Based on the aforementioned causes, community workers must strive to empower the whole community and not a sector of it. I identified similar causes of oppression at Ayeredee based on my opinions on the political situation there. In Ghanaian communities true political power is in the hands of the revolutionary organs (Cadres for the Defence of the Revolution, People's Militia, 31st December Women's Movement, and Civil Defence Organization). These political organs (dominated by men) in most cases control the distribution of goods and services in both the rural and urban areas. The 31st December Coup d'etat which toppled the civilian administration of Dr. Hilla Limann gave birth to these organs as a safeguard against opponents of the "revolution". Despite a return to a parliamentary system of government in January 1992, the revolutionary organs are in no doubt still in control of political activities in Ghana. Most women (and men) have been forced to accept the authority of the political organs with reservations. I do not blame these women because the whole idea and operation of the political organs is based on the premise that "you are either part of the solution, or part of the problem: there is no mid-way". To be part of the latter

group implies that a person is "anti-revolutionary", "CIA agent", "capitalist", "imperialists baby", to mention a few. Given these negative connotations coupled with the dangers of being isolated and discriminated against in terms of the distribution of goods and services, most people prefer to identify themselves with these revolutionary organs even if they hold contrary views. A critical examination of the "big picture" reveals that women have been marginalized although some political fanatics claim that the 31st December Women's Movement has been serving the interests of women in Ghana. It is conceivable that active participation in the decision-making process at the nutrition centre depends on the woman's political orientation.

The fact that only 200 malnourished children in Ayeredee were selected to benefit from the supplementary food program points to the fact that there is a serious problem somewhere. What about the case of the other malnourished children in Ayeredee who were not selected for the problem? Surely, what is good for Kofi may be also good for Ama. Dineros-Pineda noted that in the Philippines members of the community resented the special attention that was given to the 10 children who were selected for a similar nutrition program. I am not surprised that there were similar sentiments at Ayeredee. During the focus group interviews, one of the service providers indicated that the refusal of those whose children were not in the program to volunteer their time on

the community farm partly accounted for its demise. Given the cultural background of this community, I strongly recommend that all its residents, non-governmental and international agencies, the Brong-Ahafo regional nutrition officers, community social workers, PAMSCAD Secretariat, and all those interested in the nutritional status of this small community should meet. The purpose of this meeting will be to evaluate the long-term consequences of this program on the community and the need to involve all the residents in the program. The first issue on the agenda must centre around the current priorities of the community members (self-determination). Residents must be asked whether they want the program continued or not. This is very necessary because in the past many international agencies with very good intentions have spent thousands of dollars on projects that the local people did not need. I am sure that if there had been genuine collaborative and democratic participation they may have realized that what the local people needed cost only some few dollars.

The main priority of the women may be getting jobs for their husbands, or assisting them to engage in income-generating activities. One of the components of empowerment is distributive justice (Prilleltensky, in press) which implies that individuals must have equal access to resources and burdens. Without equal access to resources the empowering process will be incomplete. The women should be encouraged to

engage in income-generating activities in order for them to be independent. This is where the idea of Popular Economic Organizations (Campfens, 1990) comes in. These Organizations that were initiated and managed by impoverished women in Latin America have proved to be successful. Similarly, Stein (1992) indicated that income-generating activities for poor women in Costa Rica paid off. I see no reason why such strategies will not succeed in all developing countries.

Community development workers must not behave as if they have all the answers to the problems in their attempt to intervene. Their main perception of change must be on concrete outcomes and results. For instance in the case of Ayeredee, the change must be that of combating levels and incidence of malnutrition. Their role must be that of facilitators, enablers, teachers, and catalysts. Community development workers should have faith in the people they interact with and support their efforts (Albert, 1992) instead of imposing their ideas on them. At the end of the day, the powerless people must be able to connect with one another. In a recent class discussions Professor Campfens of Wilfrid Laurier University noted that,

> Community development is like building bridges...It helps the people to connect to each other and lay a foundation for mass movement. (excerpts from Campfens 1992 Fall Class Discussions)

Building bridges towards the creation of a mass movement entails the realization on the part of the powerless that the best alternative is to take fuller control over their lives.

I believe that this can be achieved through "critical consciousness raising" as advocated by Freire (1970). This is a type of popular education whereby individuals mostly illiterates are enabled to become more aware of their present conditions through critical analysis. The assumption is that if individuals rediscover themselves, they are more likely to critically reflect on appropriate solutions. Critical consciousness raising seeks to eliminate all forms of injustices against the poor and the powerless. Ankrah (1990) notes that this type of popular education is not common in Africa as a result of the reluctance of most Africa leaders to embrace this idea whole-hearted.

Evans (1992) has advocated for "liberation theology" as part of the empowerment agenda and I consider this ideology to be another kind of consciousness raising. According to Evans, liberation theology deals with the spiritual, social, political and economic liberation of people. Furthermore, it also serves as a catalyst as well as practical and salient ideology for grassroots community workers and organizers. Since liberation theology is truly indigenous, Ghanaians may adapt to it with little or no difficulty given their strong belief in the traditional African religion. Osofo Okomfo Damuah, founder of the Afrikana Mission in Ghana, based his teachings on this ideology. However, it is still not popular in Ghana. Although the concepts of "critical consciousness raising" and "liberation theology" are capable of transforming

African communities as they have done for Latin American countries, one should be aware of the dangers and risks involved in trying to implement these ideas in Ghana or African as a whole. This stems from the fact that most African governments (mostly military dictatorships) do not want their citizens to be more aware of the need to resist oppressive tendencies. People with such ideas are considered "reactionaries" and every attempt is made to make life uncomfortable for them in their various countries. The fact that Paulo Freire had to go into exile (he is now back in Brazil) may perhaps elucidate this point further.

The advise of Adebayo Adedeji, United Nations Under-Secretary General and Executive Secretary of the Economic Council of Africa must be taken very seriously regarding "critical consciousness raising" in Africa. In a closing remarks at a meeting in Arusha in 1990, Adebayo Adedeji indicated that:

> an Africa with democracy, accountability and development, would not emerge unless governments allow their people some space to become empowered and give them the chance to use their initiative for the betterment of their societies. (Ankrah, 1990 p.37)

I have some doubts whether Ghana as it stands now is prepared to implement the advice of Adedeji. However, this caution does not mean that community psychologists should not make any attempts because if they do not do it, who will do it?.

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APPENDICES

APPENDIX 1

PARTICIPANT EMPOWERMENT SURVEY

SECTION 1
Empowerment processes

A. Accessibility and Convenience

I am going to ask you questions about the way you access the services of the Nutrition Centre. Please select one of the statements below which best describes your opinion:

1	2	3	4	5	6
Agree Strongly	Agree	Agree Somewhat	Disagree Somewhat	Disagree	Disagree Strongly

1. My appointments at the nutrition centre usually begin on time. 1 2 3 4 5 6

2. The nutrition centre is conveniently located. 1 2 3 4 5 6

3. It is difficult to be accepted into the program right away. 1 2 3 4 5 6.

4. If I have a nutritional problem, it is difficult to get someone at the centre for help. 1 2 3 4 5 6.

5. I think the nutrition centre has everything needed to provide good nutritional services. 1 2 3 4 5 6.

B. Technical Quality

I am going to ask you questions about how qualified the workers at the nutrition centre are. Please select one of the statements below which best describes your opinion.

1	2	3	4	5	6
Agree Strongly	Agree	Agree Somewhat	Disagree Somewhat	Disagree	Disagree Strongly

1. The health worker who sees my child at the centre appears to be competent. 1 2 3 4 5 6.

2. The health worker was not very thorough when examining my child. 1 2 3 4 5 6.

3. The health worker gave my child food unnecessarily. 1 2 3 4 5 6.

4. I felt that my child's nutritional status was determined without enough information. 1 2 3 4 5 6.

5. The Centre Attendants appear competent and well trained. 1 2 3 4 5 6.

6. The workers at the nutrition centre advise me about ways to avoid malnutrition. 1 2 3 4 5 6.

C. Provider Conduct

I am going to ask you questions about how you are treated at the Centre. Please select one of the statements below which best describes your opinion:

1	2	3	4	5	6
Agree Strongly	Agree	Agree Somewhat	Disagree Somewhat	Disagree	Disagree strongly

1. I am always treated with respect at the nutrition centre. 1 2 3 4 5 6.

2. Sometimes, while at the centre, I am made to feel foolish. 1 2 3 4 5 6.

3. The nutrition officer and I talked briefly about other areas of my child's life beside nutrition. 1 2 3 4 5 6.

4. I often feel that my involvements at the centre are being rested. 1 2 3 4 5 6.

5. The workers at the centre usually don't consider my child's individual needs when dealing with him/her. 1 2 3 4 5 6.

6. The workers at the centre made me feel that I could talk about any kind of problem. 1 2 3 4 5 6.

7. The workers at the centre aren't very sensitive to my cultural and religious values. 1 2 3 4 5 6.

8. The nutrition centre keeps my child's problems private and confidential by being sure that other agencies and persons do not know about them. 1 2 3 4 5 6.

9. My child's need for privacy is not respected at the

nutrition centre. 1 2 3 4 5 6.

D. Self-determination

I am going to ask you questions about your involvement in the decision-making at the Centre. Again, select one of the statements which best describes your opinion:

1	2	3	4	5	6
Agree Strongly	Agree	Agree somewhat	Disagree somewhat	Disagree	Disagree Strongly

1. The nutrition centre does not provide me and other participants with opportunities to be involved in the planing and management of the centre. 1 2 3 4 5 6.

2. People like me have enough say about how the centre is run 1 2 3 4 5 6.

3. The nutrition centre considers the health needs of the village by asking community members their opinion. 1 2 3 4 5 6.

4. Staff of the nutrition centre ask me for my ideas about what the program should be like. 1 2 3 4 5 6.

5. Staff at the nutrition centre asked me about my needs before they started this program. 1 2 3 4 5 6.

6. I don't think the nutrition centre cares about what I think they should do. 1 2 3 4 5 6.

7. My ideas about what the program should offer have actually been put to place. 1 2 3 4 5 6.

8. I feel like I have a lot of say in the design of the PAMSCAD program. 1 2 3 4 5 6.

E. Dissemination of Information and Opportunities for Decision-making (relationship with workers)

The questions here are meant to find out your relationship with the workers regarding decision-making affecting your child's nutritional needs. As usual, please select one of the statements below which best describes your opinion.

1	2	3	4	5	6
Agree	Agree	Agree	Disagree	Disagree	Disagree

Strongly		Somewhat	Somewhat		Strongly

1. Workers answer my questions about my child's nutritional status completely. 1 2 3 4 5 6.

2. The health workers and the centre attendants did not give me all of the information that I thought should be given. 1 2 3 4 5 6.

3. The health workers and the centre attendants often use words that I do not understand. 1 2 3 4 5 6.

4. I feel that the workers at the centre should spend more time explaining my child's nutritional status and diet to me. 1 2 3 4 5 6.

5. The health workers always explain why my child is examined. 1 2 3 4 5 6.

6. The workers at the centre do not include me when making decision about my child's nutritional status. 1 2 3 4 5 6.

7. The staff at the centre encourage me to be involved in making decisions about my child. 1 2 3 4 5 6.

SECTION 2

Empowerment Outcomes

A. General Satisfaction

I am going to ask you questions about how satisfied you are with the nutrition program. Please select one of the statements below which best describes your opinion:

1	2	3	4	5	6
Agree Strongly	**Agree**	**Agree Somewhat**	**Disagree somewhat**	**Disagree**	**Disagree Strongly**

1. I am very satisfied with the nutritional care my child receives at the nutrition centre. 1 2 3 4 5 6.

2. At the nutrition centre, my child receives as much care as I feel /she needs. 1 2 3 4 5 6.

3. The nutrition centre is good for the community. 1 2 3 4 5 6.

4. There are things about the nutrition program that could be made better. 1 2 3 4 5 6.

5. The nutrition centre is probably a waste of the tax payers money. 1 2 3 4 5 6.

6. My family's health has improved as a result of my involvement in the program. 1 2 3 4 5 6.

7. My family's nutritional status is better as compared to the time I became involved with the program. 1 2 3 4 5 6.

B. Seeking Knowledge

I am going to ask you questions about how you get information from the workers at the Centre. Please select one of the statements which best describes your opinion.

1	2	3	4	5	6
Agree Strongly	**Agree**	**Agree Somewhat**	**Disagree Somewhat**	**Disagree**	**Disagree Strongly**

1. I ask questions about the nutritional status of my child when I do not understand it. 1 2 3 4 5 6.
2. I usually don't ask the nutrition officers and the Centre Attendants about my child's nutritional status. 1 2 3 4 5 6.

3. I frequently seek out information on my child's nutritional status. 1 2 3 4 5 6.

4. I keep up to date on the events happening at the nutrition centre. 1 2 3 4 5 6.

5. I am actively involved in making decisions about my child's welfare. 1 2 3 4 5 6.

6. Usually I let the health workers and centre attendants' decide what is best for my child. 1 2 3 4 5 6.

C. Confidence

I am going to ask you questions about how confident you are about nutritional matters. As usual, please select one of the statements below which best describes your opinion.

1	2	3	4	5	6
Agree Strongly	Agree	Agree somewhat	Disagree somewhat	Disagree	Disagree Strongly

1. I believe that I have the skill necessary to take good care of my child's nutritional needs. 1 2 3 4 5 6.

2. Sometimes, I have doubts about my ability to take good care of my child's nutritional needs. 1 2 3 4 5 6.

3. I am confident that in ten years from now, my child will be as healthy as s/he is today. 1 2 3 4 5 6.

4. In 10 years from now, my child is likely to be as healthy as s/he is today. 1 2 3 4 5 6.

D. Sense of Control

I am going to ask you questions about the sense of control that you have over nutritional matters. Again, please select one of the statements below which best describes your opinion.

1	2	3	4	5	6
Agree strongly	Agree	Agree Somewhat	Disagree Somewhat	Disagree	Disagree Strongly

1. If I have enough food and take care of my child, I can avoid malnutrition. 1 2 3 4 5 6.

2. When my family has enough food and my child is malnourished, it is because of something I've done or not done. 1 2 3 4 5 6.

3. Good nutrition is a matter of having enough food and knowing how to cook.
1 2 3 4 5 6.

4. No matter what I do, if my child will be malnourished, she/he will be malnourished. 1 2 3 4 5 6.

5. Most people do not realize that the extent of malnutrition is controlled by accidental happenings. 1 2 3 4 5 6.

6. I can only do what my nutrition officer tells me to do.
1 2 3 4 5 6.

7. There are so many malnutrition diseases around that you can never know how or when you might pick one up.
1 2 3 4 5 6.

8. Children who never get malnourished is plain luck.
1 2 3 4 5 6.

9. Malnutrition results from carelessness.
1 2 3 4 5 6.

10. I am directly responsible for my child's nutritional status.
1 2 3 4 5 6.

E. Family Health and Nutrition Outcome

1. My child's nutrition status improved after getting care at the centre. 1 2 3 4 5 6.

2. I don't think my child's nutritional status improved even after being taken care of at the centre. 1 2 3 4 5 6.

3. How do you consider the nutritional status of your child ? Please select one of the statements below.

Very unhealthy					Very Healthy
1	2	3	4	5	6

4. Please feel free to add any comments that have not been covered in this survey.

E. Access to Food

1. Since my participation in PAMSCAD, I have better access to food. 1 2 3 4 5 6.

2. My family does not get enough food outside the program. 1 2 3 4 5 6.

3. I fear that if PAMSCAD does not continue, I will not have enough food. 1 2 3 4 5 6.

4. The PAMSCAD program has really helped to get more food to children who need food 1 2 3 4 5 6.

5. I feel that the PAMSCAD program should provide more food to children who need food. 1 2 3 4 5 6.

6. My family does not have enough money to buy the type of food that the health worker has recommended for my child. 1 2 3 4 5 6.

G. Personal Information

1. Sex of Child: Male Female

2. Age of child: Below 1 year , 1 2 3 4 5

3. Age of mother: 16-25 26-35 36-45 46-55 56-65

4. Marital Status: Single Married divorced

5. Educational Level: Primary secondary illiterate
   Middle university other.

6. Length of time in the program: 1yr 2yrs 3yrs

7. Level of participation: frequently often sometimes

APPENDIX 2
NUTRITION AND HEALTH KNOWLEDGE SKILLS

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NUTRITION AND HEALTH KNOWLEDGE SKILLS

1. Have you become more aware of preparation of nutritious weaning foods? If "yes", in what ways ?, If "no", why not?

2. Have you become more aware of modifying the family food into a suitable meal for the child? If "yes", in what ways?, if "no", why not?

3. Has the PAMSCAD program helped you to become more aware of appropriate diet during pregnancy ?. If "yes", in what ways?, if "no", why not?

4. Has the PAMSCAD program helped you to learn new techniques in breast feeding?. If "yes", in what ways?, if "no", why not?

5. Have you increased your knowledge in family planning as a result of the PAMSCAD program?. If "yes", in what ways, if "no", why not?

6. Have you become more aware of immunization programs? If "yes",in what ways?, if "no", why not?

7. In your opinion how has the PAMSCAD program helped you to become more aware of the three food groups and their function?. If "yes", in what ways?, if "no", why not?

8. Has the PAMSCAD program helped you to become more aware of the causes of malnutrition?. If "yes", in what ways?, if "no", why not?

9. Has the PAMSCAD program helped you to become more aware of the prevention and treatment of diarrhoea ?. If "yes", in what ways, if "no", why not?

10. Is there any other issues you may want to add that have not been covered in this discussion?

Thank you very much for your time.

APPENDIX 3:

CONSENT FORM

PARTICIPANT EMPOWERMENT SURVEY

CONSENT FORM.

Hello,

My name is Kofi Barimah and 1 am a graduate student in the community Psychology program at Wilfrid Laurier University in Canada. I am a native of this Region and 1 come from Sunyani which is the Regional Capital. I am sure that by now, you may have been informed of this evaluation from the Regional Nutrition Officer. (Purpose of evaluation to be reviewed with the participant if she is not aware. The workers providing this nutrition program are pleased that 1 am here to find out more about your concerns so that they can better help you to provide good nutritious meals for your children. The information from you will help the service providers to serve you better.

I would be extremely grateful if you could provide me with your experiences with this food supplement program. Please answer the questions to the best of your knowledge. There are no right or wrong answers and you may refuse to answer any particular question or Stop the interview at any time. All answers provided will be strictly confidential. The results of the research will be discussed at durbar and you will be invited.

If you agree to participate, please sign or thumb-print this form for me before we begin this interview.

(PARTICIPANT) (RESEARCHER).