

## Utilization of Safe Motherhood Initiative (SMI) by Female Teachers in Public Secondary Schools in Enugu State Based on Location

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### ABSTRACT

Safe motherhood initiative (SMI) is a vital component of reproductive health and is of prime concern to fertility. It is a worldwide initiative whose aim is to reduce maternal morbidity and infant mortality and also to improve women's reproductive health. The study aimed at determining the extent of utilization of SMI by female teachers in public secondary schools in Enugu State based on location. . It specifically sought to ascertain the extent of utilization of Ante-natal care services, family planning services, essential obstetric care services and child health care services by female teachers in secondary schools in Enugu state based on location. The study adopted the descriptive survey research design. The population for the study consisted of all the 7419 female teachers in the 291 public secondary schools in Enugu State. A sample of 440 female secondary school teachers were selected using Taro Yamen formula. A self-structured instrument was developed by the researcher and was validated by experts. The instruments reliability coefficient was ascertained using Cronbach Alpha reliability estimate. The data collected were analyzed using mean and standard deviation to answer the research question. The hypothesis were tested using t-test statistic. The result obtained showed that pre-natal/ante natal care services, family planning services, essential obstetric care services and child health care services are utilized by female teachers in public secondary schools in Enugu state based on location to a great extent. Hence, the study, by implication, revealed also that location influence the health status of the respondents. Based on the findings, the researcher recommends, among others, that government should ensure the availability of skilled midwives at health centers within the health work force development plan in Enugu State. The researcher suggested that the study be conducted in all the other states of the federation.

Keywords: Safe Motherhood Initiative and Location

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### INTRODUCTION

Safe Motherhood Initiative (SMI) represents a global effort to reduce maternal morbidity and mortality (MMM) especially in developing countries. According to the American Congress of Obstetrics and Gynecologists (ACOG) [1], safe motherhood initiative (SMI) is a multi-year multi-stakeholder project which comprised nurses, midwives, physicians, patient safety specialists and other partners working together to standardize care in all obstetric emergencies associated with maternal mortality and morbidity. SMI offers a unique and unprecedented opportunity to review and amend existing clinical

practices to reflect current evidence-based management guidelines in a non-primitive setting; access to expert opinions and tools to understand important nomenclature for obstetric hemorrhage severe hypertension in pregnancy and venous thromboembolism [1]. [2], described it as a global effort to reduce MMM in developing countries. According to the report, the programme aims at empowering obstetrics teams to share, assess and implement strategies to reduce the incidence of obstetric hemorrhage, venous thromboembolism and severe hypertension in pregnancy.

According to [3], SMI focuses on obstetric hemorrhage, severe hypertension in pregnancy and thromboembolism which consists of step-by-step, evidence based tools to manage risk, prevent adverse event, respond and debrief. There are three main health care delivery services enlisted by the SMI for pregnant women to overcome maternal mortalities; they are prenatal care, obstetric care and family planning [4]. These laudable objectives of SMI have received some criticisms. According to Maine (2016), the problem of MM has not decreased since the initiative on set of the 1987 and the initiative has been largely ineffective. The report argued that this lack of success has been due not only to lack of knowledge of causes of MM or to lack of resources but to underutilization of the maternal services provided. There is absence of a clear focus, which has been fuelled by misconceptions about how MM might be reduced. Again, [5] support the view that MM must be addressed as a “curative” issue rather than a “preventive” one. This notwithstanding, experts in public health have generally advocated that many maternal deaths in the developing countries of the world such as Nigeria could be prevented if pregnant women are exposed to adequate utilization of SMI components with the right attitudes on utilization of it during pregnancy [7]. Female teachers in public secondary schools in Enugu State may be exposed to the components of SMI, but their utilization of the component seems to be poor. This disposition may impact seriously on their health status during pregnancy and possible negation of the programme initiative. It has been claimed that most of the pregnancy complications and problems being experienced are deeply rooted in improper utilization of SMI components. It includes prenatal/antenatal care, nutrition, personal hygiene, obstetric care, family planning, emergence care, postpartum care, post abortion care, prevention of sexually transmitted diseases (STIs), prevention of mother- to- child Aids and child transmission (PMTCT) of HIV and AIDS and child care [7]. In this study the

utilization of SMI by female teachers in secondary schools in Enugu State was examined based on pre-natal/ antenatal care, family planning essential obstetric care and child care services.

The safe motherhood initiatives components may be available to female teachers in secondary schools but the utilization may be poor. According to [8], utilization is the proportion of the available time (expressed usually as percentage) that a piece of equipment or a system is operating. Some studies on the extent of utilization of health services and facilities were conducted by experts in health and education. [9], found that the utilization of HIV and AIDS prevention strategies among students of secondary schools in Abia State was low. In a related report, [10] posited that adolescents utilization of reproductive health services (RHS) in Enugu State was low. Perhaps, the utilization of SMI among female teachers in secondary schools in Enugu may as well be low. This is because the situation of the utilization in Enugu seems too elusive. Most pregnancy complications and problems of SMI being experienced in Enugu are deeply rooted in poor utilization. That is to say, that poor utilization of qualitative health service contributes to maternal morbidity and mortality increase rate in Enugu State. Many maternal deaths in developing world could be preventable if women are sensitized well enough to utilize prenatal/antennal care services before conception and health care during pregnancy. Again in Enugu State, observations and chemical records have shown that maternal deaths toll is on the high side. This [11] attributed to the notion held by mothers of child bearing age that it is no use availing themselves of ante-natal services before their pregnancy is five months old or utilizing post-natal services except their baby(s) are not feeling fine or they have challenge.

Antenatal care involves provision of advice and medical service to a pregnant woman by a health professional from the time of pregnancy to delivery and includes services such as urine test for

albumin and sugar, haemoglobin, blood pressure, fetal auscultation and fetal palpitation[12]. Literatures show that routine pre-natal/antenatal care has three main components: education and promotion of healthy attitudes, the monitoring maternal and fetal progress, the identification of women at high risk of complications followed by treatment or referrals to appropriate equipped and staffed facilities [13].

Immunization during antenatal visits by women prevents and control childhood diseases. [14], asserted "immunization is the most powerful cost effective means of preventing some of the deadly diseases of childhood and an important component of primary health care (PHC). Notable vaccines include BCG (given at birth, the pentavalent vaccine (five vaccines in one combining DTP, hermatite B and Hibuaccines (Haemophilus influenza type B) [15]. Female teachers in public secondary schools in Enugu State utilization of immunization schedules, nutritional and family planning services could be a hindrance to effective realization of SMI goals.

Family planning has been recognized by available literatures as a major determinant of SMI. According to [16] the term family planning is a way of thinking and living that is adopted voluntarily, upon the basis of attitude and utilization of SMI and responsible decision by individuals and couples in choosing their family size and the sex of children. [17] stated that family planning considerations include the number of children a woman wishes to have including the choice to have no child as well as the age at which she wishes to have. This probably explains why [18] suggested that women and families be made to avoid unplanned pregnancies and if pregnant, they can learn the importance of receiving antenatal care services such as how to identify danger signs, plan for emergency referrals and choose safe birth options. Through effective pre-natal care the women and her families are provided with health education on issues like child care and nutrition.

A major requirement of a woman and specifically a mother that is a teacher is balanced diet. During pregnancy the quality of women's food requirements are increased in terms of quality and quantity and an adequate caloric intake from a most unsatisfactory nutrition. To avert excessive weight gain, the less active mother should prevent increase of unbalanced diet. To this end that iron supplements are which is an essential component of hemoglobin, and ranks very high in importance for pregnant mothers and prevents abortion must be given to mothers during pregnancy.

Child health care service is another issue of consideration in SMI. Child health care service aims at promoting the health of a child to ensure that they achieve optimal growth and develop both physically and mentally. According to [19], services and interventions in child care include; growth monitoring and oral rehydration, breastfeeding and specifically exclusive breastfeeding (EBF), immunization, family planning, female education and supplementary feeding of pregnant women. [13], maintained that it involves protecting children from major hazards through specific measures (immunization Chemoprophylaxis, diet supplements and thorough improvement in the field of care provided by the mother and the family). It also includes treating disease and disorders with particular emphasis on early diagnosis all of which aims at providing an effective remedy at an early stage before dangerous complications occur, [13]. The implementation of these objectives by mothers teaching in secondary schools in Enugu State coupled with obstetric utilization may ensure that children are adequately protected to achieve optimal growth and development. Emergency obstetric care services are another SMI component required of every pregnant mother. According to [20], obstetric care takes record of what happened in previous pregnancies and labours in order to provide a clue as to what may be anticipated in present instance. Certain conditions may reoccur, and it may be possible to give advice or instant treatment to avert them. [21],

stated that this will help in the prevention, diagnosis and treatment of abortion. According to the report, good obstetric care will prevent MMM and spurs mother to take adequate care of the child after delivery.

Many women in the rural and urban setting of less privileged countries of the world lack access to appropriate routine and emergency obstetric care. To this end, [5], advised that available health personnel should be adequately trained and fully utilized to provide the broad range of service that women need. The extent to which female teachers in secondary schools in Enugu State utilize obstetric services provided by SMI may be a major determinant to avoidance of complications during child delivery and eventual care given to the infant thereafter. Women who internalize the SMI components and desire appropriate care of their babies may find that the baby can communicate even though it may be for many months before the child can say a word [11].

The responsibilities as well as the privileges of a female teacher in secondary school are great and could be a matter of positive disposition in issues relating to the utilization of SMI. Perhaps the number of deliveries by a female teacher in secondary school could be the determining factor to the utilization of SMI bundles irrespective of its usefulness. Parity relates to the number of deliveries by a woman which may be primiparous (one delivery) or multiparous (more than one delivery). [11] shows that parity is a strong predictor of SMI utilization by women. [22], observed that women undergoing first pregnancy utilized skilled services more than multiparous mothers living in rural Bangladesh. However in a contrast report, [23] found that women living in Ntchisi district of Malawi who were multiparous utilized health facilities at a low rate. This possibly suggests that SMI utilization in that region of the country is low and could be improved by encouraging women in both rural and urban settings.

The place of residence of the female teachers in public secondary schools may

be a factor in the utilization of SMI components. A study by [24], observed that pregnant women in the rural district of Kenya combine antenatal visits with the use of herbs which they bathe and drink or sit-in during pregnancy, childbirth and immediately after birth. According to the report, women in that region share the opinion that these practices prevent clot of blood after delivery. Perhaps, the utilization of SMI may be low among women of that region. It has not been established if female teachers in public secondary schools in Enugu state utilize SMI bundles as they may be deeply involved in traditional practices. [25], reported that pregnant women in Orlu urban of Imo state had low utilization of child care services, but their nutritional practices were efficient. [26], observed that child bearing mothers (CBMs) in rural Bangladesh received health care services from village doctors, and attributed this disposition to financial insolvency. Corroborating, [27], earlier report affirmed that in most rural settings, there are challenges. This may be because the decisions that lead women to utilize the services seem to occur within the context of their marriage and family.

More to the above, the location of the primiparous and multiparous mothers may be a major determinant of utilization of safe motherhood initiative. [24] observed that rural CBMs in Kenya combine the practice of antenatal visits with the use of herbs which they bath and drink or sit in during pregnancy, childbirth and immediately after birth. They attribute these practice to the believe that it prevent clot of blood. [25], reported that pregnant women in Orlu urban of Imo state had low practice of child care services. However, their nutritional practices were efficient. Also [26], reported that CBMs in rural Bangladesh received health care services from village doctors and attributed this disposition to financial insolvency. However, [28] noted that as commendable as SMI components are, many women in Nigeria still portray low utilization of it. Another report by [29] also maintained

that there is little or no information on SMI among CBMs in most rural places in Africa despite its usefulness to mothers. According to [27], in most rural setting, there are challenges in increasing women access to health care services generally this may be because the decision that lead women to use the services seem to occur within the context of their marriage and family. To the Knowledge of the present researcher, no researcher has conducted a research particularly on SM practices among mothers teaching in public Secondary schools in Enugu State, hence the need for this investigation. [30], reported that there was statistically significant reduction in the population of rural women obtaining ANC service with increasing number of deliveries and number of living children. [31], reported that only 4% of the women of Samre Saharti district of Ethiopia gave birth for their recent child in health facility and only 6% were assisted by skilled birth attendants. The findings of the study also showed that parity and history of obstructed labour and ANC visit were significant predictors for the selection of delivery place while maternal education and marital status were significant factors for ANC utilization. [32] observed that women rural women of Mtwara district of Tanzania utilized qualified skilled attendants and obstetric care services and attributed the development to community based SMI intervention programs in promoting the utilization of obstetric care. [33] observed that less than half of the rural women of Sindh, Pakistan utilized ANC during their last pregnancy from government health care provider. [34], reported that the women of Abiye District of Ondo state Nigeria carrying their first pregnancy utilized Abiye clinic more than their counterparts with multiple deliveries in the area. [35], reported that both the rural and urban women used as respondents utilized skilled birth attendant at a very low rate

#### **Statement of the Problem**

Complications of pregnancy and childbirth are the leading causes of maternal mortality and morbidity in women in developing countries of the

as majority were more favorably disposed to utilizing TBAs. The findings also showed that the place of residence, built under among others were found to be significantly associated with the use of skilled assistance at delivery. [35] reported 1st imitations of intended visit occur at late stage of pregnancy for almost 86% of the respondents. Findings also receded that the utilization of past abutlon service and prostrated care increased drastically. However the number of deliveries did not influence the utilization of hospital services. All these points to the fact that location and parity are strong predictors of SMI utilization by women including teaching mothers.

In Enugu State, safe motherhood initiative seems to be elusive. It has been claimed that most of the pregnancy complications and problems being experienced are deeply rooted in poor utilization of SMI. Poor utilization of qualitative health service continues to contribute to maternal morbidity and mortality in Enugu State [31]. When expectant women arrive at the hospital, certain preparations are made to make the delivery safe. This also means that SMIs are carried out by the nurses. The desire and confidence to continue the utilization of nurses and midwives as well as other health personnel may be largely dependent on these health personnel. This possibly suggests that utilization of these personnel by the female/teachers mothers may be high or low with far reaching health implications. Perhaps, understanding the preferences of the people and the various factors that influence their preferences will help to improve the utilization of SMI components and thereby reduce unnecessary loss of lives. As a result of the foregoing, the researcher is poised to ascertain the extent of safe motherhood initiative utilization by female teachers in public secondary schools in Enugu State based on location.

world. Observations of women in rural and urban settings of Enugu State revealed that some of them appear to patronize traditional birth attendants

(TBAs) more than having to seek expert advice in Maternal Care Hospital (MCH); maternities and hospitals. This invariably means that some aspects of SMI- pre-natal/ante-natal care, family planning, essential obstetric care and child care services are neglected by female teachers teaching in public secondary schools in Enugu State as such increases mortality rate. However, it has not been established whether women are differentiated in attendance to these facilities by any recognizable criteria. It is therefore likely that such criteria may be based on attitudinal inclinations. For instance,

could the preference to use any health facility of choice be based on location or parity or could it be that the more the inclination to utilize it, the more SMIs are prevalent? Recent report indicates that Nigeria is one of the six countries of the world that account for 50% of global maternal deaths [19]. These observations are indeed the motivation or problem and crux of this study. The problem of this study, posed as a question, is: what is the extent of utilization of SMI by female teachers in public secondary schools in Enugu State based on location?

**Purpose of the Study**

The study sought to examine the utilization of Safe Motherhood Initiative (SMI) by female teachers in public secondary schools in Enugu State. Specifically, the study sought to;

i. ascertain the extent of utilization of SMI by female teachers in public secondary schools in Enugu State based on location.

**Research Question**

The following research question were raised to guide this study.

- i. To what extent do female teachers in public

secondary schools utilize Safe motherhood initiative (SMI) in Enugu state based on location?

**Hypothesis**

The following null hypothesis was formulated and tested at .05 level of significance

H<sub>01</sub> There is no significant difference between the mean ratings of urban

and rural female teachers in public secondary schools in Enugu State regarding their extent of utilization of Safe motherhood initiative (SMI) based on location.

**METHODOLOGY**

The study adopted a descriptive survey design. The area of the study was Enugu State, Nigeria. The population for the study consisted of 7419 female teachers in the 291 public secondary schools in Enugu State. In all, we have 4491 female teachers are in urban public secondary schools and 2928 serve in rural public secondary schools. In accordance with parity, 1307 female secondary school teachers are primiparous (those that have given birth only once) while 2112 are multiparous (those that have given birth more than once). A total of 440 female teachers in public secondary schools in Enugu state were used for the study. The sample size was determined using Taro Yamane formula. The sample size consisted of 264 urban and 176 rural female teachers in public secondary schools in Enugu State. In accordance

with parity, the sample size was 153 for primiparous (ie those that have given birth only once) and 287 for multiparous (ie those that have given birth more than once) female secondary school teachers in public secondary schools in Enugu State. The instrument used for data collection was a 44 items questionnaire called Safe Motherhood Initiative Utilization Questionnaire (SMIUQ). The instrument had a 4-point response scale with response category of very great extent (VGE 4Points), great extent (GE-3 points), little extent (LE-2) and very little extent (VLE-1 Point). The instrument was validated by three experts; two from Health Education Department and one from measurement and evaluation, all from Faculty of Education Foundation, Enugu State university of Science and Technology (ESUT), Enugu. The internal

consistency of the instrument was determined using Cronbach Alpha reliability estimate and it yielded a reliability coefficient of 0.67. The study was carried out among the female secondary school teachers in all the secondary schools in the six education zones of Enugu state. The researcher and the research assistants administered the questionnaire to the female secondary school teachers. The administered copies of the questionnaire were collected on the spot. This helped to minimize interference which may substantially influence the outcome of the study.

Very great extent (VGE)----4 points  
 Great extent (GE)-----3 points  
 Low Extent (LE)-----2 points  
 Very little extent (VLE)----1 point

The decision rule for the null hypothesis is that if t-calculated is equal to or greater than t-critical at the chosen confidence level (.05) and degree of freedom ( $n_1 + n_2 - 2$ ) the null hypothesis is rejected; if on

**Presentation of Results**

This section presents the results of the study according to the research question that guided the study.

**Analysis of Data**

The data analyzed was presented in Tables 1

**Research Question 1:** To what extent do female teachers in public secondary

Through this a 100% return rate was recorded. Data collected were analyzed using mean, standard deviation and grand mean. The mean rating numerical value was added up and divided by the number of response items. This is referred to as the cut-off point which the researcher used to make inferences for the study. For the research question, any item below 2.50 signifies low extent while items equal to or above 2.50 signifies high extent.

The hypothesis was analyzed using the, t-test. Nominal values were assigned to different scaling options as follows;

the other hand, the calculated t-value is less than the value of the t-critical from the table value, then the null hypothesis is accepted.

schools utilize Safe motherhood initiative (SMI) in Enugu state based on location

Table 1: Mean ( $\bar{X}$ ) Ratings of the Extent to which Female Teachers in Public Secondary Schools Utilized Safe motherhood Initiative (SMI) in Enugu State Based on Location.

S/N	Urban N=264								Rural N=176							
	<b>Utilization of Pre-natal/ antenatal care services</b>								4 VGE	3 GE	2 LE	1 VLE	$\bar{X}$	SD	Decision	
	4 VGE	3 GE	2 LE	1 VLE	$\bar{X}$	SD	Decision					$\bar{X}$	SD	Decision		
1	87	71	63	43	2.76	1.08	GE	71	57	31	17	3.03	0.98	GE		
2	97	83	57	27	2.94	0.99	GE	85	37	33	21	3.05	1.07	GE		
3	91	82	54	37	2.85	1.04	GE	55	47	43	31	2.71	1.08	GE		
4	31	45	69	119	1.95	1.04	LE	97	33	29	17	3.19	1.03	GE		
5	13	41	73	137	1.73	1.89	LE	15	37	45	79	1.93	1.00	LE		
6	127	61	51	21	3.11	0.99	GE	95	35	33	13	3.20	0.99	GE		
7	93	75	63	33	2.86	1.03	GE	65	55	35	21	2.93	1.02	GE		
8	81	77	59	47	2.72	1.08	GE	81	63	23	9	3.22	0.86	GE		
9	25	49	63	127	1.89	1.01	LE	21	45	47	63	2.13	1.03	GE		
	<b>Grand Mean</b>					<b>2.53</b>	<b>1.13</b>	<b>GE</b>	<b>Grand Mean</b>					<b>2.82</b>	<b>1.01</b>	<b>GE</b>
	<b>Extent of Utilization of Family Planning Services</b>								4 VGE	3 GE	2 LE	1 VLE	$\bar{X}$	SD	Decision	
10	89	73	47	55	2.74	1.13	GE	7	25	53	91	1.70	0.85	LE		
11	97	83	57	27	2.94	0.99	GE	25	33	57	61	2.12	1.04	LE		
12	19	51	79	115	1.90	0.95	LE	81	57	23	15	3.15	0.95	GE		
13	99	87	69	9	3.04	0.87	GE	75	47	33	21	3.00	1.04	GE		
14	75	69	65	55	2.62	1.10	GE	27	33	49	67	2.11	1.08	LE		
15	90	81	67	26	2.89	0.99	GE	61	57	33	25	2.87	1.04	GE		
16	37	58	79	90	2.15	1.04	LE	93	43	27	13	3.22	0.96	GE		
17	107	60	57	40	2.88	1.10	GE	5	39	45	87	1.78	0.88	LE		
18	87	73	59	45	2.76	1.08	GE	61	57	43	15	2.93	0.96	GE		



	Grand Mean								2.65	1.03	GE	Grand Mean								2.54	1.03	GE
	Utilization of Essential Obstetric Care Services				4 VGE	3 GE	2 LE	1 VLE				$\bar{X}$	SD	Decision	4 VGE	3 GE	2 LE	1 VLE	$\bar{X}$			
19	When pregnant I receive adequate supervision and management from obstetrician								99	87	65	13	3.03	0.90	GE	101	39	23	13	3.29	0.95	GE
20	I utilize the provisions for labour								103	71	57	33	2.92	1.05	GE	87	35	31	23	3.05	1.09	GE
21	I received adequate diagnosis and treatment for pregnancy								39	57	71	97	2.14	1.07	LE	53	51	49	23	2.76	1.02	GE
22	I undergo investigation/medical examination regularly when pregnant								127	61	51	21	3.11	0.99	GE	103	43	25	5	3.38	0.83	GE
23	I obtain Treatment when necessary from obstetric care center								17	45	67	135	1.78	0.94	LE	97	49	23	7	3.34	0.85	GE
24	I utilize nutritional care services.								129	63	41	31	3.09	1.05	GE	65	51	35	25	2.88	1.06	GE
25	I receive health education talks								101	67	51	45	2.84	1.11	GE	19	29	53	75	1.95	1.01	LE
26	I utilize post abortion care services								45	57	69	93	2.20	1.10	LE	61	49	39	27	2.81	1.07	GE
	<b>Grand mean</b>												<b>2.63</b>	<b>1.03</b>	<b>GE</b>	<b>Grand mean</b>				<b>2.93</b>	<b>0.99</b>	<b>GE</b>
	<b>Utilization of Child Health Care Services</b>								<b>4 VGE</b>	<b>3 GE</b>	<b>2 LE</b>	<b>1 VLE</b>	<b><math>\bar{X}</math></b>	<b>SD</b>	<b>Decision</b>	<b>4 VGE</b>	<b>3 GE</b>	<b>2 LE</b>	<b>1 VLE</b>	<b><math>\bar{X}</math></b>	<b>SD</b>	<b>Decision</b>
27	Immunized my child/children with DPT1, & III against diphtheria, pertussis and tetanus								109	75	51	29	3.00	1.02	GE	93	41	27	15	3.20	0.99	GE
28	I Immunized my baby against poliomyelitis								91	87	51	35	2.88	1.02	GE	25	39	45	67	2.12	1.07	LE
29	Immunized baby against Hepatitis type A and B and Yellow fever								35	57	79	93	2.12	1.04	LE	87	35	35	19	3.07	1.06	GE
30	Immunized my baby against maternal neonatal tetanus								33	37	91	103	2.00	0.97	LE	91	45	23	17	3.19	1.00	GE
31	Immunization baby against whooping cough								99	75	67	23	2.94	0.98	GE	71	63	27	15	3.07	0.94	GE
32	Immunized my baby against measles.								113	61	53	37	2.94	1.09	LE	105	31	25	15	3.28	1.00	GE
33	Immunized my baby against tuberculosis								107	89	61	7	3.12	0.85	GE	97	33	27	19	3.18	1.05	GE
34	I present my child/children for routine immunization.								45	63	67	89	2.24	1.09	LE	83	45	25	23	3.06	1.06	GE
35	I Breastfeed my babies exclusively for six months .								137	53	41	33	3.11	1.07	GE	93	49	19	15	3.25	0.95	GE
36	My child/children receives vit A.								131	63	45	25	3.13	1.01	GE	87	33	29	27	3.02	1.13	GE
37	Practice adequate dietary supplementation for my children								35	57	69	103	2.09	1.06	LE	75	45	39	17	3.01	1.01	GE
38	I give my child/children balanced diet								129	71	35	29	3.13	1.02	GE	91	43	21	21	3.15	1.04	GE
39	Practice of growth monitoring of my children								87	73	67	37	2.79	1.05	GE	11	31	47	87	1.80	0.94	LE

40	I use growth monitoring chart	119	67	59	19	3.08	0.97	GE	65	57	33	21	2.94	1.01	GE		
41	I measure my child/children until 18years	97	85	71	11	3.01	0.89	GE	3	15	71	87	1.62	0.71	LE		
42	Go to clinics to measure my child/children.	21	45	69	129	1.84	0.97	LE	63	59	41	13	2.97	0.94	GE		
43	Utilize weighing scale to weigh my baby/ children.	107	75	53	29	2.98	1.82	GE	99	39	27	11	3.28	0.94	GE		
44	Use measuring tape for measuring my child/children limbs	87	73	65	39	2.78	1.06	GE	101	37	21	17	3.26	1.00	GE		
<b>Grand Mean</b>						<b>2.73</b>	<b>1.05</b>	<b>GE</b>	<b>Grand Mean</b>						<b>2.91</b>	<b>1.05</b>	<b>GE</b>
$\bar{X}$ of $\bar{X}_s$						<b>2.63</b>	<b>1.06</b>	<b>GE</b>	$\bar{X}$ of $\bar{X}_s$						<b>2.80</b>	<b>1.02</b>	<b>GE</b>

Table 2 shows that of the 44 items on the extent to which female teachers in public secondary schools utilized safe motherhood initiative (SMI) in Enugu state based on location. Out of 9 items on pre-natal/Antenatal care services, female teachers in urban areas rated 6 of the items (1, 2, 3, 6, 7 and 8) to a great extent as their recorded mean scores 2.76, 2.94, 2.85, 3.11, 2.86 and 2.72 respectively are above the cut-off point of 2.50. They however disagreed with remaining items (4, 5 and 9) with mean scores of (1.95, 1.73 and 1.89) to a little extent. In the same vein female teachers in rural areas rated 7 items (1, 2, 3, 4, 6, 7 and 8) with

mean scores of (3.03, 3.05, 2.71, 3.19, 3.20, 2.93 and 3.22 ) to a great extent respectively and the remaining 2 items (5 and 9) to a little extent with mean scores of 1.93 and 2.13. The standard deviation of female teachers in urban and rural public secondary schools in Enugu State is small signifying that there is homogeneity in their responses. The Table also shows that the respondents' grand mean score for rural female teachers is 2.82 while those of their urban counterpart is 2.53. This shows that female teachers' rural areas utilize pre-natal/ante-natal care services better than those in urban areas.

### Hypothesis 1

There is no significant difference between the mean ratings of urban and rural female teachers in public secondary

schools in Enugu State regarding their extent of utilization of Safe motherhood initiative (SMI).

### Table 2 t-test Analysis of the Difference Between the ( $\bar{X}$ ) Mean Scores of Urban and Rural Female Teachers in Public Secondary Schools in Enugu State regarding their Extent of Utilization of Safe Motherhood Initiative (SMI).

Location Decision	N	$\bar{X}$	SD	df	t-cal	t-crit
Urban	153	2.63	1.06			
NS				338	1.61	$\pm 1.96$
Do not reject						
H <sub>01</sub>						
Rural	287	2.80	1.02			

Significant at  $P < .05$ ,  $df = 338$ , critical t-value = 1.96

The t-test analysis in table 16 above indicates that the calculated t- value is 1.61 while the critical t-value is  $\pm 1.96$  at

.05 level of significance. This implies that the calculated t-value is less than the critical t- value. Thus, going by the

decision rule, there is no significant difference in the mean scores of urban and rural female teachers in public

secondary schools in Enugu State regarding their extent of utilization of Safe motherhood initiative (SMI).

**DISCUSSION OF FINDINGS**

For the discussion of the findings inherent in this study, research question and research hypothesis that are related will be treated together. The research question sought to ascertain the extent to which female teachers in public secondary schools in Enugu State utilize safe motherhood initiative (SMI) based on location. The result in Table 2 showed that Mothers teaching in secondary schools in Enugu State utilize safe motherhood initiative (SMI) based on parity/location to a great extent. The twelfth research hypothesis ascertained if there is a significant difference in the safe motherhood initiative (SMI) utilization by female teachers in public secondary

schools in Enugu State based on parity/location. Thus, going by the decision rule, there is no significant difference in the safe motherhood initiative (SMI) by female teachers in public secondary schools in Enugu State based on location. The findings is consistent with that of [20] who found that pregnant women in Orlu urban of Imo state had low practice of safe motherhood initiatives. [27], also discovered there are challenges in increasing women access to health care services rural setting. All these points to the fact that location is a strong predictors of SMI utilization by women including teaching mothers.

**CONCLUSION**

Conclusively from the above analysis and interpretations done and the information from related literature, it implies that female teachers in public secondary schools in Enugu State based on location

utilized safe motherhood initiative (SMI) such as pre-natal/ante-natal services, family planning services, essential obstetric care services and child health care services to a great extent.

**Educational Implication of the Finding**

This study has revealed that Ministry of Health is to be commended for the outstanding accomplishments made to date in the establishment of relevant, appropriate, and forward-looking policy in relation to the health of mothers and children, in general, and to Safe Motherhood specifically child health care services. Ministry of Health is to be commended for the outstanding accomplishments made to date in the establishment of relevant, appropriate, and forward-looking policy in relation to the health of mothers and children, in general, and to Safe Motherhood Initiative with its

components. Development of policies on maternal and, if possible, neonatal death audits, and further development of policies on permanent methods of contraception, private sector and health financing will contribute to effective mobilization and use of resources and provide a strong foundation for the development of strategies and activities which effectively address the Safe Motherhood situation in Enugu State if not the problem of poor utilization of safe motherhood components will hold the society hostage.

**RECOMMENDATIONS**

At the end of the study, the study recommended that:

utilization by female teachers teaching in public and private secondary schools in Enugu State or south-east.

- i. A comparative appraisal of the Safe motherhood initiative

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