



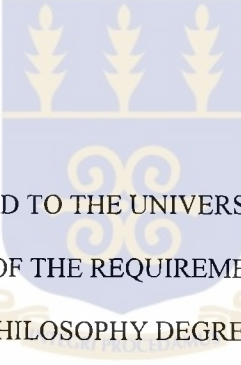
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PRENATAL LEARNING NEEDS OF MULTIGRAVID WOMEN AT SUNTRESO
HOSPITAL

BY

MATILDA ANGELA BANSAH (MRS)

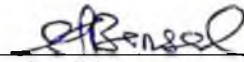
The crest of the University of Ghana is centered behind the text. It features a shield with a blue background and yellow symbols: three stylized plants at the top and a central emblem with two interlocking loops. Below the shield is a yellow scroll.

THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN
PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF
MASTER OF PHILOSOPHY DEGREE IN NURSING

FEBRUARY, 2003


Declaration

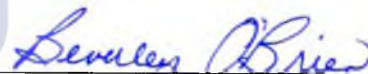
I, Matilda Angela Bansah hereby declare that this thesis is my original work, which I have produced conducting a research. References made from other researchers and writers have been fully acknowledged. None of the materials contained in this thesis have been presented either partially or wholly to any institution for any degree.

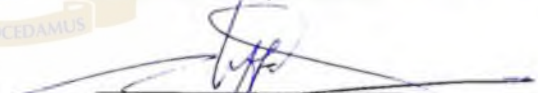

Candidate

WE THE UNDERSIGNED ACCEPT THIS THESIS AS CONFORMING TO THE REQUIRED STANDARD.




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Table of Contents

	Page
Declaration	i
Acknowledgement	ii
Table of contents	iii.
Abstract	vi.
Chapter One – Prenatal learning needs of multigravid women	1
Background to study	1
Statement of the problem	7
Purpose of the study	8
Objectives of the study	8
Significance of study	8
Definition of terms	9
Chapter Two – Literature Review	10
Learning needs	10
Organization of prenatal education	16
Outcome/Impact of prenatal education	21
Sources of information	30
Patient learning principles	32
Research question(s)	33



Chapter Three – Method	35
Research Design	35
Study Setting	36
Selection of study participants	36
Data collection	38
Data analysis	41
Trustworthiness of research	42
Ethical considerations	45
Chapter Four – Findings	47
Description of the sample	47
Demographic characteristics of participants	48
Thematic findings from the interview data	49
Identified learning concerns	49
Women’s method of learning	69
Sources of information	77
Motivation to learn	80
Chapter Five- Discussion	81
Chapter Six – Summary, Conclusion, Implications for practice and Recommendations	97
Limitations	105
References	107
Appendixes	116
Appendix A - Information Sheet for Recruitment of Participants	116

Abstract

The need for effective client education is an important component in midwifery practice. The benefits include a decrease in maternal mortality and morbidity. The purpose of this study was to explore the learning needs of multigravid women. The study was qualitative in nature and an exploratory- descriptive design was adopted. Eighteen multigravid women were selected for the study through a purposive convenience sampling technique. Eight women were interviewed individually and ten engaged in a focus group discussion. Responses were audio taped, transcribed verbatim and content analyzed. Findings indicated that multigravid women had particular learning needs that were not met. Their most important information sources were the prenatal clinic and their mothers. Some of the information from these two sources was in conflict. Responses of the women were sometimes related to misconceptions and inadequate information. Others generated doubts, anxieties and unsound practices. The women reported that specific topics that the nurses taught, such as preparation for delivery, personal hygiene, nutrition, and aspects of breastfeeding did not reflect their current learning needs. They did however report that topics such as birth control, fetal positions, and sexual activity during pregnancy would be helpful. The women wanted a variety of teaching methods or more interactive teaching styles during teaching periods to address individual and group learning needs. The study provides useful information and strategies from clients' perspectives that could help to plan, develop and implement prenatal education sessions to meet the felt learning needs of multigravid women and to equip them with relevant information.

Appendix B1- Consent Form	117
Appendix B2- Confirmation that Informed Consent were Understood	118
Appendix C- Demographic Data	119
Appendix D- Sample Interview and Focus Group Discussion Guide	120
Appendix E- Ethical Clearance	121
Appendix F- Permission to Collect Data	122
Appendix G- Demographic Characteristics of Participants	123

Abstract

The need for effective client education is an important component in midwifery practice. The benefits include a decrease in maternal mortality and morbidity. The purpose of this study was to explore the learning needs of multigravid women. The study was qualitative in nature and an exploratory- descriptive design was adopted. Eighteen multigravid women were selected for the study through a purposive convenience sampling technique. Eight women were interviewed individually and ten engaged in a focus group discussion. Responses were audio taped, transcribed verbatim and content analyzed. Findings indicated that multigravid women had particular learning needs that were not met. Their most important information sources were the prenatal clinic and their mothers. Some of the information from these two sources was in conflict. Responses of the women were sometimes related to misconceptions and inadequate information. Others generated doubts, anxieties and unsound practices. The women reported that specific topics that the nurses taught, such as preparation for delivery, personal hygiene, nutrition, and aspects of breastfeeding did not reflect their current learning needs. They did however report that topics such as birth control, fetal positions, and sexual activity during pregnancy would be helpful. The women wanted a variety of teaching methods or more interactive teaching styles during teaching periods to address individual and group learning needs. The study provides useful information and strategies from clients' perspectives that could help to plan, develop and implement prenatal education sessions to meet the felt learning needs of multigravid women and to equip them with relevant information.

Chapter One

PRENATAL LEARNING NEEDS OF MULTIGRAVID WOMEN

Background to the Study

All pregnant women are required to go through a series of educational programmes during the prenatal period. These programmes are designed to equip them with the knowledge and skills they need, for safer pregnancy and childbirth. Prenatal learning needs are unique to individual women or to a group of women. These ought to be explored from the perspectives of the pregnant women. Prenatal education cannot be effective without first determining the learning needs of pregnant women.

The need for effective client education is an important component in midwifery practice. The benefits include a decrease in maternal mortality and morbidity. Maternal mortality has been defined as “ the death of women while pregnant or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes” (World Health Organization, 1992). Reports about maternal mortality indicate high rates of 585,000- 600,000 deaths per year worldwide and 99 percent of these deaths occur in developing (low and very low income) countries (Christiani, 1996; Health and Mortality, 1998). In Ghana, maternal mortality rates are quoted as 214/100,000 live births. In the national health policy, health leaders in Ghana stated a goal of reducing the rate to 100 per 100,000 live births by the year 2001(Annual Report, Reproductive and Child Health, 1999).

In addition to maternal mortality, the United Nations International Children’s Emergency Fund (UNICEF) estimates that women experience more than 50 million maternal health problems every year. As many as 300 million women (more than one quarter of all adults) in the developing world suffer from short or long term illnesses and

injuries related to pregnancy and childbirth (Tsui, Wasserheits, & Haaga, 1997).

Complications related to pregnancy and childbirth are among the leading causes of mortality and morbidity for women of reproductive age in many parts of the developing world (Health & Mortality, 1998).

Causes of maternal deaths are similar globally. About 80 percent of these deaths have direct causes, related to pregnancy, labour and puerperium (Health and Mortality, 1998). These arise from interventions, omissions, incorrect treatment or a chain of events resulting from any of these situations. The direct causes include severe bleeding/haemorrhage (25%), that generally occurs during postpartum, and puerperal infection/sepsis (15%), which is frequently the consequence of poor intrapartum hygiene or untreated reproductive tract infections. These infections include several sexually transmitted infections (ST I's). Hypertensive disorders especially eclampsia (13%), prolonged/obstructed labour (8%), and unsafe abortion (13%) are also among the leading causes of maternal mortality. Other direct causes (8%) include ectopic and molar pregnancies as well as complications associated with anaesthesia.

Twenty percent of maternal deaths are the result of indirect causes such as existing diseases or diseases developed during pregnancy that are not related to obstetrical causes. Anaemia is the most significant indirect cause (Christiani, 1996; Health and Mortality, 1998; WHO & UNICEF, 1996). Other indirect causes include malnutrition, infectious diseases, sickle cell diseases, diabetes mellitus and hypertension (Network Family Health International, 1999). Many of these causes also lead to fetal or infant mortality.

Most causes of maternal mortality and morbidity are preventable if appropriate actions are taken by pregnant women and care providers. The safe motherhood

programme, which has been adopted by several countries including Ghana, comprises prenatal care, supervised deliveries and postnatal care. The goal of safe motherhood is to improve women's health in general and specifically, to reduce maternal/infant morbidity and mortality (Annual Report, Reproductive and Child Health, 1999). Providers of prenatal care have an important role to play in reducing maternal and infant mortality (Helton, 1997). Safe motherhood can be a reality when it is ensured that all pregnant women have access to quality maternal health care services (Health and Mortality, 1998; WHO, 1999). Prenatal care includes health or prenatal education.

In the past, mother craft skills were handed down from one generation to another or from one woman to the other within the extended families as part of socialization process in the Western world. Women learned birthing and child-care skills by understudying relations who were going through the process of pregnancy and childbirth. In other words, they observed and participated in labour, and helped with the care of young babies. Young women as a result, grew up confident in their own ability to give birth and to undertake the practical care of their children (Gagnon, 2001; Maloney, 1985; Nolan & Hicks, 1997; Nolan, 1997a; Zwelling, 1996). This observation is true in all parts of the Ghanaian societies and even in nuclear families. Sheila Kitzinger (1994) has called the entire process, “the women’s network” and noted that it was still functioning in some parts of the world. Formal prenatal education started as early as the 1900s in the United States in response to a need to improve prenatal care and maternal-infant outcomes. Throughout the decades, the goals of prenatal education have evolved and changed (Zwelling, 1996).

Prenatal education involves the provision of information on pregnancy, labour and delivery, the postpartum, and early childhood period. Pregnancy and childbirth carry

with them physiological and psychological states that are experienced by every woman (Bobak, Lowdermilk, Jensen & Perry, 1995 p. 152). Knowledge of these states is needed to prepare the pregnant woman to cope with these altered states (Kirkham, 1991). There are related complications of pregnancy and childbirth that can lead to maternal mortality and morbidity. Knowledge of these may help pregnant women to seek prompt treatment when the need arises.

Authors of several studies conducted on maternal mortality in developing countries reported that prenatal education was valuable in reducing maternal mortality (Thassri et al., 2000; Martey, Djan, Twum, Brown, & Opoku, 1994). These authors identified causes of maternal mortality that corresponded with those identified globally. The causes were haemorrhage, toxemia of pregnancy/ eclampsia, sepsis, obstructed labour, and anaemia. Martey et al., (1994) reported that other causes included jaundice and fever.

Oosterbaan & da Costa (1995) examined the traditional and spiritual concepts related to pregnancy and childbirth in Guinea Bissau. Most of these beliefs and practices prevented appropriate nutrition as well as prenatal and delivery care. They also knew very little about danger signs and risk factors related to pregnancy and childbirth, which could affect maternal mortality rates. The findings reinforced the need to develop appropriate health education programmes to address a wide range of topics in pregnancy and childbirth.

Provision of prenatal education can assist clients to attain the relevant knowledge on pregnancy and childbirth, correct misconceptions, and strengthen their confidence (Murira, Munjanja, Zhanda, Lindmark, & Nystrom, 1996). Education helps women to make life-saving choices about pregnancy and childbirth (Thompson, 1997).

When appropriate education is provided, nurses help clients to make informed decisions about their own health (Bobak & Jensen 1991).

Patient education can be used to teach patients about the nature of their condition, disease process, and treatment. It is an opportunity to explain what patients are not clear about. It is important that any information/education given be accurate (Asraf, 1996). A phenomenological researcher examined reassurance from the perspective of eight patients in a local general hospital. Results indicated that patients felt reassured when they received accurate information. Knowledge of their condition prepared them psychologically, and gave them a sense of control. It also helped to stop them from worrying unduly and prepared them to initiate further enquiry. In general, it reduced levels of anxiety in patients, enhanced recovery in health, and enabled them to cope with any stress of illness (Asraf, 1996).

In Ghana, 90 percent coverage of prenatal care of all pregnant women was targeted for the period 1998-2000 (Annual Report, Reproductive and Child Health, 1999). The attained coverage for 1998 and 1999 was 87.8 and 86.4 percent respectively. No figure was available for the year 2000. These figures can provide an estimate of the coverage for prenatal education. This is because prenatal education is usually the first activity offered at the prenatal clinics (unlike the separate classes organized for pregnant women in developed /high income countries).

Prenatal education is usually given to a large group of waiting women over a short period of time (i.e., about 30 minutes or less). The duration depends on the site of work, commitment of individual care providers, their knowledge base, and work schedules (Close, 1988; Hill, 1986; O'Meara, 1993a). It is not common to find husbands /partners of pregnant women being part of prenatal education programmes.

The content of prenatal education for all Ghanaian women is dictated by Ministry of Health. The content includes the process of pregnancy, complication readiness, danger signs, routine examinations, personal and environmental hygiene, exercise, and nutrition, rest and sleep, drugs (iron, self-medication, malaria prophylaxis), and tetanus vaccination. Other topics include care of the breast and preparation for breast feeding, family planning, harmful/helpful traditional practices, sexual activity, prevention of STIs/AIDS, process of labour, preparation for birth, care of self during postpartum, and care of the infant (Reproductive Health Classroom and Clinical Activity Guide, 2000).

Hospital administrators or physicians have controlled the curriculum or teaching methods of prenatal education. This places the educator in a difficult position of choosing to be an advocate either for the institution or for the recipient of the education (Hancock, 1994; Zwelling, 1996). The actual content of education received by pregnant women in many parts of the world is usually what educators (midwives, nurses and doctors) believe they should impart. They see themselves as the experts of health knowledge and decide what pregnant women must be taught often without involving them (Evans & Jeffery, 1995; O'Meara, 1993a; Murira et al., 1996).

Women are taught to be compliant with institutionally determined regimens rather than being empowered to achieve their own goals. In other words, the felt learning needs of pregnant women are unexplored (Armstrong, 2000; Gagnon, 2001; Gilkinson, 1991; Hill, 1986; Laryea, 1998; Nichols, 1993; Stamler, 1998; Sullivan, 1993). Kirhkam (1991) asserted that there is a gap between what the educator feels is important and what women want to know. She suggested that this issue might be overcome if women are helped to voice their needs and concerns. Thompson (1996) reported strategies that might help midwives to be more effective in their efforts to make motherhood safer. Amongst them

is the need to listen to what women themselves say about their needs and use those responses to plan their educational programmes. Evans & Jeffery (1995) also stated that, identification of learning needs by pregnant women could fill the gap in the literature and in nursing knowledge.

Statement of the problem

From personal interviews with clients and observations in midwifery practice, clients complained that the education they received did not address their felt learning needs. The topics were repetitions and therefore not of interest to them. This view of the pregnant women is similar to what has been documented elsewhere (Armstrong, 2000; Bester, 1992; Freda, Anderson, Damus, & Merkatz, 1993b; O'Meara, 1993b; Evans & Jeffery, 1995; Nolan, 1997a). On the part of pregnant women, it was observed that even when the opportunity was given for them to ask questions, contribute to the educational programme or air their anxieties/views, only a few got involved. Yet, they asked questions whenever a health provider drew closer and interacted with them while they waited for their appointments.

Every pregnant woman has a right to good maternal health services and an improved health status of the woman is critical to the health of the family. Although research studies have identified the need to address the learning needs of pregnant women, health care providers continue to educate them from their own perspectives. They assume that the learning needs of pregnant women are addressed, but the women have felt differently about that assumption. It is confirmed that the learning needs of multigravid women such as review classes are different from those of primigravid women (Macdonald, 1987; Sullivan, 1993). Particularly in Ghana, the researcher assumes that there are many multigravid women whose learning needs are not being addressed. Health

care providers need to look at their strategies for educating pregnant women especially, multigravid women. Furthermore, care providers need to address the learning needs of women from their perspectives so that educational programmes can be developed that are relevant and acceptable to them. The best strategy was to undertake studies that would reveal the learning needs of these multigravid women.

Purpose of the study

The purpose was to explore the felt learning needs of multigravid women and how the educational programmes could be improved to meet the identified learning needs.

Specific objectives

The study:

- 1) Explored what multigravid women felt they needed to know in order to have a healthy outcome of pregnancy and childbirth.
- 2) Assessed the views/perception of multigravid women about the existing prenatal educational programmes.
- 3) Explored sources of information/knowledge during the prenatal period.
- 4) Identified multigravid women's reasons for attending prenatal educational programmes.

Significance of the study

Midwives/ health providers will have more insight into learning needs of multigravid women. This will make them sensitive enough to appreciate the care that these women really need and how to improve it. Utilization of the findings will assist policy makers in the review of prenatal educational programmes. Results of the study may be used to develop appropriate educational programmes that will provide

multigravid women with relevant prenatal information that they could use to adopt healthier lifestyles. The themes that emerged from the study would guide further research in the area of prenatal education. In doing these, the intent of reducing maternal morbidity and mortality will be achieved and safe motherhood ensured.

Definition of terms

Prenatal- the period of pregnancy

Learning needs- a gap between what multigravid women know before information is given on a particular set of competencies and what they want to gain.

Prenatal/antenatal education- the health teaching that is given to pregnant women at the prenatal clinics or during special organized classes.

Multigravid women- these are pregnant women who have previously had more than one pregnancy.

Multiparous women- these are women who have completed two or more pregnancies to the stage of fetal viability (i.e., = or > 28 weeks of gestation).

Primiparous women- these are women who have completed only one pregnancy to the stage of fetal viability.

Primigravid women- these are women who are pregnant for the first time.

Chapter Two

Literature Review

The purpose of the literature review was to summarize and assess critically existing theoretical and research literature pertaining to prenatal education. A variety of research studies reviewed were relevant to the research question. Databases that were searched include PubMed, ERIC, ENB, Ingenta, Ideal, CINAHL, Cochrane, and Medline. Dissertation and Master's abstracts were also used as well as the World Wide Web (i.e. Google search engine). References cited were from 1985-2001 but studies published earlier than 1985 that were deemed to be of value for the research study were included. Key words used for the searches were prenatal or antenatal education, (health education or patient education) and pregnancy. Other key words used were (outcome or effectiveness) and (prenatal care or antenatal care) and (education or learning). To organize the review, specific studies were reviewed and followed up with a principle of patient education.

As prenatal educational programmes were introduced into practice, a variety of studies were conducted where researchers focused on pregnant women's learning needs, the organization of prenatal educational programmes, the outcome/impact of prenatal education and their sources of information/knowledge.

Learning Needs

A variety of studies were reviewed to identify the learning needs of pregnant women. Most researchers used questionnaires to elicit the learning needs or interests of pregnant women. Some compared pregnant women's perceptions with those of the health

care providers. (Freda, Anderson, Damus, & Merkatz, 1993b; Pinkosky, 1997; Stokes, 1995).

In a study, 385 pregnant women (250 from a public clinic and 135 from a private clinic) were surveyed in the United States at a first prenatal visit. The purpose was to identify what the women perceived as their most important learning needs based on 38 topics. Significant differences were found in some topics when compared with that of 32 health care providers. Providers showed more interest in teaching on alcohol, cocaine, smoking, sex, discomfort, when to go to the hospital during labour, medicines and breastfeeding. Clients rather showed more interest only in teachings on forceps delivery, fetal development, nutrition, and vitamins. Differences were also evident between private and public clients as well as multigravid and primigravid women. Topics of great interest for all clients were fetal development, nutrition, vitamins and danger signs during pregnancy. Pregnant women exhibited low levels of interest in some topics that were important in promoting improved pregnancy outcomes such as breastfeeding, caesarean section, sexually transmitted diseases, birth control, smoking, and alcohol consumption (Freda et al., 1993b).

Similarly, learning needs as identified by primigravid women (n=239) and prenatal health care professionals (n=54) were compared. The study determined whether there were changes in their learning needs throughout their gestational period. Results indicated that they were in agreement one-third to half of the time. In the first trimester, the women mentioned fetal development; nutrition, physical and emotional changes, routine blood test, and reasons for prenatal care. In the second trimester the women mentioned vitamin supplements, weight gain recommendations, and infant care including feeding. In the third trimester, the women mentioned pain relief measures,

complications that could occur during labour, infant care and feeding, as well as coping with infant and work. In other words, differences in learning needs existed according to gestational age. Differences were also evident with maternal age, education, race, marital status and income (Pinkosky, 1997).

A qualitative study was conducted to explore the learning needs of pregnant women in Texas (Stokes, 1995). The difference between client perceived and care provider perceived levels of interest in certain pregnancy-related topics was described. Six health care providers and 65 women attending their first prenatal visit were enrolled. Results indicated that care providers showed interest in topics such as sexually transmitted diseases including AIDS, while clients were interested in emotional changes during pregnancy and prevention of premature labour. Findings of this qualitative study were consistent with quantitative studies ((Freda et al., 1993b; Pinkosky, 1997).

Other investigators explored learning needs, using only pregnant women as respondents (Camiletti, 1999; Freda, Anderson, Damus, & Merkatz, 1993a; Macdonald, 1987; Sullivan, 1993). A questionnaire was used to identify learning needs of 120 women (primigravid and multigravid) who were less than or equal to 16 weeks gestation. The study was at Middlesex-London, Ontario and the purpose was to assist in planning, developing and implementing first trimester prenatal health fairs. It was reported that the women identified several topics they felt should be included in the first trimester health fairs (Camiletti, 1999).

Some of the most preferred topics were nutrition, drugs (harmful and required) fetal development, physical and emotional changes, and reasons for prenatal care. Others were exercise, drug effect on fetus, ultrasound, what is available at prenatal classes, sexuality, STI's and coping with pregnancy discomforts. Those they found undesirable

were infant feeding including breast milk and baby care. There was a strong emergence of the need to include environmental health issues such as insecticides, and radiation. The ranking of topics were not related to age, education, and social status but to employment. Employed women were more likely to rank coping with discomforts of pregnancy, reasons for regular prenatal care and physical changes of pregnancy as important (Camiletti, 1999).

A questionnaire was used to assess the type of information provided to 159 American primigravid and multigravid women (80 public and 79 private) during their first visit. Here again, women indicated their levels of interest in 38 topics commonly cited as important during pregnancy. A second assessment was done to determine whether information was given for each topic and if the learning was as much as desired. Results indicated that women in public clinics received more information than those in the private clinics. The pregnant women were satisfied with the information given but the topics were not associated with the women's level of interest at the first visit. Fewer than 50 percent of private clients reported having information about important topics such as sexually transmitted diseases including AIDS, preterm birth, family planning, or family violence (Freda et al., 1993a).

Another researcher through interviews studied the felt learning needs of 71 pregnant women (34 primigravid and 37 multigravid) in Calgary. Results indicated varied responses according to the trimester of pregnancy. Primigravid women in their first trimester wanted to learn about fetal development, positive and negative influences of nutrition and teratogens, as well as physical and psychological changes and their causes. Those in the second trimester wanted information about labour and birth; self care after birth, combining motherhood with a career and infant care including feeding. Those in

the third trimester reported that they wanted information about analgesia and how to manage complications during labour and birth (Sullivan, 1993).

There were no first trimester multigravid women among the participants. Those in the second trimester wanted to refresh their knowledge on fetal development and to be able to explain it to their children. Other learning needs were appropriate nutrition and exercise needed to be healthy during and immediately following pregnancy. Those in the third trimester also wanted individual diet counseling that would take into account their dietary preferences. They also wanted refresher courses on physical preparation for labour, and information about any changes in hospital practices, parenting (especially preparation of the family to cope with the new baby) and how the mother can attend to her own needs. Some multigravid women did not attend any prenatal classes with a belief that it would not be of any value to them. The women preferred detailed information to superficial ones (Sullivan, 1993).

Similarly, Macdonald (1987) interviewed multiparous women who had delivered, before they were discharged from a Toronto hospital. Some reported that their learning needs included content areas relating to labour, which were the physiology, breathing and relaxation exercises, anaesthesia, analgesics and any old and new tips for pain management. They also wanted to learn strategies for negotiating their rights, correcting outdated information, supporting women planning vaginal delivery after previous caesarean section, welcoming a new baby into the family and coping with fatigue as well as reactions of siblings. Even though breastfeeding and contraception were not identified as their learning needs, any new information about them was well received.

In two other studies, both pregnant women and their partners were recruited to be respondents (Maloney, 1985; Shaw, 1988). A study conducted in Ontario used

questionnaires to assess what clients (57 mothers and 43 fathers) expected to gain from childbirth classes. All respondents indicated their interest in a list of 19 common topics. While mothers expected to learn coping strategies, fathers expected to learn factual information regarding childbirth, labour, infant development and childcare. In addition, both sides expected to learn breathing, relaxation, and infant care techniques. Expectations of many mothers and fathers were met and yet, they felt more time should have been spent on the majority of topics (Maloney, 1985).

The second study was descriptive and assessed the learning needs of 30 primigravid prenatal class attendants (15 women and 15 men) in Texas. A prenatal education needs assessment questionnaire was used. Results indicated a high level of interest in all areas. Respondents considered the most important area to be labour and delivery with priority given to topics like vaginal births, complications, and non-medical relief measures. Their interest in the area of newborn care was focused on feeding, health supervision, and communication with infants. Topics relating to safety were prominent under pregnancy care. Finally, nutrition, breast care, and physical changes in women's bodies were the most important under postpartum care (Shaw, 1988). This high level of interest reported in this study was not supported in other studies where interest in only some of these areas was reported. The sample size was small for a quantitative study and that might have led to the differences. Interest areas identified from studies, where both fathers and mothers were enrolled, was similar to those of other studies.

Researchers (Freda et al., 1993b; Pinkosky, 1997; Stokes, 1995) who compared the learning needs from provider's point of view and that of pregnant women reported that they were not in agreement for quite a number of topics. Learning needs of pregnant women varied depending on their parity that is multigravid or primigravid (Freda et al.,

1993b; Sullivan, 1993; Macdonald, 1987). An outstanding finding of some studies was the interest of multigravid women in refresher courses instead of being exposed to the full prenatal education programmes (Sullivan, 1993; Macdonald, 1987). Identified needs were associated with gestational age (Pinkosky, 1997; Sullivan, 1993). Differences were also found between women from private and public sectors (Freda et al., 1993a & 1993b)

Nolan (1997a) called the differences in interests between the health care provider and the client a discrepancy. The discrepancy is an important finding according to her because; providers' interests have been shown to influence the provision of information or knowledge. The results of previous studies draw the attention of health professionals to a range of learning needs or topics of interest to pregnant women in the development of prenatal education content.

Organization of Prenatal Education

Having identified the learning needs of pregnant women, the content of prenatal education programmes must be organized such that whatever is being presented is relevant and easy to utilize. Research studies where the topic of organization of prenatal education was addressed were limited. Opinions of other authors are therefore used to support the research studies that were found.

A descriptive study was conducted where 100 pregnant women and 65 midwives evaluated prenatal education in Harare (Murira, Munjanja, Lindmark, & Nystrom 1996). Lecture was the most frequently used teaching method and was full of distractions, which affected the concentration of the women. It was further found that midwives decided on the subject matter for health education without consulting the pregnant women. Both midwives and pregnant women agreed that written material should be provided for both women and their spouses to support the limited information. The conclusion was that

there should be greater use of other methods of communication such as the mass media (e.g., television and radio) and pamphlets.

Similarly, Oware-Gyekye (1994 unpublished) quoted earlier reported that the lecture format was the most frequently used teaching style. In addition, health providers treated the women as though they were homogenous and did not consider variables such as age, education, and experience as important in the organization of educational programmes. The use of visual aids to enhance teaching was not a common practice. Macdonald (1987) asserted that the lecture method was not appropriate but it served best to draw out participants' knowledge by adding information, accuracy and depth to that base.

Hence, Bonovich (1981) recognized participation in the learning process during prenatal classes as a key factor in providing information for pregnant women who were poorly motivated. In her study, pregnant women were given the opportunity to share important information about their experience of pregnancy, labour, and delivery, and care of the newborn. This group process served as a vehicle for expressing of feelings, providing reassurance, and providing direction for action.

In another study, which was qualitative in nature (Kinnon, 1998), seven primigravid women were interviewed to explore why they felt their childbirth experiences should be shared. Findings indicated that women were interested in the experiences of other women. Hancock (1994) shared similar views when she asserted that parents are the real experts and therefore want to share their experiences and emotions with each other. This sharing may be a positive way of alleviating anxieties and learning about childbirth and parenthood.

A study was conducted to find out ways in which non- health professionals disseminated childbirth knowledge. Ninety-five pregnant women were interviewed in Britain and Canada. The main method used for the programme was group discussion. The multigravid women reported that using the discussion format encouraged shared learning, cohesiveness, and support for each other. The learning was seen as a group effort that depended on participants' level of education and ability to analyze and synthesize information (Laryea, 1998).

On the contrary, the primigravid amongst the women in Laryea's study (1998) reported that the discussion format was less helpful and wanted a more directive approach. It was suggested that these women might have lacked confidence, were overwhelmed with the impending birth and motherhood, and were afraid to make the wrong choice. Other methods used were one-to-one information sharing, books/handouts, visual aids, and practising of skills such as relaxation and breathing techniques. Health care providers were occasionally invited to provide information about particular topics such as pain medication, posture, nutrition in labour, and postnatal care.

Other researchers (Gould, 1986; Skevington & Wilkes, 1992) addressed the use of small groups to provide education. Results indicated that the support pregnant women gained from participating in small group discussions were one of the most valuable aspects of class attendance. Laryea (1998) confirmed this finding.

Similarly, smaller groups (n=6-7) instead of a large one were used in a programme developed to deliver more effective prenatal education in a small rural clinic in Ghana (Hill, 1986). It was based on an observation that women did not receive all the information they needed because the existing content of prenatal education was not arranged to suit their needs. A thirty-minute period was proposed for the education and

all staff members were to facilitate the group process. It was hoped that a small group atmosphere would encourage greater participation of pregnant women than could be expected when a lecture format was used. Guidelines were drawn for the major areas of discussion but the exact content was dependent, to some extent upon the women, their questions and contributions.

O'Meara (1993b) evaluated the views of 207 pregnant women (past and current users) about health education services through a survey in Australia. As part of the findings, it was reported that the extent of their participation in the learning process did not measure up to their expectations. The same researcher (O'Meara, 1993a) examined childbirth and parenting educational programmes in Australia using eleven(11) childbirth private and public childbirth educators. All educators recognized the value of active learner involvement, but felt they were unable to achieve this because of physical and working constraints.

With extremely large numbers of prenatal women, educators from the public hospital maintained audience interest by having a 2-player presentation with a voice changeover every 10 minutes. Teaching aids were not easily accessible for teaching as observed by Oware-Gyekye (1994). It was also reported that the goals, objectives, planning, and coordination of prenatal education were inadequate and suggested that organization of the educational programme had not developed professionally in the way that other care services had been developed (O'Meara 1993a).

Macdonald (1987) interviewed multiparous women before their discharge from hospital in Toronto on their views about prenatal teaching sessions. Results indicated that they were not interested in a whole repeated prenatal education series and wished they could have a review class. Based on these findings, a programme was organized to assist

parents to feel prepared to manage childbirth and to integrate their new baby into the family. Most parents had a need to clarify or explore their previous birth experiences. It was suggested that the use of past experiences was a valid part of adult education, which could enhance new learning. A series of review classes helped to identify common learning needs of multiparous women.

Macdonald (1987) asserted that there was no one best style for adult learning because each style was appropriate for some learners in some settings and for some content. She demonstrated this by incorporating within a course held for multiparous women, small group sessions, large group discussions, experiential learning, demonstration and practice of learned behaviours such as breathing and positioning in labour and delivery. She also used one-to-one counseling, private meetings with couples, and reading materials.

None of the studies sought specifically to assess the learning needs of pregnant women. Assessment of individual learning needs has been identified as the first step in addressing the needs of pregnant women. It determines what the individual wants and needs to know (Freda et al., 1993b; Evans & Jeffery, 1995; Macdonald, 1987; Rovers, 1987; Sullivan, 1993). This assessment creates the opportunity for learners to suggest topics for the content of education from prospective members, thus giving them a feeling of ownership. It was suggested that assessment could also be used for review classes especially for multigravid women who still needed information or to plan discussion topics for subsequent classes. Assessment also served as an evaluation tool at the end of prenatal educational programmes (Laryea, 1998; Macdonald, 1987).

Studies where organization of prenatal education was addressed helped to identify several teaching methods and strategies that have been used in prenatal educational

programmes. The common/most frequent teaching method was a lecture and the women were not consulted on decisions about the subject matter (Murira et al., 1996; Oware-Gyekye, 1994). Other teaching methods such as small group teaching and group discussions were used (Gould, 1986; Hill, 1986; Laryea, 1998; Macdonald, 1987; Skevington & Wilkes, 1992). Active participation that encouraged sharing was observed as a valuable strategy (Bonvich, 1981; Kinnon, 1998; O'Meara, 1993b). The use of teaching aids was also reported (Laryea, 1998; O'Meara, 1993a; Oware-Gyekye, 1994). Some researchers found inadequacies and suggested that prenatal educational programmes do not incorporate enough measures to support pregnant women.

Outcome/ Impact of Prenatal Education

While prenatal education improves pregnancy outcome, it is not clear which features of the educational programme produce the positive results. The outcome or impact of prenatal education using solely surveys has been explored. A limitation to this is that there may be variables, from the perspectives of the pregnant women that very much affect the outcome of the educational programmes. The caregivers might not yet have considered these variables. The evaluations were based on specific topics related to pregnancy, labour, and puerperium including infant care. Researchers have focused on two main areas, which are knowledge gain/retention and utilization as well as changes in health-related behaviours. The focus of one study was the incidence of complications.

Several researchers have conducted studies on knowledge gain/retention and utilization (Bester, 1992; Eiser & Eiser, 1985; Husband, 1983; Jacoby, 1988; Malata, 2000; McCann, 1997; Oware-Gyekye, 1994; Spiby et al., 1999; Tjugum, Barlinn, & Bringedel, 1989; Verma, Chhatwal & Varughese, 1995; Willford, 1998).

A research study was conducted where primigravid women were interviewed about aspects of education that are important in pregnancy. Education on smoking and alcohol consumption was found to have only a little impact. The women rather felt positive about breastfeeding and family planning after they received information about them. Very little knowledge was received about danger signs that occur during pregnancy and clients did not know the reasons for the examinations and laboratory tests performed. It was recommended that health education be critically examined to ensure that it satisfies the needs of clients, taking into consideration their pre-existing knowledge and educational abilities (Bester, 1992).

Forty-eight primigravid women who were 3-4 months pregnant were interviewed to determine their knowledge about fetal development, and their awareness of hazards to development. Although there was reasonable knowledge about normal fetal development, the women were generally not aware of the repercussions of maternal rubella or rationale for many routine tests at prenatal clinics. (Eiser & Eiser, 1985). The findings of the previous study (Bester, 1992) are similar in that important aspects of education, not known by pregnant women, are identified in both studies.

In London, UK, 628 primiparous women were questioned about the helpfulness of information received on pregnancy and childbirth. Women felt generally satisfied with the information given at various stages but about 20 percent wanted more information or explanation during pregnancy. They felt unable to discuss their concerns fully with the doctors and midwives who attended to them (Jacoby, 1988). The significant knowledge gain reported in this study supports findings from Husband (1983). In her study, 50 primiparous women were recruited to assess the benefit derived from prenatal classes. It

was reported not surprisingly that women exposed to education had a significant increase in knowledge when compared with those who had no exposure.

A quantitative study was conducted to evaluate the impact of an educational programme during the prenatal period. Three hundred and one primiparous and multiparous women (201 who obtained prenatal education and 100 who had none) were recruited. It was reported that those in the study group gained significant knowledge regarding the purpose of prenatal care, hematinics, tetanus toxoid, measles, diphtheria, pertussis and tetanus vaccination. The recommendation was that the prenatal period should be optimally utilized to impart health education on various aspects of maternal health and childbirth (Verma, Chhatwal & Varughese, 1995).

On the contrary, an interview was conducted for 350 pregnant women to find out their experiences of childbirth preparation in relation to various aspects of pregnancy, delivery, and the postpartum period in Norway. Less than half of the number who attended prenatal classes reported that the classes were beneficial. The rest reported little or no benefit. Results indicated that the women did not find the classes to be especially important in prenatal care (Tjugum, Barlinn, & Bringedal, 1989).

Similarly, a descriptive- correlation study was conducted to explore labour and childbirth information given to 150 primiparous women at hospitals and communities in Malawi. Analysis of the questionnaires revealed that the amount of information given in the hospital settings was not satisfactory. Information obtained from the community was culturally based, comprised mainly of beliefs and taboos of childbirth. Based on results of the study, there is a need for improvement in how and what labour and childbirth information should be given (Malata, 2000).

A questionnaire was used to assess the extent of health education perceived by 108 pregnant women and 12 health care providers in Ghana. Results indicated that knowledge gained could not assist them to identify risk factors and consequently, take appropriate measures to prevent complications (Oware-Gyekye, 1994). Results are similar to that of Malata (2000) because both studies found the knowledge unsatisfactory to assist pregnant women.

In another study, two groups of primigravid women (50 who had completed prenatal education and 45 who had not) were interviewed about their preparation for infant care, knowledge of infant jaundice, dehydration, factors that could result in significant neonatal morbidity, and possible mortality in the postpartum period. The researcher reported that those who attended classes demonstrated no higher levels of preparedness for infant care than those who did not attend. They were more likely to recognize signs of infant jaundice, more competent in assessing health related problems, and less likely to seek emergency services inappropriately for their infants (McCann, 1997).

Primigravid women's ability to adequately nurture their children over an 8-week period was explored. It was evident that significant differences did not exist in parenting behaviours for both mothers who attended and those who did not attend classes. It was concluded that further research was needed to determine the helpfulness of prenatal education in preparing young couples to assume that parenting role (Willford, 1998). McCann's (1997) findings were supported in this study in that infant care and parental behaviours are not necessarily acquired through prenatal education.

A within- subject design (n=121 primiparous women) was implemented to explore the use of coping strategies in labour (breathing, posture and relaxation) that were

taught during prenatal education sessions. It was reported that women used the three coping strategies to different extents. The involvement of midwives in the acquisition of these coping strategies was not to the extent that the pregnant women expected. They found birth companions rather supportive. A significant number expressed dissatisfaction with the amount of time allotted for the practice of coping strategies during prenatal classes. The findings raised questions about the correct components of the classes and how midwives and birth companions could be involved optimally in this aspect of a woman's labour (Spiby et al, 1999).

From the studies that were reviewed, it was evident that no statistically significant knowledge gain in relation to infant care and parenting behaviours was recorded (McCann, 1997; Willford, 1998). The performance of those who had education and those who had none was the same and could be linked to the informal "women's network" that gives women information on pregnancy, childbirth, and childcare (Nolan, 1997a). Those who were exposed to education gained knowledge in the recognition of signs of infant jaundice and assessment of health-related problems. Other areas of knowledge gain were the purpose of prenatal care, vaccines for children and pregnant women, and haematinics or blood supplements in the form of drugs (McCann, 1997; Willford, 1998). Primigravid women felt quite satisfied with the knowledge gained in areas such as normal fetal development, breastfeeding, and family planning (Jacoby, 1988). Statistically significant knowledge gains in specific topics when compared with those without education were reported (Husband, 1983; Jacoby, 1988; Verma, Chhatwal & Varughese, 1995).

Alternately, some pregnant women were mostly dissatisfied with the knowledge/information gained irrespective of the setting or site of education (Malata, 2000; Spiby et al, 1999; Tjugum, Barlinn, & Bringedal, 1989). Vital aspects of the educational content

received little or no attention (Bester, 1992; Eiser & Eiser, 1985). These included the rationale for routine tests and examinations, danger signs that can show up during pregnancy, emotional preparation for birth, health skills, and ability to gain confidence. The knowledge gained was not enough for pregnant women to utilize (Malata, 2000; Oware-Gyekye, 1994) and opportunities for practising of skills were limited (Spiby et al., 1999). They felt midwives did not support them as expected. They were unable to discuss their concerns fully with health care providers (Jacoby, 1988). Some reported prenatal classes to be unimportant in prenatal care (Tjugum, Barlinn, & Bringedal, 1989).

The second outcome measure was the changes in knowledge and health-related behaviours associated with prenatal education programmes (Adams, 1982; Belizan et al., 1995; Guillen Rodriguez, Sanchez Ramos, Toscano Marquez & Garrido Fernandez, 1999). In Latin America, Belizan and associates (1995) conducted a randomized, controlled trial on pregnant women at risk. The purpose of the study was to assess whether education led to changes in health-related behaviour and the use of health facilities. Women receiving home intervention of 4-6 visits (n=1115) and a control group receiving routine prenatal care (n=1120) were enrolled. A significant knowledge gain was reported for participants in the intervention group with seven out of nine alarm signs (such as oedema, headache, bleeding and others) and with two out of three labour-onset signs (contractions, loss of mucous plug, rupture of membranes). The findings were consistent with those of Verma, Chhatwal, and Varughese (1995). No differences between groups were found in relation to diet improvement, cigarette and alcohol consumption, maternal physical strain, lactation at 40 days postpartum, utilization of health facilities, self-reported maternal morbidity, and drugs used during pregnancy.

Adams (1982) conducted a similar study and found that fewer prenatal class attendees still smoked cigarettes after receiving education when compared with non-attendees. In the case of alcohol consumption, the finding was the opposite of cigarette consumption. Slightly fewer attendees changed their diet as compared with non-attendees. The majority of them felt their classes were worthwhile and of value to them because it was an opportunity to meet other women and learn relaxation techniques. Some could not remember anything when asked what they had learned. Others usually remembered only breastfeeding and very few valued the education content. Adams concluded that opportunities for educating during pregnancy were not effectively utilized and the pregnant women did not see the benefits of the education.

On the contrary, a pre-test/post-test design was used in a study of 222 pregnant women in Spain. The purpose was to determine the effect of prenatal education on previous knowledge, hygiene and dietary habits, attitudes to giving birth, satisfaction with the development of the sessions and perceived use. Pregnant women reported that prenatal education was useful for confronting birth and were very satisfied with the methods used. It was concluded that maternity education was effective for improving knowledge and health habits (Guillen Rodriguez et al., 1999).

In an Australian study the views of 207 pregnant women (past and current users in both private and public sectors) on childbirth and parenting educational services were evaluated using a survey. The aim was to identify the effectiveness of prenatal education on human behaviour. Analysis of questionnaires indicated no significant differences in attitudes, beliefs, and values of these women before and after birth that could be attributed to childbirth education. In addition, it was found that the health skills, ability to gain confidence and emotional preparation for birth, did not fully measure up to client's

expectations. Findings were similar to that of Adams (1982). Respondents indicated that they expected professionalism in the provision of services, which had a course content specifically tailored to their learning needs. They also wanted it to take into consideration variables such as age and previous experience of childbirth (O'Meara, 1993b).

Only one qualitative study was found that addressed the outcome/impact of prenatal education (Mackey, 1990). Sixty-one married Lamaze-prepared multigravid women with gestational ages between 36-38 weeks were interviewed about their preparation for childbirth. The majority reported that the information they had about labor and delivery was generally helpful and valuable. They reported reduced fear and tension and also increased relaxation during childbirth. The education helped them to increase their chances of managing labour satisfactorily.

Researchers reported that prenatal education led to changes in the ability to confront birth, reduce fear and tension and increase relaxation during childbirth (Guillen Rodriguez et al., 1999; Mackay, 1990). In a majority of cases, prenatal education did not result in any significant changes in behaviour when compared with those who did not receive education. Important outcomes that did not change with prenatal education included cigarette and alcohol consumption, lactation at 40 days postpartum, diet improvement, maternal physical strain, utilization of health services, and the use of drugs during pregnancy (Adams, 1982; Belazin et al, 1995; O'Meara,1993b). Differences were therefore not evident in the attitudes, beliefs, and values of the pregnant women.

A third aspect of the outcome was related to the incidence of complications. First trimester young mothers (101 who chose to attend classes and 95 who chose not to attend) reported their perceived outcome of the education provided about pregnancy, childbirth, infant care, contraception and healthy life styles. Results indicated that

maternal weight gain and infant birth weight were significantly higher in the group that received the educational intervention. Pregnancy complications (preterm labour, intrauterine growth retardation, anaemia) were significantly higher in the group that did not receive the educational intervention and these women were almost three times as likely to undergo caesarean birth (Van Winter, Harmon, Atkinson, Simmons, & Ogburn, 1997).

In almost all studies where the outcome of prenatal education was addressed, attendants and non- attendants of prenatal educational programmes were compared (Adams, 1982; Van Winter, Harmon, Atkinson, Simmons, & Ogburn, 1997; Verma, Chhatwal, and Varughese, 1995). In these studies, some pregnant women reported that prenatal education was satisfying and did increase knowledge in relation to specific topics. Many others were dissatisfied with the information or found prenatal education disappointing. The quality of educational content and support for practising health skills seemed inadequate from the perspective of the pregnant women. Some researchers questioned the importance or helpfulness of prenatal education during prenatal care (Malata, 2000; Oware-Gyekye, 1994; Spiby et al, 1999; Tjugum, Barlinn, & Bringedal, 1989).

Changes in health-related behaviours were not significantly different between certain groups (Adams, 1982; Belazin et al, 1999; O'Meara, 1993b). It was demonstrated that prenatal education was effective for improving knowledge and health habits (Guillen Rodriguez et al., 1999) and could reduce the incidence of complications in pregnancy, childbirth, and childcare (Van Winter et al., 1997). Health care providers were to consider the review of what they taught and how they went about it.

Sources of Information/Knowledge

Several researchers have used questionnaires to solicit the information sources of women during pregnancy (Aaronson, Mural & Pfoutz, 1988; Adams, 1982; Benn, Budge & White, 1999; Jacoby, 1988; Oware-Gyekye, 1994; Sullivan, 1993).

Five hundred and twenty-nine pregnant women were surveyed to identify what they considered to be their major source(s) of information during pregnancy. Results indicated that the largest number of respondents cited health care providers and books as their first or second most important sources of information. Those with higher socio-economic status relied more on books and less on the family and those with previous pregnancies used this experience as a source of information (Aaronson, Mural, & Pfoutz, 1988).

Similar results were reported when 253 primiparous and multiparous women were interviewed about their views on prenatal education. Additional sources identified were mothers and friends. Few reported that prenatal classes or health personnel were their main source of information (Adams, 1982).

Questionnaires for 628 primiparous women were analyzed to find out the helpfulness of information received during pregnancy and childbirth in London. As part of the results, respondents reported their most frequent source of information to be books. Another source was prenatal classes and these corresponded with the findings of Adams (1982). Additional sources reported included films, radio and television (Jacoby, 1988).

Another study involving 120 pregnant women was conducted to assess the extent of health education in Ghana. Analysis of the questionnaires revealed their knowledge sources to be their previous experiences in pregnancy and childbirth, prenatal education

sessions or health personnel. Another source was their exposure to the media (Oware-Gyekye, 1994).

Seventy-one pregnant women (34 primigravid and 37 multigravid) were also interviewed in Calgary/Canada about their learning needs. It was reported that participants' first sources of information about childbearing and rearing were their friends and colleagues. Moderate satisfaction was derived from these sources. Participants also made use of books, magazines, articles and pamphlets for information about their concerns and feelings, fetal development, stages of pregnancy, labour, childbirth and parenting. A low satisfaction was derived from reading materials which was contrary to reports in the previous studies reviewed. Many of the participants felt their physicians were too busy to allow them to discuss their feelings and concerns (Sullivan, 1993).

A questionnaire was used to elicit information sources of 50 women during pregnancy in New Zealand. The investigators reported that shared experiences of mothers and friends were primary sources of information that were useful to them. Findings of researchers in previous studies (Adams, 1982; Sullivan, 1993) were supported. Even though health personnel were found to be another source of information, the women reported that doctors and specialists primarily provided factual information. Midwives also provided information related to reassurance and support (Benn, Budge, & White, 1999).

Qualitative studies that addressed this topic were not found and therefore experiences related to their sources of information might not have been explored in-depth. Researchers reported several sources of information. These included reading materials (Aaronson, Mural & Pfoutz, 1988; Adams, 1982; Jacoby, 1988; Sullivan, 1993), previous pregnancy experiences (Aaronson, Mural & Pfoutz, 1988; Oware-Gyekye,

1994), informal or formal supportive persons such as mothers, friends and colleagues (Adams, 1982; Benn, Budge & White, 1999; Sullivan, 1993), prenatal classes (Adams, 1982; Oware Gyekye, 1994), health personnel such as doctors, specialists and midwives (Aaronson, Mural & Pfoutz, 1988; Adams, 1982; Benn, Budge & White, 1999; Oware-Gyekye, 1994) and the media (Jacoby, 1988, Oware Gyekye, 1994).

It was evident in almost all studies that reading materials, health personnel or prenatal classes were the most common or main sources of information. Reading materials were not reported to be a significant source of information in the Ghanaian study (Oware Gyekye, 1994) probably due to low educational levels of the women. Few researchers reported lack of satisfaction with sources such as prenatal classes/health personnel, friends, colleagues, and reading materials.

Patient Education Principles

Malcolm Knowles' principles of adult education (Knowles, 1984) identified how adult learners could better understand what they learn. He suggested that a learning need was a gap between where the learner was at that instance and where they wanted to be in relation to a particular set of competencies. Meeting the learning needs enabled learning to become satisfying and effective. Failure to acknowledge these needs led to barrier formation that could slow down or prevent learning of new behaviours.

Knowles identified certain assumptions about the adult learner. According to him, as people matured, their self-concept moved from dependence to self-direction and they were capable of making their own decisions. Secondly, people accumulated life experiences that served as an increasing resource for learning. Thirdly, their readiness to learn was increasingly oriented to their developmental tasks and social roles. Finally, their learning became problem-centered instead of subject-centered (Knowles, 1984).

Based on Knowles' principles, it is acknowledged that much could be achieved if clients were treated as adults, capable of self-directed learning and if they were encouraged to participate actively and confidently in the learning process. Adults were motivated to learn when they realized they had a need to learn and learned best when they perceived information to be relevant and capable of being easily used in the immediate present (Rankin & Stalling, 1996; Young, 1984). Education of pregnant women depends heavily on the principles of adult learning because most childbearing women fall within the category of adult learners.

In summary, prenatal education researchers have focused mainly on identification of pregnant women's learning needs, the organization of prenatal education, the outcome/impact of the education, and their sources of information. Almost all researchers conducted quantitative studies. Most evaluated the effect of educational programmes on primigravid women; only three focused solely on multigravid/multiparous women. This omission needed to be addressed. In addition, previous research studies were conducted solely in the North American and European countries except for two that were conducted in Africa (Harare and Malawi) excluding Ghana. In Ghana, an unpublished study and a programme that was organized to improve prenatal education services were found. There was no specific qualitative study that addressed the learning needs of multigravid women in the developing countries or Ghana where the study was conducted. The study was conducted to answer this important question.

Research Question

The research question was:

From their perspective, what were the learning needs of multigravid women?

To answer this question, the following were addressed in the course of the study:

- 1) Why would they attend prenatal educational programmes?
- 2) From what source do they obtain information?
- 3) What are they learning currently?
- 4) What did they learn previously?
- 5) How helpful were these to them?
- 6) What else would they like to learn?
- 7) How are their existing educational programmes organized?
- 8) What do they think about their prenatal educational programmes?

Chapter Three

Method

The purpose of this study was to explore the learning needs of multigravid women so that prenatal education programmes could be developed to meet those needs.

Qualitative research was appropriate for this study because little was known (Mayan, 2001; Morse & Field, 1996) about the perception of prenatal learning needs of multigravid women, particularly those of Ghanaian women.

In qualitative research, the researcher examines the phenomenon of interest in-depth and comes to know and understand the phenomenon from different perspectives (multiple realities). Qualitative researchers are committed to understanding and interpreting the participants' points of view and use methods that include unstructured interviews, observation and examination of artefacts to become grounded in the real life of the participants (Streubert & Carpenter, 1995).

The inquiry is conducted in such a way that it does not disturb the natural context of the phenomenon of interest, but rather tries to make sense of every life as it unfolds. The researcher serves as an instrument and therefore, is accepted as a co-participant in the study. Finally, findings of the study are reported in a rich literary style from the perspective of those who have lived them. Included in the findings are quotes, commentaries, and stories to enrich the report (Mayan, 2001; Streubert & Carpenter, 1995).

Research Design

An exploratory-descriptive design was adopted for the study. This design is more general than the traditional methods of qualitative research (phenomenology,

ethnography and grounded theory) but it includes elements from these designs. The researcher seeks to describe and interpret a shared phenomenon from the perspective of those who live it for the purpose of developing nursing knowledge (Thorne, Kirkham, & Macdonald-Emes, 1997).

Study Setting

Suntreso Hospital in Kumasi, Ashanti Region of Ghana was the study setting. It is situated near the round about of Sofo-line, off Abrepo junction road and within the Bantama sub metropolitan area. It is about 2 kilometres from the Komfo- Anokye Teaching Hospital (KATH). The maternal and child health unit comprises a prenatal and postnatal clinic, intranatal services, and family planning. The prenatal clinic was the specific setting for the study. It has seven midwives on duty at a time and the busy clinic days are Mondays, Tuesdays, and Fridays. About 80-120 women report on each of these days. This particular setting was selected because it caters mostly for normal maternity cases. Besides, it is accessible to clients and located close to a business area. Clients found it easier to seek prompt and regular medical attention. It was also accessible to the researcher since funding for the research was inadequate.

Selection of Study Participants

Owing to the nature of the study, a purposive convenience sampling technique was used. The purposive sampling included participants who had knowledge about the research topic and the ability to meet the information needs of the study (Bogdan & Biklen, 1982). The convenience sampling technique also made it easier to recruit those who were willing to provide the needed information and were readily available during the period of data collection. This was important because gathering quality data was

dependent upon participants' ability to freely engage in the study without interruptions (Polit & Hungler, 1995).

Recruitments of the multigravid women were done on Tuesdays. It was not appropriate for the researcher to recruit a large number of participants because of the large volume of in-depth verbal data that was gathered and the time required for analysis of that amount of data (Sandelowski, 1986; Thorne, 1991). The sample size for the study could not be determined before the study but eight (8) women participated in the individual interviews and ten (10) participated in the focus group discussion making a total of eighteen (18) participants. Data collection especially with the individual interviews ceased when additional participants did not yield any new or relevant information that was different from the initial ones already obtained (Field & Morse, 1985; Mayan, 2001).

Selection criteria for inclusion into the study were pregnant women who:

1. Were multigravid of varied parities living within the Kumasi Metropolis.
2. Were near or at term (38-40 weeks) without any complications at the time of data collection.
3. Had attended a minimum of four prenatal education sessions during pregnancy.
4. Devoted time to talk about experiences or give information needed.
5. Had the ability to speak and comprehend Twi or English.

Multigravid women were used, because it was suspected that they had learning needs that varied from those of primigravid women upon whom many researchers had focused. Participants could easily be reached, because they all lived within the Kumasi metropolis. Their gestational age and a minimum of four attendances at prenatal

education were emphasized in the inclusion criteria, because they may have had enough exposure to enable them give information or share experiences.

One multigravid woman who did not meet the attendance criteria was interviewed to find out about her interest level in the educational sessions. Two languages were selected, because the researcher was fluent in both of them. Furthermore, Twi is the predominant language in Ashanti Region. Responses provided insights into the learning needs of a much wider group of women. Participants felt rather comfortable communicating in the Twi language irrespective of their levels of education. Being able to speak comfortably in the participant's language facilitated greater understanding within the study dialogue.

Data Collection

The data collection methods used were individual interviews and a focus group discussion. Both methods were suitable for collecting in-depth qualitative data. The individual interviews facilitated a more open and free wheeling dialogue between the study participants and the researcher. This made it easier for participants to share personal views, which they might not have discussed in the midst of others. Further, it enabled a rich database to be obtained (Mayan, 2001).

The focus group technique helped to obtain data about the feelings and opinions of small groups of participants concerning a given phenomenon (Basch, 1987). Focus group discussion usually involves 6-10 participants having similar backgrounds, who are recruited to respond to a set of questions in a moderated setting. In this study, the researcher initiated the discussion as a moderator (Mayan, 2001). A prepared semi-structured interview guide (Appendix D) was used for both individual interviews and focus group discussion. Relevant information from the literature and pregnant women

were used as a basis for the development of appropriate questions. The supervisory committee members also reviewed the questions used.

Before data collection began, site approval was obtained from the Director of the Hospital and the Head of the prenatal clinic (Appendix F). The Head of the clinic then approached potential participants and informed them about the purpose of the study and introduced the researcher to those who were interested in participating in the study. The researcher together with the nurses met briefly with the potential participants and talked with them. A week after the initial meeting, the researcher approached participants who were eligible for inclusion and explained the study to them with the help of an information sheet (Appendix A). This was repeated for the focus group discussion. Individual participants who agreed to be part of the study were contacted 2 days prior to their planned participation on telephone or through a visit to remind them of their interview appointments. The researcher and participants mutually agreed on the date, time, and location (i.e., the clinic or the home) (Morse & Field, 1996 p.73).

A separate apartment was obtained at the setting, solely for individual interviews and the focus group discussion. It helped to eliminate interruptions, encourage full expression of ideas and minimize influences to responses given (Morse, 1986). All interviews and the focus group discussion were carried out between participant(s) and the researcher alone to maintain consistency and confidentiality.

In both formats, the researcher tried to maintain a friendly but purposeful atmosphere to obtain the needed responses and allowed participants to voice their thoughts and feelings without interruptions. Further, there was flexibility in the order in which questions were asked. Participants were also encouraged to talk about all questions guiding the study and to seek clarification when necessary. Probing questions were used

to follow up on the participant's responses to initial questions. The researcher further ensured that all questions guiding the study had been explored in detail. The varied educational levels of participants as well as their comprehension and cognitive abilities were taken into account. The period used for the individual interviews ranged between 30-45 minutes and 90 minutes for the focus group discussion.

At the beginning of each individual interview and the focus group discussion, the study was again explained to the participants and informed consent obtained. Participants were assigned numbers and later pseudo names to enable the researcher to identify them. Demographic data was collected at the beginning of the individual interviews and focus group discussion, which helped to describe each participant and made it possible to understand their worldviews (Appendix C). Individual interviews were conducted first. Five individuals were interviewed at the clinic, while three were interviewed in their homes according to their preferences. Allowing them to choose the setting contributed to their relaxation during the interviews.

The focus group discussion, which followed the individual interviews, was conducted at the prenatal clinic, because it was a common site for all participants. Only one focus group discussion was carried out, owing to the limited time available for managing data from several focus groups. It was not considered likely that a series of focus groups would contribute significantly more information about the phenomenon of interest. Different participants apart from those interviewed individually were used for the focus group discussion. This helped to reveal similarities in the responses and the characteristics of participants. The researcher observed the interaction that transpired among participants, which made it feasible for experiences of participants to be discussed. A lot of information was also obtained in a relatively short period of time

(Mayan, 2001). Findings of the individual interview data were linked to that of the focus group data and both methods complemented each other.

With the initial interviews, participants could not easily remember what they had learned at the prenatal educational sessions. It became necessary therefore to prompt them about what they had learned with the help of the Ministry of Health stipulated topics that were supposed to be used for prenatal education. It helped them to remember more of what they had learned and identify their learning needs. It is acknowledged that by doing this, it was important to address a topic that they may not have otherwise considered.

Responses from participants were audio taped and field notes recorded as needed during the interviews. The field notes included the researcher's observations about the setting, nonverbal communication occurring during the interviews or any interruptions that could influence the interactions. It also reflected the researcher's thoughts and interpretation, which served as a guide for subsequent interviews. Details were recorded as soon as practicable (Mayan, 2001; Polit & Hungler, 1995).

At the end of each interview or the focus group discussion, attempts were made by the researcher to summarize important features of the information obtained. These summaries were presented to participants to ensure they agreed that their views had been reflected. They were given the opportunity to add any other relevant information or to comment further. Participants were also informed that the researcher may contact them again after the initial interview, if there was the need to find out more after reading through the transcripts (Mayan, 2001). Second interviews were organized for six participants when the researcher detected that some responses needed further clarifications. The interviews of two participants were interrupted on several occasions by

their children because there was no one to take care of them. The data collection was completed in four months.

Data Analysis

Content analysis of data was conducted concurrently with data collection. Audiotapes of the first three individual interviews were transcribed verbatim in Twi and then translated into English. By having both Twi and English translations available, the researcher ensured that the English language analysis reflected what participants expressed in Twi. Coding of transcripts and searching of themes were done for the first three interviews and data were analyzed to generate certain questions that will guide subsequent interviews. It also enabled the researcher to critique her interviewing skills and become immersed in the data.

The remaining interviews followed the same pattern of coding and searching of themes. Content analysis allowed certain categories that described the learning needs of multigravid women to emerge. For example, a broad category that was generated was “family planning”. Any portions of the data that had descriptions such as “staying away from pregnancy”, “controlling births”, “waiting for some time before getting pregnant”, “getting something to protect oneself” and others were interpreted as the desire to have information about family planning.

Categorization of these themes was done (Mayan, 2001) using the cut and paste approach with the computer (Microsoft word). As analysis was initiated, the codes, themes, and categories were checked with the supervisory committee members to ensure accuracy and completeness. The identified categories were used to reconstruct the data in a way that summarized and reflected what the participants expressed as their prenatal

learning needs. Relationships among the identified categories were determined, summarized and related to the research question.

Trustworthiness

The nature of qualitative research requires that the trustworthiness of the data be assured. According to Guba and Lincoln (1981), assessment of rigor in qualitative research studies and the establishment of trustworthiness of the data is ensured through credibility (truth value) and transferability (fittingness) of findings. Other examples of rigor include auditability and confirmability (Sandelowski, 1986; Polit & Hungler, 1995; Dempsey & Dempsey, 2000).

Credibility

Credibility is the degree to which findings truly represent the realities of participants who describe the phenomenon being studied (Sandelowski, 1986). To ensure credibility, individual interviews were conducted first and the findings, linked to the focus group discussion to find out how they related to the responses of the group (validation of data). Provision of summaries of important features of the information obtained at the end of interviews was a strategy of member checking. This ensured that what participants really meant was what the researcher heard (Mayan, 2001). The researcher went back to participants to find out more information after the transcripts were read.

Different participants from those recruited for the individual interviews were used for the focus group discussion. This helped to determine whether information received from those in the focus group, that had similar characteristics could confirm the individual interviews. The use of languages that they were most comfortable with assured the ability to express best their realities. The researcher ensured that self-values were not

conflicting with the phenomenon of interest by maintaining self-awareness. This was done by keeping a diary of thoughts and feelings about the phenomenon during the data collection period.

Transferability

Transferability has to do with how findings can be transferred to other settings or groups outside the study situation (Sandelowski, 1986; Dempsey & Dempsey, 2000; Polit & Hungler, 1995). To ensure this, participants who were willing to discuss their learning needs were recruited. Women of varied parities were interviewed, allowing the researcher to obtain information that reflected the learning needs of women with few or many previous pregnancies. Responses given to questions asked were assessed for relevancy, completeness and amount. A thick description (with a lot of quotes from participants) or a substantial amount of clear and detailed information about the phenomenon being studied were provided to support the selection of themes. The analyzed data were reviewed by the supervisory committee members to ensure that data obtained were categorized in a way that was logical to others.

Auditability

Auditability is maintained through an enquiry audit or audit trail. An audit trail is a systematic process by which a researcher records all activities related to the investigation, thereby leaving a clear decision path/trail. It enables any reader or another researcher to follow the progression of events in a study to understand their logic or how the conclusions were arrived at. (Mayan, 2001; Sandelowski, 1986; Streubert & Carpenter, 1995). To promote auditability, a detailed description of how the study was done, including the questions asked in the interview, the audiotaped interviews and

transcribed data were made available. Field notes, memos and notes were written during each interview to support analyzed data.

Confirmability

Confirmability is concerned with the meaningfulness of the study and it is achieved when auditability, credibility, and applicability are established (Sandelowski, 1986; Polit & Hungler, 1995). To ensure confirmability, an audit trail once again was used. Moreover, individual interviews were followed by a focus group discussion to further clarify what participants said. Confirmability was also determined when the findings of the study were reported.

Ethical Considerations

Ethical considerations involve ethical review, informed consent, confidentiality, as well as risks and benefits.

Ethical review

Ethical clearance for the study was obtained from the ethical committee of the Noguchi Memorial Institute and the Suntreso Hospital, Kumasi before data collection started (Appendix E & F).

Informed consent

The nature, purpose, and procedure of the study together with the time commitment required were explained to each participant (See Appendix A for written information form). Participants were made aware that they were at liberty to refuse to answer any questions or drop out of the study at any time and that was not going to affect the care they received from the clinic. Participants who could not read were informed about the study by translating the information into the Twi language. It was ensured that the translation carried the same meaning as it appeared in English. Consent was then

obtained from each participant in the study where participants appended their signatures or thumbprints (See Appendix B1&B2).

Confidentiality

Participants were assured of the confidentiality of personal information and written materials. They were informed that any information obtained would be kept in a secured place for the duration of the study and also for further analysis. In addition, only the researcher, transcriber, and supervisory committee members had access to the raw data.

Risks and benefits

There were no known risks to participants who took part in this study. Participants benefited from the study since they had an opportunity to express their learning needs, experiences or views. Furthermore, several questions, which they raised during the course of the interviews and discussion, were addressed. Participants expressed a lot of satisfaction with the interaction. It is hoped that there will be subsequent benefits, in that, the learning needs of those who will attend prenatal clinic in future will be addressed through improved educational programmes.

Chapter Four

Findings

The felt learning needs of multigravid women were explored to help provide relevant educational programs for them. A purposive convenience sampling was used. Data were collected through individual interviews ranging between 30-45 minutes and a focus group discussion, which lasted 90 minutes. Audiotapes were transcribed verbatim in Twi and then translated into English. Analysis of data was conducted concurrently with data collection to allow for coding, searching of themes and further questions to guide subsequent interviews. A process of reading and rereading of transcripts while constantly comparing and contrasting interviews with each other helped to identify themes that emerged from the data. The themes generated were categorized and checked with the supervisory committee members to ensure accuracy and completeness. The categories were then used to reconstruct the data in a way that summarized and reflected what the participants expressed as their prenatal learning needs.

Description of the Sample

Eight women participated in the individual interviews. Of these, seven met the inclusion criteria and one did not because she reported late for the teaching sessions most of the time. It was important to interview her to find out whether she reported late to the teaching sessions as a result of her level of interest in the teaching programmes. Although she did not meet some of the criteria for selection, responses from her were not different from the others. Ten individuals volunteered to participate in a focus group discussion therefore; the total sample size was 18. Demographic data were obtained from each participant so that the research sample could be described and the world of the participants understood. Their characteristics are presented in a table (Appendix G).

Demographic characteristics of participants

Age of participants

The ages of participants ranged from 20-35 years with a mean age of 29 years. They fell within the early adulthood and active childbearing age. Ten participants were in their early 30's.

Occupation of participants

Participants had varied occupations. Ten were solely traders in perishable or non-perishable goods. Others were hair braiders (6), teachers (1), and housewives (1). Apart from the one who was a teacher, the rest were in the low- income group.

Educational background of participants

The highest level of education for most of them (9) was standard 7 (middle form 4) while four reached primary 5 or 6. The remaining participants (5) reached post secondary (teacher training), secondary form 5, senior secondary or Junior secondary. Nearly all participants had schooled up to the basic level. The researcher observed that the higher their education, the better they perceived the importance of prenatal education.

First prenatal visit

Participants made their prenatal visits in a range of one to five months of pregnancy with an average of 3-4 months. It indicated that they stayed longer on prenatal education before labour started. Most participants (13) made their first prenatal visit in the first 3 months of pregnancy, three during the 4th or 5th months, and the rest (2) made theirs in either the 1st (due to ill health) or 2nd month.

Number of pregnancies

The number of pregnancies experienced by participants ranged from two to six with a mean of four. Six participants were pregnant on 2 occasions while five were

pregnant on 3 occasions and four on 4 occasions. The remainder (3) had been pregnant on 5 or 6 occasions. Apart from one participant who had her sixth pregnancy unplanned, the rest had planned pregnancies. All participants were married and lived with their children and partners within the Kumasi metropolis. Children born to these participants were alive.

Educational background of partners

The educational backgrounds of partners were similar to that of the women. The highest educational level for most of them (9) was standard 7(middle form 4) while others (6) reached Form 5. Three of the participants did not know the educational background of their partners. The higher the level of education of partners, the better the perception in supporting their wives to pursue prenatal education.

Occupation of partners

Their partners also had varied occupations. The majority (5) were traders in non-perishable goods. Three were drivers, two were auto mechanics, and two others were electricians. There was one in each of the following categories: cook, priest, barber, building contractor, farmer and carpenter. Their income complimented that of their wives and generally, they fell within the low socio-economic group.

Thematic findings from the interview data

1. Identified learning concerns

Learning concerns were identified through analysis of both individual interviews and focus group discussion. Many women could not remember what they had been taught during their current pregnancy and the previous ones. As a result, topics outlined by the Ministry of Health were used to prompt participants. To identify their concerns,

responses to the questions relating to whether they learned what they wanted to learn and whether there were other topics they wanted to learn were analyzed.

Topics advanced by participants in the study included family planning (FP), sexual activity in pregnancy; prevention of sexually transmitted infections (STIs); postnatal care of mothers; hazards during fetal development and prevention; infant care and safety (care of babies); danger signs during pregnancy; as well as rest and sleep. Others included drugs and their effects; issues surrounding maternal activities including exercises; breast care and management of engorgement; early disorders in pregnancy; reasons for routine examinations including explanation of findings/fetal position; improving hemoglobin (Hb) levels; breast-feeding, substitutes and supplementation with water; hospital protocols, and effects of vomiting during labour. The rest of the identified learning needs were varied in nature and were those reported by one or two of the participants.

Family Planning (FP)

FP was an informational need for women in this study. They believed that the practice of FP would improve their socio-economic status. The women were mostly concerned about preventing further pregnancies using the available methods. Others were related to the period for beginning FP and how effective it was if breast-feeding was used as a method. In addition, some participants wanted to learn about their side effects, misconceptions, and eligibility criteria for some of the methods. Concerns about FP were expressed in the following quotes:

- I used secure (pill) and had some rash. That prevented me from pursuing it any further. The women said I was too young for FP but I have decided that I will go in for it after this pregnancy because the cost of living is high. (Julie)

Two others said,

- What worries me now is my sexual relations with my partner after delivery. I am always on the same bed with him. Whether I like it or not, he will draw closer to me. If he does, I can't say I will deny him of sex because it will create problems. My husband even says if he had someone who could help to stop the pregnancies entirely, it will help us to raise adequate money to take care of our children. (Kate)
- A certain nurse staying closer to us explained to my husband and I when I delivered my second child that, FP could not be practised unless you have menstruated on the 40th day. I was not comfortable with her response because if you haven't menstruated on that day and you want FP, how can you achieve your aim? It is also explained at the clinic that if you deliver and breast-feed adequately, you will not get pregnant. This also beats my mind because I have seen some women whose children have just started to sit, becoming pregnant again. (Mimie)

Some participants expressed interest in minilaparotomy and natural FP. They reported that their partners only made them pregnant without considering the effects. They wanted to practise FP without the consent of their partners. One of them was concerned about partner involvement in FP practice. One participant said,

- You may want the doctor to perform surgery to turn your womb after delivery but he refuses to do that which I don't understand. I have authority over my body and therefore my desire to stop childbirth should not be interfered with. Something must be done about this. (Betty)

Alice felt the choice of method was the responsibility of nurses. She said,

- When they are teaching, they introduce the method but they don't tell us which of them is helpful. They should help us to know the one which will protect us without any problem.

One participant noted that her pregnancies were naturally spaced and that she would not need additional strategies for FP. Babs said,

- My pregnancies are naturally spaced. I haven't used any of the artificial methods before and don't have the desire to practice it. I know the pregnancy will stop by itself. I am always given treatment before I get pregnant so I know that I will be all right. If it wasn't the natural spacing, I would have loved to practise it.

Participants wanted to have control over their pregnancies and that is why Babs is different from the others.

Sexual activity during pregnancy

Participants appeared to have some discomfort, which was expressed through shyness or laughter when they talked about sexual activity. They described sexual activity during pregnancy as problematic and used terms such as unbearable, a bother, uncomfortable, and nauseating. Very few participants from the focus group discussion expressed their views and that could be attributed to shyness since society sometimes frowned at such discussions openly.

Participants felt it was not possible to deny their partners' sexual advances. Yet, they chose to abstain from sexual intercourse during pregnancy because it might lead to an abortion. They expressed a desire to know how to manage sex (i.e., when to have sex and how to satisfy partners) so that their partners would not go out to other women and also to ensure that pregnancy was not adversely affected. They wanted information to reduce the tension created by their not being able to engage comfortably in sexual activity.

Mimie said,

- During pregnancy, it is as if the human being is nauseating to me, when my partner touches me, I don't feel comfortable. We need to be taught when to have sex or abstain. Also, how we can go about it to avoid tension between partners.

Other notable responses were:

- A pregnant woman has a specific period that she can conveniently have sex with a man so if that time is past and the man wants it then I will allow him to go for another woman. I don't know what will happen if I allow him. (Diana)

and,

- During some periods, I don't just feel happy going into sex but my partner will be demanding it. I sometimes prove difficult and usually don't know what to do. It isn't all the time that sex is helpful. I may allow him sexual intercourse and may have problems with the pregnancy. (Ama)

Julie who experienced six pregnancies said, “Any detailed discussion concerning pregnancy and childbirth doesn’t bother me now because what is important to me is the teaching of FP”

Prevention of sexually transmitted infections (STIs)

Some participants who contributed to this theme had a fair idea about STIs especially about HIV/AIDS and the need for partners to be monogamous and faithful to each other to prevent the condition. Their sources of information were from the radio, the church, and sometimes, the clinic. Only one participant mentioned the condom as a preventive measure. Participants were worried about the possibility of their partners infecting them with STIs owing to their unfaithful habits. They expressed the need for nurses to provide information about STIs to enable them gain a better knowledge. One participant wanted the teaching so that she could also teach her husband and others. Mimie said,

- The female may be faithful but her partner may infect her with the condition because he went out. This really worries me. What I have heard is that there is a need to use condom if you want to prevent it.

Two participants who reported what they knew about STIs demonstrated their lack of sound knowledge about it. One said,

- Some of these may occur from the way we go about our sexual intercourse. The woman may struggle with the man and in the course of it, if the penis touches a wrong place and some of the woman’s hair gets to the orifice of the male organ, the man will get it. (Kate)

Linda also said, “With gonorrhoea if we don’t take care of our vulva hygiene, we can get the disease. It can be prevented if we clean our vulva adequately”.

Postnatal care of mothers

Measures that could prevent ill health of mothers were given. Responses revealed that the women went about it by depending on health providers, mothers/friends or their own knowledge. They used sitz baths, applied a local ointment or inserted herbs in the vagina. They also applied hot fomentation on the abdomen and vulva and used orthodox

medicine. In place of sanitary pads some used rags. Some of their practices could be harmful to their health. Although these were their practices it was recognized not to be the most appropriate.

Examples of how women cared for themselves postnatally are included in the following quotes,

- After every delivery, I use sitz baths in the morning and evening before bathing. I then smear a local ointment in the vagina and on the vulva and that makes me all right. (Kate)
- After delivery, some women mess up in the maintenance of their health. Instead of using pads, they depend on rags, which are difficult to dry in the open so they are dried in the room. They use the same rags again and improper handling could allow germs to set in. By the time the vaginal discharge is no longer seen, they will be taken ill. (Nana)

Apart from sitting on hot water in a bucket, my mother grinds some hot herbs and ask me to push it into the vagina. It helped me not to get sick at all (she was referring to prevention of infection). (Diana)

Some participants wanted explanation to the causes of chills and severe lower abdominal pains experienced after birth. They were particular about the unbearable nature of the lower abdominal pain (LAP) and the fact that they did not know what caused it. This shows they did not have a sound knowledge base. Concerning the LAP, they said,

- There is this kind of pain women experience in the lower abdomen after delivery. It makes the woman dizzy at times. You wonder what it is whether it is the uterus that is moving into a certain direction, some blood that has accumulated in the lower abdomen or the fluid that oozes. (Erica)
- This thing can be very unbearable and it makes feeding of babies difficult. You can easily drop your baby so the teaching of what happens and what we can do is very necessary. (Betty)
- It is said that such pains occur when you pick your baby up very often. There is also the belief that it is accumulation of blood that causes this. (Hanna)

One participant reported that postnatal teaching offered by the nurses would help her to prevent practices that could adversely affect them. Freda said, "I see that the teaching will help because maybe, the way we go about it is not the best and can affect us one day"

Prevention of deformities during fetal development

Participants related fetal health damage to indiscriminate use of drugs (both orthodox and herbs for enema) and inadequate nutrition. The enema was used during pregnancy and just before labour started. Although they had some knowledge about what caused fetal hazards, some participants still resorted to the use of enema because they were encouraged by their mothers to do so. They also expressed a concern about fetal deformities as a result of unsuccessful termination of pregnancies. Responses indicated that participants adopted practices that may not be appropriate. Participants expressed a need for nurses to emphasize this topic because of the practices adopted by some women.

Two participants said,

- According to the nurse, someone they delivered used herbs for enema. When the baby came out, the skin was greenish and the baby was dead. It isn't the enema that can help the baby to be born smoothly. It is God who can support us. As for this drug thing, the nurse should always talk about it because it is not helpful to the baby. (Linda)
- Some women will also want to use enema when they are getting ready to deliver. It is not helpful for women to practice it but because of the behaviour of some women, the nurses have to talk about it often. (Diana)

One participant felt that she could use the information provided at the prenatal clinic to help others in similar situations. She said,

- The teaching will help me. Maybe a sister of mine may be in financial crisis and will not be able to go to the clinic. In this case, I can use the knowledge I have to help her. (Kate)

Another participant believed that avoiding a fall on the abdomen, scalds on the body and being careful with one's behaviour could prevent it. She said,

- My mother tells me I have to exercise restraint and be myself during pregnancy because my baby could be hurt and deformed if I fall on my abdomen accidentally or through fighting with others. (Julie)

Infant care and safety (care of babies)

Participants received information from the clinic or their mothers about cord care, baby bathing, breast-feeding and immunizations. They had good knowledge about feeding and a fair idea about immunizations. They were very interested in cord care and bathing for which knowledge levels were low. Before babies were given their bath, hot fomentation was applied to various parts of the body including the cord, penis/vagina, and head (fontanelles).

Some participants reported that they had not gained competency with baby bathing and could not always depend on their mothers. These responses indicated a need for demonstration of baby care skills. The issue of early separation of cord was a major concern. It was reported that the women used a method acceptable to them at home for the cord or they used methylated spirit to clean the stump then continued with local measures to facilitate separation. Some participants preferred to care for the cord in ways that they were taught by their mothers. Two participants said,

- My grandma applies hot fomentation to parts of the body including the head, and pours warm water into the umbilical area then she cleans it with methylated spirit ... Even though I know the babies are sent for weighing and given immunization, the details are not known to me. (Nana)
- I pour warm water into the penis or vagina of the baby when I am bathing them then I do the same to the umbilical stump and apply warm water all over the body. (Kate)

Other participants believed babies had some odour at birth which, could only be cleared by thorough bathing in the first week of life. Participants were not in favour of the instructions given by nurses to top and tail babies (not immersing babies in water but cleaning them up) until the cord comes off. Erica said, “sometimes the babies have some odour after delivery. My problem is how the cleaning up for one week can help this

odour to clear”. Some participants reported that local measures like the use of salt and chalk mixed together, separated the cord faster and that was their preference.

One said,

- At home, we use chalk and salt ground together for the cord. It comes off by the 4th day. Now they are asking us to use methylated spirit, which hardens the cord and delays the separation thus giving it an odour. (Alice)

One participant expressed the need for nurses to provide information on this topic although she had a general knowledge. She expressed how important the care of babies was to her when she said,

- I have observed that the way we have to bath them and handle the cord is something they usually don't talk about. Some people might have lost their mothers and may have to take care of the babies themselves. (Freda)

Another said,

- Sometimes, mothers have no time for the care of these babies and that can affect their health but it is for the babies that we attend clinic and that is why it is important to me. (Mimie)

Danger signs during pregnancy

Most participants had very little knowledge about danger signs during pregnancy.

Their interest was related to topics such as bleeding and high blood pressure. Some participants perceived soreness of the mouth, salivation and vomiting during initial months of pregnancy as danger signs of pregnancy although vomiting could be one of them.

Linda said,

- In pregnancy, vomiting is normal and needs no drug. With salivation, they said it is God's own making for the human being to go through it. I don't know much about bleeding and would like to learn something about it if there is the opportunity.

Two others said,

- I have no idea about these but I am interested in the blood pressure and bleeding conditions because until I am taught, I will not know what they are. (Nana)

- You must know what it means when the BP goes up or becomes low. We should be taught that if such a thing happens, this or that will be the cause. If we are taught the meaning of such conditions, I believe it will help us. (Betty)

One participant felt she would have been affected negatively if she was exposed to any of them. She said,

- In my first three pregnancies when I wasn't going to the clinic, I was lucky I didn't get any of these. A sister may be behaving like me so I can be of help to her or someone else with the knowledge about them. (Kate)

One other participant admitted that many people were exposed to danger signs and it would be ideal if women who experienced these were taught what to do. Betty said, "Many people go through it so when these are taught over here, it helps those women to know what to do and the drugs they can use to control the situation".

Rest and sleep in pregnancy

Participants expressed uncertainty as to their learning concerns in relation to rest and sleep. They expressed a desire to learn about rest and sleep in pregnancy to gain the needed knowledge and correct any wrong ways of going about it. For example, Diana said, "I will like a teaching on it so that I will know how to correct myself. Maybe I may not be doing the right thing"

and Betty said, "I haven't received any teaching about it and if you can teach me, I will like it". Nana related the need for rest only towards the end of pregnancy with the explanation that vigorous activity may affect mother's health. She said,

- When one wakes up, one should work and be active to strengthen the fetus but getting to the end of pregnancy, it should be minimized. This is because at that time, any vigorous activity could give a lot of palpitation.

Some participants were more concerned about the cause of sleep alterations in the night during later stages of pregnancy, and how to correct them. Others were interested in the specific periods that pregnant women should sleep. For example Cornie said, "When

labour is getting closer, sleep is not possible. So sometimes I ask if it is normal because it is very difficult for your eyes to close". Freda also attributed her inability to sleep to a low Hb level for which she had no drug treatment. She said,

- I sleep in about 6 different places before morning. So with the sleep I wonder whether I am experiencing this because no drug was given when they detected my Hb level to be low.

Drugs and their effects

Participants had a high level of knowledge about pharmaceutical support for fetal development and specific drugs that were taken by pregnant women. They were also aware that drugs must be taken only if prescribed to avoid fetal problems including teratogenesis (i.e., deaths and deformities) and maternal morbidity (e.g., dizziness). They expressed a lot of concern about adverse drug effects including nausea, vomiting, abdominal pains, and unpleasant smells that could not be tolerated. They desired to know which of the haematinics were helpful (single or divided doses). They found information on drugs in pregnancy valuable as the knowledge would help them and their fetuses.

Two of them gave the following responses:

- Some women say they have nausea and vomiting when they take drugs like Bco, folic acid and multivite. Their bodies don't tolerate them. (Julie)
- I was given multivite and Bco throughout my first pregnancy and given pregnacare during my 2nd pregnancy. I want to find out if the pregnacare alone can help me. (Mimie)

One participant related her concern about drugs to their negative effects on pregnancy especially the possibility of causing an abortion.

She said,

- I didn't know something like heptoplex wasn't good for pregnancy. I couldn't eat. My aim was to drink that medicine so that I can be able to eat and sleep well. I know very well that the drug caused my abortion. (Nana)

Some participants seemed not to be interested in the blood supplements prescribed for them, (vitamin B complex, multivite and folic acid) that were taken thrice in a day. They regarded the expensive ones to have a better effect and yet were not sure whether the drugs gave them the needed support. They had an idea about others that were taken once in a day and wanted to know which of the two could support them better. There was a strong desire for variety of blood supplements. A few participants expressed concern about their husbands' reaction to the same drugs being given all the time. Gina for instance said,

- Since I got pregnant, those drugs are the only ones they give to me. As a result, my husband complains that I don't attend clinic and that I hide the very drugs I am given and yet collect money all the time from him.

Participants seemed to be afraid of informing nurses about their reactions. Some expressed the need for women to be able to talk about it and one said,

- We should advise ourselves and tell them our likes or dislikes. We may have the money so we purchase the expensive ones if we wish. Whatever health facility you go now, the drugs are the same so you will have to make your choice. (Irene)

Cornie reported that she was reacting to some of the drugs but they were substituted with something else when she complained to the nurses. She said,

- During one of my pregnancies, a particular drug they prescribed gave me abdominal pains. I told the nurse about it and she asked me to put a stop to it. Another one was prescribed for me. So if something is wrong with you, they will know what to do for you when you tell them.

Maternal activity including exercises

Participants wanted to learn about appropriate exercises during pregnancy that would be healthy for them to know the extent of involvement. They also wanted information about the consequences if exercises were neglected. One of them had knowledge about maternal activity but wanted the topic to be emphasized during prenatal educational sessions.

She said,

- I wish it would be part of the teaching so that the pregnant woman will know her limits. For instance, it will help her to know that if I run, it will not help me. It will help pregnant women to control themselves. (Nana)

Others said,

- It must be made part of the teaching all the time because some women only sit and feel lazy when they have to get up and work. Even when there is something to be done, they just ignore them and sit all day. (Freda)
- I see that it is worth learning but some women can be very weak and may not be able to carry it out at all. (Mimie)

Participants related exercises in pregnancy to the ease of fetal descent during labour. An example given was the pounding of fufu during later stages of pregnancy. Others were improved blood flow throughout the body and for correct positioning of their fetuses. Their responses indicated they needed additional information about the rationale for exercises and what they entailed.

Breast care and management of engorgement

Responses revealed that the women engaged in a variety of breast care practices that are not currently recommended such as cleaning breast before baby sucks. Others talked about cleaning the nipples around term to free the ducts for baby to suck milk with ease. Participants managed engorged breast through measures such as applying powder, grown ups sucking milk out of breast and again, expressing milk and throwing it away. They were not sure of what caused engorged breast and how to manage it. The issues are highlighted in the following quotes,

- I know when every woman brings forth, the breasts get engorged and I can't tell whether it is because of something we don't know and that is why it happens that way. Sometimes it gives a lot of pain. (Babs)
- I know that I can express the milk and throw it away because if the breasts are hard, the baby will not be able to suck effectively. I am not sure if I do the right thing. (Nana)

- I normally apply powder on it so that the pain will be reduced and the breast will become soft ... if the breasts get engorged and you put on brassiere, I don't think it will be easy for you to sleep with it. (Mimie)
- I will like the nurses to talk about what to do to reduce it. Sometimes, if the pain is too much, I get a grown up to suck the milk out for me. (Kate)

Early disorders of pregnancy

Participants experienced several early disorders of pregnancy such as vomiting, nausea, salivation, dizziness, constipation, lower abdominal pain, body weakness, pain in the thighs and waist (i.e., pain in the lumbo-sacral region), and irritability. They wanted to know the causes and what they could do in such situations. Some of the women were not sure what they were going through and expected nurses to give them drugs for the disorders. A few participants mentioned that knowledge about these disorders would prevent them from becoming scared and help them to cope. The women described some of the early disorders in the following quotes,

- I realize that I am unable to eat the whole day. At times, I feel pains in my body and develop headaches. I also feel dizzy but when I take my drugs, it reduces. (Nana)
- During early stages of pregnancy, we go through certain states. Sometimes we vomit or develop waist pains. When I started this pregnancy, I used to vomit anytime I ate but the nurses told us that we have to force and eat after that because that will make us strong. (Diana)
- Sometimes I have lower abdominal pains, which makes walking difficult, my thighs are very painful. I struggle within myself without knowing what is happening to me. If I had knowledge about it, I would have probably said it is the fetus that has shifted to that part of my body and wouldn't think too much about it. (Julie)
- With pregnancy, nothing happens but for the weakness and ill health existing from the beginning. I don't understand why we have to experience salivation and vomiting. When someone talks, we get annoyed. I usually ask myself why it happens that way in one's life. (Linda)

Reasons for routine examinations and explanation of findings/ fetal position

Participants were interested in the rationale for checking blood pressure (BP) and examining the abdomen. They focused on the correct position of fetus whenever they

talked about abdominal examinations. They knew that ultrasound helped to detect wrong fetal positions and poor health of the fetus. Participants reported that the importance of screening tests including ultrasound should be emphasized during teaching sessions. One of them felt it will help those who considered it not a priority whenever such requests were made because sometimes, adverse effects occurred. Diana said,

- When I was asked to have a scan done, I had no money so it wasn't done. Some few days after, I gave birth and the baby could not breathe properly. A nurse who has no patience wouldn't have supported me to deliver. Supposing they emphasized the importance of scan to me, it would have forced me to go for it and that would have prevented the poor state of my baby when it was born.

Nana also said,

- This is very necessary because you may get pregnant again after 5 – 10 years. You might have forgotten them so it is important to make it part of the teaching to remind those who have forgotten.

Irene had a different view about giving clients information concerning their condition. She felt it would scare them instead and said, “if she tells you that your BP is gone up, you will be scared so they should keep it. Some one may think about it and that will affect her”. Mimie had a concern that women wanted ultrasound for the purpose of identifying the baby's sex and expected nurses to de-emphasize that purpose. She said,

- Some women explain it as a means of finding out whether the fetus is a male or female. The nurses have to emphasize on the need to find out whether the fetus is correctly positioned or not.

Participants wanted findings of both abdominal examinations and BP explained after the procedure has been carried out. They reported that some nurses gave a clue that something was wrong and yet were silent about what they found. Some participants wanted to know the purpose of using a tape measure and a fetal stethoscope. They thought the fetal stethoscope detected the gestational age of the fetuses

Two participants said,

- I haven't had any teaching on why the BP is checked and will be happy to know something about it. (Betty)
- Recently, they checked and rechecked. I therefore questioned the nurse whether my BP was high. She replied that it varies with individuals. I believe it has a level that is abnormal and they sometimes mention that if the BP is high, salt intake must be reduced. She didn't explain anything to me so I couldn't do anything to my foods and just ate them as they were. I want to know if I will not be affected. (Dela)

Some participants were concerned about the nurses asking them for their gestational age and fetal movements instead of examining and telling them what they found. They reported that nurses were currently not interested in discussing issues with clients. They seemed to prefer obtaining information from nurses rather than being asked to provide it. One participant for instance reported that nurses may not be able to detect problems on abdominal examination and therefore ultrasound was necessary.

Two said,

- Sometimes when they assess the abdomen, the nurses will rather ask us how old our pregnancy is and whether we experience fetal movements then they ask us to go off the couch. They then give us another appointment. Isn't it the nurses who should know what it is and explain things to us? (Julie)
- They will rather ask you how far your pregnancy has gone and whether you feel fetal movements. If you don't feel anything then you have wasted your time for nothing. You will have to say it... A friend felt reduction in fetal movements and it stopped a day after, not knowing the baby was dead but she did not know. It is strange for someone who visits the clinic regularly to go through such a problem. Does that mean the problem existed and she wasn't informed? I really see from this situation that if ultrasound is not done, the nurses may not detect such problems. (Mimie)

Participants wanted to be informed about the positions of their fetuses. They reported that nurses did not tell them anything after the examinations and they at times got scared about the outcome because of the format of presenting the problem. Few participants reported having one-on-one information from nurses about the position of their fetuses after going through ultrasound. They commended the few nurses who either gave one-on-one explanation or group teaching on findings from abdominal examination. It seemed that participants expressed interest in individual teaching during examinations.

Some said,

- All they do is to check our BP, weight and urine. A tape measure is placed on our abdomen and stretched to touch the part above the vulva. Nurses discuss nothing with clients. At first, they will tell us the fetus is not correctly positioned hence do this or that but these days, they tell us nothing. (Julie)
- When we are not told, how will we know? They should teach us that if the fetus is not correctly positioned, we should lie this way or that way (Dela)
- They can teach us from the beginning of pregnancy the way we can cause the fetus to be correctly positioned. It will help because it is scaring. It gives the impression right away that you can't deliver when the time is up (Gina)

One participant wanted explanation to certain signs that nurses wrote against various examinations on their prenatal cards. She said,

- Some examinations or investigations are done with a negative or positive sign written beside them and no one knows what it means. It could be blood, urine or the abdominal checks. If the woman knows nothing about it, it doesn't help. If she knows the meaning, it will alert the woman to take any instruction or advice that she is given seriously in case she is facing some health problems. (Hanna)

Generally, participants seemed to be inadequately informed about the routine examinations carried out at the clinic and their findings therefore creating some discomforts about the way nurses treated them and mistrust in them as the experts.

Improving haemoglobin (Hb) levels

Several participants reported having low Hb levels and wanted to be informed whenever such situations occurred. They were not sure of what caused the low Hb and how they could improve upon it and therefore wanted teaching in that direction. They also expected that the routine drugs/ haematinics could prevent low Hb so they felt the drugs were not effective. Two participants said,

- I was also asked to check my Hb. The laboratory man told me that my Hb had reduced. When I got to the nurse at the clinic, she did not write any drug to improve my blood level (Fati)
- I went to the lab and was told my Hb level was low but I have been taking their drugs for 6mths and the B'co makes me eat very well but it could not raise my blood level. So I can't understand it. Does that mean it is the drug that doesn't help me? (Betty)

Further, participants reported that they became frightened about the format of presentation of their problems by nurses. They reported superficial information from nurses that did not help them in resolving their problems. Sometimes, they resorted to information from friends to support them. Cornie said,

- I went to check my blood level and was told it had reduced drastically but no drug was prescribed for me. Later, they wrote tablets vitamin B'co and multivite for me that day but the way they talked about the reduction in Hb was in a frightening manner such that I felt those drugs wouldn't help me.

Mimie also said,

- They explained the low Hb level in a frightening manner and just asked me to eat. It was so frightening but I was told by someone to use malta guinness. I know that helped me a lot and I delivered without any problems.

From the responses of participants, it seemed once again that they were inadequately informed about how to improve their haemoglobin levels.

Breast-feeding, substitution and supplementation

Breast-feeding was one of the very common topics the nurses talked about.

Participants had knowledge about exclusive breast-feeding for 6 months. They also knew that breast-feeding promoted bonding and adequate amounts of breast milk made babies strong and healthy. Although they knew about feeding babies on both breasts, some participants believed that one breast contained water while the other was food. Gina for instance said,

- The water given very often to children after delivery will not help because one breast contains water and the other contains food. You give both sides to ensure she has taken food and water in addition.

A number of participants expressed positive effects when breast-feeding was exclusively done. For example, they emphasized that their babies never got sick and were brilliant.

Two participants who reported benefits of exclusive breast-feeding felt the teaching was inadequate and wanted thorough teaching or clear information.

Hanna said,

- I can see that the explanation to it is not adequate I suggest it is given time when they are talking about breast-feeding to make the information clearer.

Others felt breast-feeding exclusively was not all that necessary and should not be bothered with it because whether babies were breast-fed or not, they had the same features. Some participants could not understand why a lot of emphasis was laid on exclusive breast-feeding (not giving water) because breast milk and water were allowed in the past. One participant responded as follows:

- My mother made us give water from birth but she was able to write, and talk alright so I don't understand why they insist that we should practise exclusive breast-feeding. (Irene)

Another said,

- I don't do it because at first, it was allowed to give the baby water immediately it was born. Now they are saying the baby should be given breast milk till 6 months. I wish I could get more explanation into this. (Linda)

Other participants were concerned about ideal substitutes for breast milk because they were not sure of what to use if their babies refused breast milk for no apparent reason.

Results indicated that women needed further teaching on exclusive breast-feeding, rationale for feeding babies on both breasts, and breast substitutes.

Hospital protocols

Some participants did not understand why they had to be paying for the care they received and services like laboratory investigations when the hospital should be responsible for that. They did not understand why additional items were added to the list of items for delivery and yet, they found catheters especially helpful. Another concern

was the absence of a doctor for pregnant women especially during the night. They felt unsafe because they believed that any complication could arise. Two said,

- From the beginning, our mothers used to go to hospital without such items. You only go to present yourself, but now they ask us to buy all these things. I want to find out why it is so because it is usually announced on radio that the government has asked that we be exempted from paying for the care we receive. So our husbands knowing this, feel reluctant to give out money. (Erica)
- We have no doctor who takes care of the pregnant women at Suntreso. It is only the nurses who interact with us. I have a sister who attends clinic at KATH. According to her she has the opportunity to interact with the nurses and the doctor sees her at the same time. I haven't seen it before and I can't understand it. (Julie)

Effect of vomiting during labour

Participants reported that vomiting during labour caused their teeth to fall off later in life and claimed they had evidences. They believed the vomitus was misdirected liquor. Some participants felt the nurses could not do anything about that state because it was beyond their knowledge. Two of them said,

- It is really in existence. I think it is God's own way of doing things and has nothing to do with the nurses. Some women before delivery will have to vomit and after some few months, you begin to experience falling off of teeth. (Dela)
- I know someone who has 2 children. She experienced this thing and her teeth has fallen off. It is very true. I don't think the nurses can do anything about it because it is God's own making. Your teeth will come off after some time even if it is not immediate. (Ama)

Additional learning concerns

Other learning concerns expressed by participants in this study were numerous and variable. The learning concerns in this category could be grouped under what they wanted to learn about pregnancy and childbirth. Their concerns were correct management of vaginal discharge, nutrition, personal and environmental hygiene, positions of pregnant women when lying down, and causes of reduced fetal movements.

Topics related to childbirth were, knowing the correct time to report for delivery (i.e., signs of labour); relationships that must exist for patients to receive attention from nurses, how to reduce weakness during labour; and the rationale for intravenous infusion.

Others were pain relief measures, self and husband support during labour, reasons for artificial rupture of membrane, importance of intact membranes, mode of delivery for subsequent births after episiotomy, how babies come out of the birth canal, and the way cord is tied and cut.

2. Women's method of learning

Participants reported that their teaching was done in a large group and a lecture format was mostly used but sometimes nurses discussed issues one-on-one. The teaching sessions combined multigravid and primigravid women, both old and new who had varied gestational ages. The teaching was held as a first procedure of the prenatal clinic. Several topics were put together for the teaching at every session. Nurses asked and allowed questions from clients but only few were given the chance to ask questions owing to limited time at their disposal. Some participants reported that some clients did not contribute when they were given that opportunity because they felt uncomfortable doing that.

Most of the time, those who had visited the clinic before and especially having children already provided answers to questions. It helped the new ones to listen and be able to answer questions when they visited again. Participants also reported that nurses left those who did not ask questions alone but summed up at the end and told them to make use of the teaching. Some participants preferred the large group teaching although they showed interest in other teaching methods. They had the idea that all could share what they had on mind. Besides, time at their disposal was limited and that was the only method that could avoid delays. These women had no exposures to other ways of teaching.

Dela said,

- It will be better if we come early for one nurse to teach us. We are grown ups so if only we are quiet with no noise, she can have time to answer our questions patiently.

Some participants on the other hand were not happy with the large group teaching and expressed a desire for small groups. Reasons given for their dislikes were, diverted attention as a result of other clients who chatted, shyness which could affect the freedom of asking questions, and a thought that others could expose them or leak what they said.

Some expressed themselves in the following quotes:

- With the large group, some women may be talking and wouldn't pay attention. When we are sitting close to such women, we don't hear anything. Some women may also feel shy to talk. (Babs)
- Someone may have a question to ask but may feel shy to stand in the midst of all those who are gathered. (Linda)

Others said,

- Some women are gossips, they may know the person who is talking. As for you nurses who teach me, I don't feel shy of you even though I don't know you so I can tell you my problem. My husband will not be here. I may say something in the course of talking and the one who knows me may come to my house and expose whatever I said to my husband and even in my environment so the information spreads. (Mimie)
- It is difficult to talk if something worry us and we want explanation for it. For instance, if we are talking about sex in pregnancy and because we are many, I will be quiet over anything which is worrying me. (Kate)

Using variety/more interactive teaching methods

Most participants wanted variety in the teaching methods such as small group teaching, experience sharing sessions and one-on-one/individualized teaching. They were aware that individuals learned better with specific teaching methods. Babs said,

- Individuals have different ideas and varied abilities to learn. When teaching is done, it isn't everybody who will absorb it. Someone may be listening very well but the information will not be retained and some may even forget.

Learning in small groups

Most participants either preferred small group teaching as an additional or ideal teaching method to make the teaching interesting. They reported that teaching will be better, clearly understood, women would express themselves freely, questions would be asked to meet their heartfelt needs, and the shy ones would be supported. One participant said,

- Even human beings will be interested in something that has benefits. If it will help each person and bring comfort, then everybody will enjoy the method. (Jane)

Another said,

- When the women are few, it is easier to ask any question to find solutions to something that really bothers you. In the large group someone may hide her questions. (Mimie)

Few participants reported that it may not be possible in their clinic because time available for other procedures will be limited. Besides, they felt the nurses were few and had increased workload. Diana for instance said,

- It will take a long time to organize the small group teaching because the nurses are few and maybe, they have to get home early to prepare their husbands' meals or pay attention to something else.

One of them was concerned about what could be done for those who reported late if small group teaching was adopted. Another suggested the way small group teaching could be organized. She said,

- For instance, one nurse teaches some topic this week, another teaches something else the following week, it continues that way till the entire contents are addressed. (Kate)

Learning by sharing experiences

Experience sharing about pregnancy and childbirth was appreciated by some participants as a method that would bring variety in teaching. While some participants felt it would be helpful as a teaching method, others did not see it that way. Those who felt it was a good idea explained that it could help to learn from mistakes of others so that

it is not repeated. Also, those who had not given birth before could have the opportunity of getting exposed to information especially on labour. Fati said,

- We may not have enough idea about something we are going through and what we already know may be wrong. Those who have gone through it before can say theirs and someone can learn from it to help in several ways. (Fati)

Betty said,

- If we have to talk from experience, then it will help those who have not given birth before. They will know what to do since they know nothing about labour. It will also help them to know the differences that may show up during labour. Such women tend to rush to the hospital with little disturbances but if somebody share experiences, it helps them to know what to do before getting to the hospital.

Mimie also said, “someone can mention what didn’t help her so that others can take a clue from it” They entertained fear that some women may share wrong information since they behaved/acted differently from what the nurses taught them. They added that some may laugh at whoever shared her experience and abuse them as well. They preferred that nurses were part of the gathering so that any wrong information/ideas could be corrected. They also felt nurses could control any behaviours of those women. Two participants said,

- When we get pregnant and visit the clinic to learn, that is not what we apply or work with. Maybe what the women share will differ from that of the nurses and may create a problem for the listener. I suggest that a nurse should be in our midst if such a method be used so that she can draw our attention to any incorrect ideas. Some of the information may not be sound so a nurse in our midst will make the method a helpful one. (Irene)
- What I see is that people may not even listen and will not work with the information when there is no nurse. They may laugh at you and even abuse you so that will not be very helpful. (Ama)

Some participants felt they were handicapped because of lack of formal education and may cause them to leave out important aspects during periods of sharing. Kate said,

- I suggest that a nurse should be part of it. I am saying this because a lot of us haven’t attended school. If they are with us, any important thing we leave out of our sharing will be added to make it a whole.

One other participant saw experience sharing (on pregnancy and childbirth) as a method of teaching that could be extended into the community for women who had not delivered before and that could support the effort of the government. She said,

- If we are part of an experience-sharing group and we couldn't attend the gathering, we could help in what the government is doing about pregnant women in our environment. We could share some issues on pregnancy and childbirth together with women who haven't delivered before. I can see that women like conversing a lot when they come together so instead of conversing unnecessarily, the conversation could be diverted to arouse their interest and have a desire to be part of women who share experiences at the clinic. (Kate)

Those who found it not helpful felt it was not possible to compare experiences because pregnancies and childbirths varied. This group also felt nurses knew better or had the knowledge and information from them will help instead of their fellow clients because their level of education was low. Further, they felt whatever teaching they needed was the responsibility of nurses. Linda said, "if we can receive information from nurses, it will be better than asking B or J to say how it went with her to help advise others".

Learning one-on-one (individualized teaching)

Participants preferred individualized teaching for addressing their personal problems or any worries. Some mentioned that opportunities for individualized teaching were not common and if even they were allowed, few women benefited. Diana said, "now that both of us are together, if even what I want to say is difficult, I will find it easier to tell you instead" Others were of the view that individual teaching was not a possibility because nurses had busy schedules. If that should work, the client had to wait for the nurse to complete her days' work. One suggested individualized teaching in their homes if that could be possible. Fati who had been exposed to individualized teaching at the clinic said,

- You have to see a nurse personally. As you continue with them, you may have one of them you can confide in so if anything is worrying you, you can talk to her about it for guidance. When I was pregnant for the first time, I was told that my blood level was low. One of the nurses spoke to me about it and told me that once I haven't delivered before, if the blood level continues to be low, I will be referred to Komfo Anokye Teaching Hospital (KATH). She advised me on foods that I could eat to recover by the 8th month.

Learning by visualising

Learning by visualising through the use of teaching aids (pictures, videos and models) was not a common practice during teaching sessions. Participants reported that demonstrations were done on few occasions, using improvised materials and it was commonly related to providing information about breast-feeding. Sometimes, a real situation of a woman who breast-fed was used during their teaching sessions. One participant contributed the following:

- During one of our visits, the nurse was teaching us how to feed the baby and she used the BP apparatus for the demonstration. In actual fact, it was only that nurse I saw doing such a demonstration. I feel it will help if these are used because for some people, when you just talk, they don't remember. If for instance there is something like a doll as big as a human being, which can be manipulated, it will be fine. They can use it to teach us the very parts of the mother the baby's body must touch. (Nana)

Others talked about references made at times by the nurses to a picture on the wall. Linda made the following comment:

- If you are not knowledgeable, you may see the picture as ordinary but if you are knowledgeable, and you read them, you can know what they mean.

Participants expressed a desire to learn by visualising during their teaching sessions because talking alone could not help them to understand teaching thoroughly. The use of teaching aids would help clients to see the recommended way of doing things and to retain more information therefore, enhancing learning.

Learning together

When the views of participants were sought about the organization of separate teaching sessions for multigravid women, most reported that they wanted both

multigravid and primigravid women together. They felt that first timers could get the opportunity to learn from multigravid women or those who may not have answers could learn from those who had them. Some participants suggested that separate teaching sessions should be used at times because it would be difficult to satisfy both groups when they were together. They felt that multigravid women already had some experiences related to pregnancy and childbirth and therefore the teaching will be easy to manage. Further, information pertaining to the needs of the group would be addressed. One who supported teaching primigravids and multigravids together said,

- It is good if both sides are rather put together because, we are all pregnant so if those who know answer the questions, it helps others to be able to learn. (Nana)

Another who supported teaching primigravids and multigravids separately said,

- If someone asks a question about difficulties that arise in labour, people may talk about how it went with them. Maybe, that was not what the nurse wanted to talk about that day. Now both sides are together so if she concentrates on that question, the teaching may not help those who have not delivered before. If the nurse ignores the question too, it may not help those who already have children. (Mimie)

Learning by useful repetition

Most participants reported that existing teaching topics should be taught in addition to any new ones identified. Reasons given were that some of the existing ones were very helpful and some women may also forget what they had learned in previous pregnancies due to worries. One participant said,

- Someone may forget what has already been taught as a result of worries and problems so if they teach the same things all the time, it reminds us of anything expected of us that we haven't done so that we can act on it. (Betty)

One participant felt the existing topics were necessary for both multigravid and primigravid women although she appreciated addition of new ones. She said,

- Whether we have delivered before or not, the same topics used should be continued. Nothing should be taken out of it. They should however add any new ones to it. (Gina)

A few participants supported the use of already existing topics because nurses selected them and felt they would be better than what clients will suggest for teaching.

Learning by unuseful repetition

Some participants were concerned about repetitions during prenatal teaching sessions. They suggested that existing topics they had been exposed to, on several occasions were left out. Participants believed it would bring variety and make the teaching interesting. The common ones participants mentioned were preparation for delivery, personal hygiene, nutrition, and aspects of breast-feeding. They were of the view that topics they had identified were part of the educational programme because they had little knowledge about them.

Some participants said,

- If those of us who have delivered before are alone then I think we have listened to the old ones for long so the nurses should use the new ones. (Cornie)
- They seem to be teaching the same things all the time so if new ones like those we have been talking about are added it will help us. Examples are the baby bathing, the way we have to take care of the high BP and ourselves after delivery. These should be considered. (Hanna)
- All that nurses talk about are foods we eat and items we need for delivery but those ones at all times does not help us. Those that have been taught several times can be left out. It will make the teaching more interesting than using only old ones which we always hear. (Julie)

Fati also said, “I feel I have enough information but I can’t close my ears when they are teaching those topics so I only have to listen”

Some of them suggested the inclusion of more new topics for the teaching of multigravid women such as those identified through their interviews, should the existing topics be maintained. A few participants were concerned about the burden that additional topics would have on nurses because they had to learn those new topics before teaching

them. Others felt some of the women might not even utilize the information. One of them said,

- I feel it will not be possible to do away with the old ones because the nurse will have to spend time learning the new ones before teaching them. Sometimes the women do not make use of what the nurses teach. They rather depend on what they know from home. (Irene)

Client perception of getting involved in teaching plans

The views of participants about their involvement in teaching plans were sought. Some participants were confident that they could make suggestions about their teaching when they were involved but others did not feel confident. The confident ones would have suggested that new topics were introduced since that could reduce disinterest during teaching sessions. It would also expose them to more detailed information on pregnancy and childbirth. Those who were not confident felt it was rather the nurses' responsibility and not theirs. Also, nurses knew best and should be in control of topic selection or any teaching plans. Others reported that they could not make suggestions because their exposure to formal education was inadequate. Besides, they felt it could create problems when a client made such suggestions. One said,

- The women know you nurses have learned these so anything we don't know, you have to teach us. I can't use my mind. (Betty)

Two others said,

- Some of us haven't been to school and cannot suggest what must be taught so it is the responsibility of the nurses to identify new topics for teaching then we can do the learning. (Dela)
- I will not be in the position to say anything like that. It may create a problem...you are the only one who claims to have a suggestion. What knowledge do you have to say such a thing? (Julie)

3. Sources of information

Participants identified similar sources of information. The sources were mostly friends, mothers, television (TV), and radio. Experiences from previous pregnancies,

nurses outside the prenatal clinic, books and women's fellowship were additional sources. Examples of information received from mothers and friends were, the nature of exhaustion or pain which goes with pregnancy and childbirth, position of legs when sitting, self-care throughout pregnancy, nutrition, baby bathing and cord care. Others were herbs for enema during and before labour and discouragement from controlling births.

In addition, participants reported that mothers admonished them whenever they practised habits that could affect their health adversely. Some of them reported that mothers taught aspects that were not addressed at the clinic. Generally, participants reported that mothers and friends sometimes gave information that was not in agreement with the teachings they received at the clinic. Two participants said,

- At the hospital, we are advised against enema while at home, our mothers will ask us to use herbs for enema to allow fetus to gain the needed strength. (Julie)
- I don't agree with mothers giving information because the things of old are different from that of the present so if we depend on our mothers who use traditional medicine, we may not know the effect those drugs have. It is not good to depend on mothers. (Babs)

Another said,

- Nurses teach that we should place our babies at a level above our abdomen during breast-feeding but, our mothers will ask us to change this to what they teach when they see that the ones nurses teach in hospital are being used. (Erica)

One participant was of the view that mothers may not know everything and felt pregnant women could depend on the teaching at the clinic to correct any information from mothers that could affect their health and that of the fetus. Some of the information received on radio and television were mostly related to nutrition. Other topics included personal hygiene, family planning, sexual activity, prevention of fetal hazards, and when to begin prenatal clinic.

A few participants depended on experiences from previous pregnancies as a source of information. They reported that it helped them to cope with subsequent ones and to understand how different each pregnancy could be. Others reported that each pregnancy and childbirth was different and could not be a source of information to support subsequent pregnancies. They described their experiences with previous pregnancies as intolerable or as worsening with increased parity. Freda said,

- In the first pregnancy for instance, I used to vomit within the first 3 months then it stopped by the fourth month. When I had it again in the second pregnancy, I wasn't worried even though I saw it as a problem. Although drugs were given, I still vomited but by the fourth month, it subsided. My previous pregnancy actually helped me to cope very well because I know the condition I was going through was part of the pregnancy and was going to stop.

Jane also said,

- It is not possible to compare the previous with the subsequent one. This is my fifth one. With the first and second, I wasn't attending clinic and was not taking drugs. I have been taking drugs for this pregnancy till now that I am ten months and yet labour has not started so I really see that each pregnancy is different.

Reading was a source of information for topics such as nutrition and positioning in pregnancy when awake or asleep. One participant was encouraged by her husband to learn all she could about pregnancy while the other took the initiative. Fati said,

- Sometimes, I depend on books but I don't do it myself. My husband reads them and tells me how to eat and sleep and many more.

Nana also said,

- My sister who comes after me does science so when she comes from school, she brings such books home and I take the opportunity to read some of them.

A few participants obtained information on family planning (FP) and drugs from nurses outside the clinic. One participant reported discomfort with the information gained about FP because it could not satisfy her need. She said,

- A certain nurse staying closer to us explained to my husband and I when I delivered my second child that, FP couldn't be practised unless you have menstruated on the 40th day. I was not comfortable with her response because if you haven't menstruated on that day and you want FP, how can you achieve your aim? (Mimie)

All participants reported that information obtained from the prenatal clinic was most helpful and supportive because it came from nurses (i.e., trained health professionals). They believed that nurses had the correct information and also addressed several topics. Another added that information obtained was what nurses perceived to be important and had to be accepted in good faith. Cornie for instance said,

- Our mothers introduce measures that are of the past and are no more in use. At first, we used to give water to our babies but now, they are discouraging it. If we don't listen to the nurses, we may lose something which is vital to us.

Participants reported they had the opportunity to be exposed to several topics at the prenatal clinic. They received information about some topics that they wanted to learn but emphasized that the information was helpful if only women could incorporate them into their lives. They also noted that they would not have had the information if they decided to stay at home.

4. Motivation to learn

Participants were motivated to learn so that they could gain knowledge and utilize it to improve upon their health status and share information with others. They also wanted to prevent complications to themselves and the fetus /baby. Further, they wanted their anxieties about pregnancy and childbirth to be relieved and to remember forgotten information.

Chapter Five

Discussion

This section discusses the analysis of data obtained from individual interviews and a focus group discussion. The discussion is based on the thematic findings, the existing related literature and the research question. The discussion has been organized under the following headings:

- i) Concerns of multigravid women;
- ii) Women's method of learning; and
- iii) Sources of information.

Concerns of multigravid women

The multigravid women who were interviewed reported several and varied concerns which they expected nurses to address during prenatal educational sessions. It was evident that many of the women had misconceptions related to prenatal health. Some other responses were not complete. Responses revealed that prenatal education up to the current time consisted of many "dos" and "dont's" without telling them the rationale behind that information. The same observations were made by Murira, Munjanaja, Lindmark, & Nystrom, 1996).

New areas that were not covered by nurses during prenatal teaching sessions were also identified. These concerns of the women can be described as their "felt learning needs" The felt learning needs were problem-centred which, confirmed Knowles' (1984) assumption about adult learners that, as people matured, their learning needs became problem-centred instead of subject-centred. They seemed to be interested in details about pregnancy and childbirth instead of the superficial teaching they had.

Family planning, sexual activity, and sexually transmitted infections were reported to be major learning needs of the women. They were areas that concerned their partners and could interfere with relationships, if they were not cautiously handled. Sexual activity and sexually transmitted infections were also identified as learning needs in previous studies (Murira et al., 1996; Sullivan, 1993). Alternately, these topics together with birth control/family planning were not rated highly in another study (Freda et al., 1993b). The attitudes of mothers/friends and partners as well as misconceptions of the women themselves affected their desire to seek information about or practise family planning. They reported that they wanted more information about family planning to avoid unplanned pregnancies.

While hesitant in allowing sexual activity because it might adversely affect the pregnancy or even lead to an abortion, the women desired to reduce the tension arising from their inability to engage comfortably in sexual activity. In spite of this state, in which they found themselves, it was still difficult to discuss their fears during teaching sessions, because in the Ghanaian society it is sometimes frowned upon to engage in such discussions in the open. They raised concerns about the need for confidentiality if sexual activity was addressed in group teaching, because it could prevent women from asking pertinent questions. Furthermore, the women wanted additional information about sexually transmitted infections and particularly, the need for their prevention, how they could go about it, and share the information with their partners.

The presence of partners would be beneficial when giving information to the women about family planning, sexual activity and sexually transmitted infections. Nurses could possibly use videos (readily available) in a private space to address these learning needs, especially sexual activity. Questions that may be asked by the audience would

then be answered after the sessions to ensure that their needs are met. If it would interfere with prenatal clinics, it could be arranged outside the clinic periods. When this is put in place, it may reduce tensions and misunderstanding and promote harmony between partners.

Another area of importance was how the women could care for themselves and their infants, after delivery. These learning needs were identified in previous studies (Maloney, 1985; Nolan, 1997b; Sullivan, 1993). Alternately, women in one study did not desire infant care practices because they had adequate information (Camiletti, 1999). In studies that utilized primigravid women it was reported, that infant care techniques were not necessarily acquired through prenatal education (Willford, 1998; McCann, 1997). The same finding reflected in the current study with multigravid women who mostly utilized information from mothers and friends. The women chose to solicit information from external sources because they felt that the nurses had not provided clear information about infant care.

In one study, it was reported that information on postnatal care and especially the area of baby care by the women was insufficient (Nolan, 1997b). This finding was confirmed in the current study. Some of the practices were not appropriate and could have adverse effects on the health of both mother and baby. For example, some of these women inserted herbs into their vagina and applied hot fomentation to the fontanelles and umbilical cords of their babies during periods of bathing. A contributory factor to these unsafe practices when women cared for their infants could be due to the fact that Ghanaian women depended on their mothers/elderly women for the care of infants irrespective of their parity. Nurses would have to teach pregnant women to adopt safe/sound practices.

Some of the practices need to be investigated for possible adoption by health care workers as participants reported success with their use. Examples included the use of powder to reduce engorged breast and chalk with salt for early separation of cord. Prevention of breast engorgement and genital tract infections were areas where participants wanted more information. Reducing lower abdominal pains after delivery was reported by the women as an area where they desperately needed information.

Nurses need to teach and demonstrate baby bathing, cord care, proper use of hot fomentation and postnatal care of women. They have to allow the opportunity for these women to return demonstrations in order to gain competency in recommended practices. Filmed scenes about care of the women and their infants could be used to support the teaching at the clinic for multigravid women and their mothers/friends to understand effects better. Developing a trusting relationship between nurses and their clients could help the women to accept the advice nurses give them and adopt recommended practices if even it is in conflict with what their mothers tell them.

Some learning needs identified could prevent complications to pregnant women and their fetuses/babies. Furthermore, they could reduce morbidity and mortality rates if the women have information about those topics. Some of these complications could be attributed to danger signs during pregnancy, early disorders in pregnancy, low haemoglobin levels that the women wanted to improve, as well as routine examinations and findings. These same needs were in other studies (Freda et al., 1993b; Murira et al., 1996; Sullivan, 1993) with the exception of improvement of haemoglobin levels. The danger signs that women wanted to learn included bleeding and high blood pressure but they also need to learn other signs, because they were not familiar with them. It would help women to identify some of these for early reporting and prompt treatment. The

women need to know that some early changes and symptoms of pregnancy are physiological in nature. They need explanation as to why such disorders occurred so that they could cope better. Nurses could also teach the signs and symptoms that are indicators of worsening states such as excessive vomiting (hyperemesis gravidarum).

Furthermore, the women need to be taught the causes of low haemoglobin (anaemia), which includes physiological anaemia, occurring during the middle trimester and poor nutrition. Instead of the routine manner of teaching nutrition in pregnancy in groups at the clinic, nurses could do individual counselling that would take their dietary preferences into account as identified in Sullivan's (1993) study. The women's anxieties could have been allayed if nurses helped them to understand why additional drugs might not be necessary for their condition and to avoid indiscriminate use of drugs as a solution. Prevention of anaemia would reduce complications such as abortion, premature labour, intra-uterine growth retardation, hypoxia, reduced resistance of the woman to infection, and postpartum haemorrhage (Bennett & Brown, 1999 p.292).

One aim of prenatal care is to identify deviations from the normal for prompt treatment and that makes examinations or investigations important for the women. The women were very particular about the rationale behind various examinations and laboratory tests carried out during pregnancy. This was similar to findings in a previous study (Bester, 1992) where primigravid women were used. The women in the current study wanted information on abdominal examination and ultrasound, especially their ability to identify and correct abnormal fetal positions. They also wanted individualized teaching during periods of abdominal examination. They were also concerned about the rationale behind blood pressure checks and wanted the findings of such examinations to be communicated to them. Communication of findings would make them aware of their

health statuses and be committed to their improvement. This observation from the women is important since knowledge of results can facilitate learning and adoption.

Some nurses relied on the women for information on abdominal examination (gestation and fetal movements) instead of finding out themselves. For example, one woman reported that nurses may not be able to detect problems on abdominal examination and therefore ultrasound ought to be carried out by the women whenever it was requested. Again, the format of presentation of some of the problems that the women encountered made them afraid about the outcome. It seemed there was discomfort about the way nurses treated them and this may be the reason why the women did not use information that nurses provided them. The refusal of nurses to talk about what pregnant women expected could give an impression that nurses were not reliable and undermines confidence in them. This idea supports observations made by Hancock (1994). Nurses would have to take up their responsibilities carefully as clients expect of them and improve upon their communication skills.

Prevention of fetal hazards during developmental stages, rest and sleep, maternal activities, drug use, and breast-feeding were also areas the women wanted to learn more about. This was similar to findings in previous studies (Camiletti, 1999; Freda et al., 1993b; Sullivan, 1993) with the exception of rest and sleep, and breast-feeding. The women wanted an emphasis on hazards that enema and indiscriminate use of drugs could have on fetal development. Some of them used enema because they believed that it gave strength to the fetus and this belief prompted its use. Enema use during pregnancy seemed to be common in some Ghanaian communities and even though the women knew it could be hazardous, they continued to use it because their mothers encouraged it. The women wanted information about the causes of sleep alterations that they experience

during the later stages of pregnancy and how they could overcome these. Nurses could give the reasons why that happens and the need for rest during the day. The women also wanted to learn appropriate maternal activities to engage in during pregnancy and the benefits it gave the pregnant woman.

Observations from some Ghanaian societies have revealed that some individuals perceive expensive haematinics (single doses) to work better than divided doses. As a result, people preferred single doses. A similar situation was revealed in the current study. The women expected variations irrespective of the cost although most of them were in the low-income group. It seemed that the women were torn between the advice of the hospital and the family about the drug issue. It would be necessary for their partners to be educated about the similar action of various haematinics and what happens at the clinic. It could be done through public teaching, inviting partners to the clinic or producing simple handouts to be given to the men at home. The women also need to be encouraged by nurses at the clinic to discuss their problems such as requesting for a change in any drug that manifested adverse effects.

Some of the women did not want to exclusively breast-feeding because they believed that babies need water as well as breast milk. Nurses would have to give adequate and detailed information about the advantages or importance of exclusive breast-feeding. This would improve their knowledge and help in making informed choices.

Finally other learning needs were related to certain attitudes/beliefs held by the women, which nurses could change during information delivery in relation to them. These included hospital protocols as identified also by Sullivan (1993) and vomiting during labour. It would be imperative to explain the changes in health care to women who

patronized the clinic. One example was the expectation that they could have a separate doctor for pregnant women and those in labour.

The women could be made to know that the care they required was not beyond the capabilities of the nurses or their scope of practice. Furthermore, the doctors got involved only when there were complications/high risk conditions. The nurses could also explain the differences in the services required of a district hospital such as Suntreso and a referral hospital in relation to maternity services. It will be important for nurses to render care as clients expect of them and create opportunities for the women to express their fears. When these are ensured, clients' reliability on nurses would improve.

Some of these concerns expressed could be identified through the use of focus group discussions, if nurses allowed these. It could help women to make decisions about their care instead of nurses assuming they could accept changes without questioning. Also, the women made an observation that when they vomited in labour (a belief that liquor was misdirected), it caused their teeth to fall off. This problem could be nutritional and therefore the cause and outcome of such disorder when reported need to be investigated to provide a solution to it.

A significant finding was the inability of some multigravid women to remember prenatal information presented during teaching sessions in previous pregnancies and even in the current one probably because it was not what they wanted and therefore paid less attention. They remembered personal hygiene, breast-feeding, nutrition, preparation for delivery and drugs very often. A similar finding was reported by Adams (1982). Another finding was the desire of the multigravid women to share information they had gained. This generates a concern for nurses to impart sound and adequate information that could

equip the women to support others to learn. This finding was consistent with that of Sullivan (1993).

These findings on the whole draw nurses attention to the fact that multigravid women have learning needs that may differ from what nurses teach them at the clinic and that of primigravid women. An assessment would therefore be an important strategy for finding out the learning needs of these women. Assessment creates the opportunity for prospective members (the learners) to suggest topics for the content of education, which gives them a feeling of ownership (Laryea, 1998).

It is suggested that assessment be used for multigravid women who still need information or to plan discussion topics for subsequent classes (Laryea, 1998; Macdonald, 1987). Nurses would have to equip themselves with the needed knowledge in terms of what the felt learning needs of the women are. They would then develop skills of communication and adopt strategies to address the identified learning needs.

Women's method of learning

Large group teaching was the method mostly used as reported by participants. The women were taught together without considering variables such as age, education, or experience in the organization of teaching sessions. These findings are consistent with previous studies (Murira et al., 1996; Oware-Gyekye, 1994). The women shared what they knew at times by answering and asking questions but not all concerns were addressed. Some of the women were just comfortable with the norm and although they had not been exposed to other teaching methods, they felt large group didactic teaching method would avoid delays and make time for other procedures. They also felt it would reduce the workload on few nurses.

Most of them wanted variety in teaching methods, because it was difficult to discuss certain issues confidently when only large group teaching was available. It was an indication that the women were concerned about the maintenance of confidentiality if they asked a question. They preferred small groups, because teaching could be clearly understood, the women could express themselves freely and ask questions to meet their heartfelt needs. This finding is consistent with the observation by Gould (1996) and Skevington & Wilkes (1992) that small group teaching gave women the most valuable support.

Another preference of the women was the sharing of experiences (experiential learning). They felt it would be possible to share concerns in order to support others and expose them (especially primigravid women) to the nature of pregnancy and childbirth. Furthermore, it would prevent the repetition of past mistakes committed by others to avoid problems. The women believed it would be beneficial, if a nurse facilitated the learning because they could not see themselves as resource persons. They expected nurses to act as resource persons to correct any wrong information that could affect knowledge and practice. This finding was reported in a previous study (Bonvich, 1981). Bonvich recognized that experience sharing served as a vehicle for expressing feelings, providing reassurance, and direction for action. Small group teaching would draw on the strengths of the women because they have a vast amount of life experiences, expertise, knowledge, and insights as adult learners (Knowles, 1984). It would make them focus in a very profitable way on their learning needs. It behooves nurses to encourage more of small group sessions so that experiences can be shared at the prenatal clinic.

Some of the multigravid women however, felt uncomfortable with experience sharing for the fear that they might not share the right information. They believed that

they have inadequate formal education, which is a limitation. They felt nurses knew better and had the knowledge and therefore it was their responsibility to teach others who attend the clinic. It was evident from the responses that the women lacked confidence in their own level of knowledge.

Multigravid women need to be encouraged that they have rich experiences about pregnancy and childbirth to share with others and therefore opportunities ought to be created for experience sharing which must go with positive feedback. Hancock (1994) described them as real experts who would want to share experiences. Facilitating the sharing of experiences as an educational strategy could encourage them to contribute to their learning. Experience sharing could also serve as a form of assessment for nurses to identify learning needs of clients. Through this approach, misconceptions, and inadequate information could be noted and addressed.

While the women seemed to enjoy being in groups, they frowned on discussing private and sensitive issues such as sexual activity that would be inappropriate to discuss in a group setting. They reported that one-on-one teaching was appropriate for addressing their personal problems or sensitive issues. They wanted several women to benefit from the individualized method, because they observed that it was usually not open to all women. Primigravid women in Jacoby's study (1988) were unable to discuss their concerns fully with those who attended to them and this was similar to the finding in the current study. Nurses could devote some time to address any identified learning needs that are sensitive or private before actual teaching sessions start or during abdominal examination and history taking periods. For example, nurses could ask direct questions about the sensitive issues in a non-judgmental manner. Macdonald (1987) asserted that where one client had a peculiar interest, which varied from the group, a private

session could be arranged to address them before or after the class. Nurses at the prenatal clinic could adopt the strategy.

Apart from occasional exposures to demonstrations and charts which gave information on breast-feeding, the use of teaching aids was not common. This finding is congruent with those of other researchers (O'Meara, 1993b; Oware-Gyekye, 1994). The women reported that giving them information without teaching aids could not help them to understand what they were being taught effectively. They were of the view that teaching aids could help to promote acceptable practices and help to retain more information. Based on the aspects of pregnancy and childbirth being communicated, nurses could incorporate into their teaching, aids such as self-developed flip charts, models, video clips, and films. When they are used in the teaching, it would make teaching easier and enhance learning.

The multigravid women preferred to learn with the primigravid women because information or experiences could be shared that would benefit primigravid women. They wanted separate teaching sessions at times because it would be difficult to meet the learning needs of both groups. Besides, they had been well informed about certain topics and wanted new topics such as those they identified during their interviews to be introduced. The women believed it would bring variety and make the prenatal educational programmes more interesting. This finding is supported in other studies (Macdonald, 1987; Murira et al., 1996) where it was reported that multigravid women wanted review classes instead of repeating an entire prenatal education series.

A few however, felt the introduction of new topics would burden nurses because they had to do some reading which may be a waste of time, because some women may not utilize the information. The women found some of the existing topics very helpful

and requested that repeating the information would refresh their memory. There was the notion that existing topics were selections by nurses and were better than what clients may suggest for teaching. This finding confirmed once again that clients did not see themselves as people who could make suggestions thus there was an indication of lack of confidence. They seemed to accept decisions from nurses as final without questioning.

Finally, some women felt confident about being part of decision-making as that would expose them to more detailed information on pregnancy and childbirth. The less confident ones expected nurses to be responsible, because nurses knew what was best for them. They also felt their lack of adequate formal education was a limitation and their suggestions might create problems. This information supports what was discussed previously. It was quite evident that they lacked confidence and therefore, their contributions needed to be valued by nurses at the prenatal clinic. Multigravid women wanted variety in teaching or more interactive styles and active learner involvement. This finding was supported in another study (O'Meara, 1993b). Since individuals learned differently, the women need to be exposed to several teaching methodologies including demonstrations and practice sessions with adequate use of teaching aids.

Sources of information

The main sources of information for the women apart from the clinic were friends, mothers, television and radio. These findings were similar to those previously reported (Aaronson, Mural & Pfoutz, 1988; Adams, 1982; Jacoby, 1988; Oware-Gyekye, 1994; Sullivan, 1993). Another source was the experiences from previous pregnancies, which is consistent with Oware-Gyekye's (1994) study. Other sources of information included nurses outside the clinic, and books. The use of books was very limited in this study and was a major difference identified when other studies were compared with the

current one. The educational backgrounds of the women could account for their inability to use books for their information. They felt comfortable with the Akan language irrespective of their levels of education.

The women reported that the most important sources of information were the prenatal clinic and their mothers. They received very useful information at times from their mothers and the information was sometimes something that they would not learn at the prenatal clinic. This supports the finding of Benn, Budge & White (1999) who observed that shared experiences of mothers and friends were useful to the women. This again suggests that women in most cultures rely on their mothers to give them information about pregnancy, childbearing and child-care as reported by Nolan (1997a).

Information from mothers conflicted with formal teaching from the clinic. Such situations pose a threat to the women, and their infants because it could affect their health practices and complicate health problems. Nurses could teach or identify useful health programmes on television and radio (Murira et al., 1996) and the women/family encouraged to listen. Mothers/friends who give information to clients could be invited on appointments with nurses to discuss issues related to the clients' care. It would improve their information on health practices, reinforce or support information that nurses and other health professionals would give to the clients at the clinic.

The women found information from the clinic to be helpful and one of the most important reasons was that nurses who had the most current information about pregnancy and childbirth handled the teaching. The women felt that nurses gave information they perceived to be important for clients, therefore they had to be accepted in good faith. This attitude may have cultural undertones, that authority should not be questioned. This finding was a confirmation that the perspectives of the women were not sought and the

women accepted what prevailed without questioning (Evans & Jeffery, 1995; Murira et al, 1996; O,Meara, 1993a). Some women reported satisfaction with the information received at the clinic although some were not associated with their interest areas (Freda et al., 1993a).

The women were motivated to learn at the prenatal clinic to gain information that could improve their health status and prevent complications to both mother and baby/fetus during pregnancy and childbirth. They wanted to be reminded of forgotten information, to be equipped to share information, to have their anxieties allayed and be relaxed. The desire that anxieties about pregnancy, labour and childbirth would be relieved was consistent with the findings of Gagnon (1995) “cited in Gagnon, 2001”.

The women were further motivated to attend educational sessions at the clinic if they perceived the atmosphere to be welcoming. To accomplish these, nurses must develop/display interpersonal skills that would generate a cordial relationship between them and the clients. The nurses must also demonstrate empathy, sensitivity and respect for clients (Rovers, 1987). Besides, the clinic setting needs to be such that the pregnant women could find places of privacy to discuss issues and learn without distractions.

Some women reported that their learning needs were met but for others, they were unmet. Despite the good things reported about nurses, the women still expressed dissatisfaction with content presentation and repetitions, explanation of findings and abdominal examinations. For example, some women reported that they had several unanswered questions as they went through their teaching sessions. Generally, the motivation for participating was interpreted to be low in some women, because their learning needs were not met. The state of these women could negatively affect the adoption of information given at the clinic. If people’s needs are not being met, they are

likely to turn off to the information, which is being presented (Vella (1994) “cited in Powell, 2000” They would also turn to another person for help if they believed that person could actually help them (Rovers, 1987) and that may explain why some women depended a lot on non-professionals including mothers and friends.

Chapter Six

Summary, Conclusion, Implications for practice and Recommendations

Summary

The purpose of this study was to explore the felt learning needs of multigravid women and to provide educational programmes that would be relevant to them. The study adopted an exploratory- descriptive design and a purposive convenience sample was used. Eighteen multigravid women volunteered to participate in the study. The multigravid women identified several and particular learning needs that differed from those taught by nurses and probably that of primigravid women. It was observed that many women could not remember what they had been taught during their current pregnancy and the previous ones probably because they were not what they wanted and therefore paid less attention to them.

Nearly all identified learning needs of the women fell within the topics that the Ministry of Health required all pregnant women to have information about. They were related to pregnancy, labour, puerperium and infant care. Not all topics stipulated by Ministry of Health were taught during prenatal teaching sessions at the prenatal clinic. The women seemed to be interested in details about pregnancy and childbirth as well as solutions to problems they encountered.

The multigravid women obtained information mostly from mothers/friends, television and radio apart from the prenatal clinic but their most important sources were the prenatal clinic and their mothers. The women found information from the prenatal clinic to be very helpful at times. At the same time, they had very useful information from their mothers and some were those they would not have had from the prenatal

clinic. Generally, responses indicated that the multigravid women had sound knowledge about some topics but others were misconceptions and inadequate information. The information sometimes generated doubts and anxieties while others led to unsound practices. Some of the information from the clinic conflicted with that of their mothers especially and their friends.

Responses indicated that nurses concentrated on certain topics more than others during teaching sessions and therefore limited the exposure of multigravid women to what could possibly meet their learning needs. They observed that the nurses did not give reasons to some of the practices they expected the women to adopt. Furthermore, the teachings were sometimes repetitions and they felt those ones could be de-emphasized and those they found helpful maintained. They wanted the periods used effectively to address more of what they identified as their learning needs to arouse their interest. The women had motivational factors (gaining additional knowledge, overcoming anxiety, avoiding complications, sharing information) that made them patronize the teaching sessions at the clinic but some dissatisfaction was expressed with the meeting of such needs. They desired to share information they had gained to support other women.

Existing learning opportunities were observed not to meet the learning needs of these multigravid women. Some women preferred large group teaching because it would avoid further delays and create time for other clinic procedures. In other words, time was a major concern to the women. Some others were not very comfortable with large group teaching because they wanted confidentiality to be maintained when discussing sensitive issues and personal problems. They wanted more of one-on-one or individualized teaching to address such issues/problems. The women saw the importance of teaching

aids and wanted them to be used during teaching sessions to give them a better understanding and to retain more information.

Although the women desired that all pregnant women were taught together so that they could support the primigravid ones with some information, they preferred separate teaching sessions at times to address group learning needs. Furthermore, they expressed a desire to learn what they wanted through more interactive teaching styles such as small group teaching and experience sharing sessions/ experiential learning in addition to one-on-one teaching. They believed it would bring variety and make teaching interesting. Additionally, experience sharing would help them to share concerns and learn from mistakes of others. It would also support primigravid women with some helpful information if they were together. The women's concern was the extension of their waiting time at the clinic if other teaching methods are adopted. Their fear about experience sharing was that some wrong information might be shared if a nurse did not serve as a resource person.

Generally, some of the women were not confident to share information and did not see themselves as resource persons. They did not also believe they could make suggestions or contribute to their teaching sessions. They felt it was the nurses' responsibility and considered nurses as being in control, having the right information or knowing better. They further expressed the need to accept information from nurses in good faith.

The women's preference for existing topics taught at the clinic was because nurses did the selection. They had the feeling that suggestions from nurses were better than that of clients. They believed their inadequate exposure to formal education made them handicapped. There was evidence from the findings to support the importance of

assessing the felt learning needs of the women and getting them involved in decisions about the teaching sessions before preparing instructional programmes. Furthermore, shifting from a teacher-controlled to a learner-controlled system of prenatal teaching that includes a variety of individuals and group activities would have to be considered by nurses. While utilizing such strategies, the teaching sessions might increase relevant knowledge of pregnancy and childbirth, reduce anxieties, correct misconceptions, and strengthen the confidence of the women.

Conclusion

It was evident from the findings that in spite of the teaching about pregnancy and childbirth at the clinic, multigravid women still have learning needs that are unmet. Meeting these learning needs enable learning to become satisfying and effective and failure to acknowledge them leads to barrier formation that could slow down or prevent the learning of new behaviours. There is a need for prenatal teaching to go beyond what nurses teach with the use of adequate strategies to strengthen/promote sound information among women and address the felt learning needs of the women.

Implications for practice

The main findings from the study highlight several discoveries that pose a challenge to nurses for improved care. They are as follows:

1. Learning needs were identified by the multigravid women that were not included in the teaching plan used by nurses for educating women at the prenatal clinic.
2. The women had misconceptions related to prenatal health and some other responses revealed that they had inadequate information.

and learning needs. They were therefore passive in their prenatal care, which included educational programmes.

11. Women had a motivation to learn to obtain adequate information for sharing purposes, avoid complications and reduce anxiety.
12. The women were torn between the hospital and family about issues on family planning, sexual activity, drugs, hospital fees and others, which made the family's exposure to teaching necessary.

Recommendations

Recommendations related to the planning and presentation of prenatal education include:

1. Consumer involvement in setting objectives and monitoring achievements. Assessment tools/techniques would have to be developed and utilized through focus group discussions. This would be appropriate before educational programmes begin for women visiting for the first time and during the later periods of pregnancy. It would help nurses to gain insights into what clients want to learn. The concerns will be prioritized by the women and help nurses know areas to de-emphasize. Nurses would have to incorporate the heartfelt learning needs of clients into the educational programme but reduce periods spent on those commonly taught. It would help to create more time for the heartfelt needs of multigravid women.
2. Encouraging women with the needed knowledge to develop ability to contribute toward their learning and share information with partners and other women.

3. Developing a trusting relationship between nurses and clients to allay their fears, help them to accept advice from nurses, and adopt recommended practices instead of the conflicting ones from other sources.
4. Participative learning techniques which address adult learning principles; this could be achieved by introducing small groups to facilitate sharing sessions. Case studies could be used to address some problems. Also, it would be necessary to introduce practice sessions to promote skill acquisition (such as baby bathing, cord care, management of engorged breast) and self-confidence. Demonstration of concepts would have to be encouraged and therefore provision and utilization of teaching aids should be a concern.
5. Making use of the time spent by the women before clinic begins, as well as the periods for physical examination and history taking to improve interaction, identify private/sensitive learning needs and provide teaching on one-on-one basis. This could address the confidentiality issue. Nurses could also ensure that all the women benefit from the teaching by organizing a first teaching session earlier and a second one later than the usual time. At times, they could introduce separate teaching sessions for multigravid women to address group-learning needs.
6. Recognizing limitations of nurses in providing information. To ensure this, nurses would have to be provided with educational programmes that would support them in engaging in self-assessment and peer review. They would also have to read regularly to become abreast with current issues or research findings that would help change negative attitudes related to

education of women. Nurses would again have to review their knowledge on ethical issues related to their role in information dissemination to help reduce the violation of autonomy and beneficence that needs to be accorded to all prenatal women.

7. Organizing training programmes related to teaching and communication skills by the Ministry of Health for nurses to equip them with adequate knowledge for teaching. The managers would have to monitor the nurses during teaching sessions to ensure teaching is correctly done. It would improve performance and increase satisfaction among women. Although it is very difficult to resolve the problem of shortage of nurses, they could be supported to aim at giving quality care that is satisfying despite how little the effort they put in may be.
8. Ensuring documentation of topics that clients have been exposed to on their prenatal cards to avoid repetitions. Nurses at the prenatal, labour, postnatal and baby units would have to coordinate what they contribute to clients' education at these stages. It will help to avoid leaving out important information.
9. Inviting mothers/friends and partners of clients possibly on appointments with nurses to discuss issues related to clients' care once in a while to reinforce what the pregnant women obtain from the clinic.
10. Developing skills in using the media and producing simple information booklets to address some of the conflicting issues identified by the multigravid women. Furthermore, identifying useful health programmes on the media and recommending them to clients and family. These would

erase misconceptions in the minds of the women and their family members and help in adopting acceptable/recommended practices.

11. Introducing prenatal/mother craft classes outside prenatal care periods by the Ministry of Health in the near future to expose multigravid women to adequate knowledge and skills needed during pregnancy and childbirth. It could help multigravid women to have a detailed teaching or review classes that would address more of their learning needs.
12. Utilizing findings of the current study to develop and organize more meaningful prenatal educational programmes. If findings are found satisfactory, they should be recommended to policy makers for the review of prenatal education.

Suggestions for future research

Future research is needed to identify ways by which health educators could improve the learning opportunities available for multigravid women. Interventions related to findings of the current study such as small group format and experience sharing could be tested in a controlled study to determine how effective they may be to address the learning needs of multigravid women. Additionally, certain areas emerged from the study that needs to be researched into such as the use of herbs, reduction of engorged breast with powder, and application of chalk and salt for a faster cord separation.

Limitations

The aim of qualitative research is to understand the phenomenon of interest or find meaning to the individual or group data. Qualitative research allows for the recruitment of few participants in a study and is not concerned about generalization (Mayan, 2001). The findings of the current study should be used to gain insights into the

educational needs of prenatal women. Quantitative researchers see sources of bias to be a limitation of qualitative research but bias can be considered a strength in that it allowed questions to be asked and probed from a variety of perspectives. This gives a deeper and rich data or new realities of the phenomenon of interest (Streubert & Carpenter, 1995).

There were other multigravid women who did not meet the inclusion criteria but might have responded differently to the research questions. Only a few (three) women had five or six pregnancies. This category of women or women who do not present for antenatal care may also have responded differently to the research questions.

It is possible that recognition of the researcher as a nurse might have prevented the participants from disclosing more of the traditional practices adopted from their mothers. Furthermore, the fear that the researcher may report findings to the nurses at the clinic could also have affected their responses. The sensitive nature of some of their concerns made it difficult for their learning needs to be brought out clearly. For example, one of the participants was concerned that what was discussed would get back to the community. Also, they seemed reluctant to talk as much about sexual activity in the group but several raised this topic in the individual interviews.

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Appendixes

Appendix A

Information Sheet for Recruitment of Participants at the Prenatal Clinic

Title of Study: Prenatal Learning Needs of Multigravid Women

Researcher: Matilda Angela Bansah, Department of Nursing, Univ. of Ghana, Legon

Supervisors: Mrs. Faustina Oware-Gyekye, Department of Nursing, Univ. of Ghana Legon; Dr Beverley O'Brien, Faculty of Nursing, Univ. of Alberta; Dr. J.D.Sefah, Medical School, College of Health Sciences.

Why am I doing the study?

Prenatal teaching is supposed to help women to stay healthy. Diseases or deaths occurring during pregnancy and childbirth may be reduced if the teaching is good. I want to find out what women with children want to learn when they are pregnant. Results from the study will improve the teaching programmes for all women. It will be written out for people to read and used to teach others.

What will happen if you take part in the study?

You will either be in a small group to talk about what you want to learn or talk to the researcher alone. If you choose to be in a small group, you will be together with about 6-10 other women who have children. The meeting /talk will be held at the prenatal clinic. If you choose to talk to the researcher alone, you can decide whether the meeting place will be at your house or at the clinic. Just you and the researcher will be at the meeting. You and the researcher will agree upon the time. The talk/meeting will take about 30-90 minutes and a second talk may be needed.

In any of the two sessions you decide to belong to, you will be asked to tell me about yourself. The questions you will be asked will have no right or wrong answers. You can answer in your own words. You are free to ask questions at any time. The talk will be tape-recorded and written out in notes. If you don't feel like being part of the study or if you decide to quit the study anytime, you do not have to tell me why. It will not affect your care.

Will anyone know what you told me?

Your name will not be used and no one else but the researcher can match your name with what you say. Your relatives, friends, or the midwives will not be allowed to sit in during the talk. Only the researcher and anyone helping with the study will see the notes or listen to the tapes. The notes and tapes will be locked up during and after the study.

What are the harm and gains to you?

Being in the study cannot harm you. You will not be paid or given any special care from being part of the study. You will have a chance to tell me what you want to learn. What you say may help to improve prenatal education given to pregnant women.

* In case you have any problem and you need to see the researcher, please contact the sister in-charge of the prenatal clinic.

Matilda Angela Bansah

Appendix B1
Consent Form

Title of Study: Prenatal learning Needs of Multigravid Women

Researcher: Matilda Angela Bansah, Department of Nursing, Univ.of Ghana Legon

- Do you understand that you have been asked to be part of a study?
Yes No
- Have you read and do you have a copy of the Information Sheet and Consent Form?
Yes No
- Do you know why I am doing the study?
Yes No
- Do you know who will be able to see or hear what you said?
Yes No
- Do you know that you can quit the study any time? You do not have to tell me why. It will not affect your care.
Yes No
- Do you know that you will not be harmed if you join the study?
Yes No
- Were you told of the gains of the study?
Yes No
- Were all your questions answered?
Yes No

This study was explained to me by: _____
I agree to take part in this study

Signature of Participant Date Signature of Witness

Printed Name Date Printed Name

Address/Tel. No. Of Participant

Signature of Researcher Date

Appendix B2

Confirmation that informed consent were understood

1. Tell me what you are being asked to do.
2. Can you refuse to be in the study?
3. Could anything bad happen to you if you decide not be in the study?
4. What bad things could happen if you decide not to be in the study?
5. Could your doctors or nurses get mad at you if you decide not to be in study?
6. Why would the doctors and nurses get mad? (Ask only if the answer to Qs. 5 is yes. Be sure that they know that the researcher is not allowed to say who decided to be in the study and who decided not to be in the study).
7. Can anything good happen if you decide to be in the study?
8. What good thing could happen?
9. Are you allowed to ask the researcher questions?
10. Are you allowed to quit the study once you have started?
11. How do you quit the study?
12. If you quit the study, will this affect how the doctors and nurses treat you?
13. What does the person doing the study mean by 'keeping a secret'?
14. Can the person doing the study tell anyone what you say while you are in the study? (Why or why not?)
15. Can anyone read what you say while you are in the study? (Why or why not?)
16. How will the researcher make sure that no one knows whom you are when you are in the study?

Appendix C Demographic Data

To help you feel comfortable and relaxed throughout the talk, I would like you to tell me something about yourself. All information you give will be confidential. It may not contribute to the final report.

1. How old are you?
2. Where do you stay?
3. What is your level of education?
4. What do you do for a living?
5. What is your husband's level of education?
6. What does he do for a living?
7. How many times have you been pregnant?
8. For which of your pregnancies did you attend prenatal educational programmes?
9. At what age of pregnancy did you begin attending prenatal educational programmes?

Appendix D

Sample Interview and Focus Group Discussion Guide

This section will be preceded by Appendix C (demographic data).

1) Why did you decide to come to prenatal educational programmes?

Probe: (only for those who do not meet attendance inclusion criteria).

- Why were you not often present at prenatal educational programmes?

2) Where else do you learn about pregnancy and childbirth?

Probes:

- What was most helpful?
- Did anyone else help?

3) What have the midwives told you at prenatal educational programmes during this pregnancy?

Probes:

- Have you learned anything new during this pregnancy?
- How would you say the teaching helped you?

4) What did you learn in your other pregnancies?

Probes:

- Were they different from what you have been taught in this pregnancy?
- How would you say they helped you?
- Were you taught what you wanted to learn?

5) What else would you have liked to learn?

Probes:

- If you were asked to choose what you want to be taught, what would you say?
- Tell me which of them are most important to you.
- Did you have problems that might not have happened if you knew more?
- Have you any problems that have not been addressed?

6) What happens at your prenatal education sessions?

Probes:

- How did they teach you?
- Tell me how it should be done differently.
- Some of the women don't feel they have been helped. Tell me what you feel the problems are.
- Is there anything else you would like to tell me?

Appendix E

121

NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH

INSTITUTIONAL REVIEW BOARD

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P.O. Box 16581
 Legon
 Ghana

My Ref. No. DF.22

10th May, 2002

Your Ref. No.

ETHICAL CLEARANCE

FEDERALWIDE ASSURANCE FWA 00001824

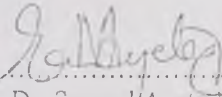
TITLE OF PROJECT : Prenatal Learning Needs of Multigravid Women
 at Suntreso Hospital

Principal Investigator : Matilda Bansali

Supervisors : Ms. Faustina Oware-Gyekye
 Dr. Beverley O'Brien
 Mr. Kusi -Nkrumah

Name of Institute : Noguchi Memorial Institute For
 Medical Research, (NMIMR) University
 of Ghana, Legon.

Study Approved by NMIMRs Institutional Review Board.

Signature of Chairman: 

Rev. Dr. Samuel Ayete-Nyampong
 (NMIMR - IRB, Chairman)

cc: Professor David Ofori-Ajjei
 (MB CHB, FRCP, WACP)
 Director, Noguchi Memorial Institute
 for Medical Research, University of Ghana, Legon.

Appendix F

UNIVERSITY OF GHANA

DEPARTMENT OF NURSING

Telephone: 500268/500501/502258
Ext. 6155 (Head of Department)
Ext. 6089/6206 (Secretary)
Nursing@ug.edu.gh

P.O. BOX 43
LEGON, GHANA



Your Ref:

Our Ref:

May 24, 2002

The Senior Medical Officer In-Charge
Suntreso Hospital
Kumasi.

Dear Sir,

PERMISSION TO COLLECT DATA

Matilda Angela Bansah, a student on the M'Phil Nursing Programme of the Department of nursing, University of Ghana, Legon is undertaking a research project entitled "Prenatal Learning Needs of Multigravid Women." The proposal for the research project received ethical approval on the 10th of May, 2002. Attached is a copy of the approval.

I would ^{be} grateful if she could be granted permission to collect data in your health facility.

Thank you.

Yours faithfully,

Mary Opare (Miss)
Ag. Head of Department

cc: The DDNS I/C
Suntreso Hospital
Kumasi.

The PNO
Prenatal Clinic
Suntreso Hospital

M. Opare
Pls assist because she will be visiting the PNC on some days.
[Signature]

Appendix G

Table 1. Demographic characteristics of participants

Partici- pants	Age	Occupation	Educational Background	First prenatal visit	No. of pregnancies	Husband's Educational Background	Husband's Occupation
1	33	Orange seller	Form 4	1 months	5	Form 5	Taxi Driver
2	23	Gari seller	Primary 6	3 months	3	Form 4	Shoe seller
3	33	Hair braider	Form 5	4 months	2	Couldn't tell	Cook
4	32	Feedstuff seller	Form 4	3 months	6	Form 4	Priest
5	29	Bottle seller	Primary 5	3 months	4	Form 4	Caterpillar driver
6	27	Hair braider	Form 4	3 month	2	Form 4	Liner
7	32	Hair braider	Primary 6	5 months	4	Form 4	Clothing seller
8	22	Clothing seller	SSS 3	3 months	3	Couldn't tell	Barber
9	31	Trader	Form 4	2 months	4	Form 5	Building contractor
10	30	Trader	Form 4	5 months	2	Form 4	Driver
11	28	Food vendor	Primary 6	4 months	5	Form 5	Filter
12	29	Hair dresser	Form 4	3 months	3	Form 4	Farmer
13	35	Teacher	Post Sec. Teacher Tr.	3 months	4	Form 5	Trader
14	27	Hair braider	JSS	3 months	2	Form 4	Electrician
15	30	House wife	Form 4	5 months	3	Form 5	Cosmetic seller
16	30	Soft drinks seller	Form 4	6 months	2	Form 5	Selling of farm items
17	30	Cosmetic seller	Form 4	4 months	3	Form 4	Electrician
18	20	Hair braider	SSS3	5 months	2	Couldn't tell	Carpenter