

## KNOWLEDGE AND UTILIZATION OF CANCER PREVENTION STRATEGIES BY WOMEN OF CHILD-BEARING AGE IN ENUGU STATE

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### **Abstract**

This descriptive survey determined the level of knowledge and the extent to which women of child-bearing age in Enugu State performed screening tests for cancer prevention. The population consisted of 855,665 women of child-bearing age in Enugu State. A sample of 1,225 respondents obtained through YaroYamenne formular was used for the study. Questionnaire was the instrument used for data collection. Research question 1 was analyzed using percentages while research question 2 and 3 were analyzed using mean statistics. Chi-square statistics was used to test level of knowledge, while t-test statistics was used to test extent of performance of screening test and extent to which constraining factors militate against the utilization of cancer prevention strategies by the respondents. The findings of the study include very low level knowledge on cancer prevention strategies and little extent of performance of screening tests by the respondents.

Cancer diseases have become one of the serious public health issues in this 21st, century. The diseases afflict people from different communities worldwide. Approximately 10million people are diagnosed with various types of cancers and more than 1 million die of the disease every year (Park, 2007). Sears and Winwood (2000) stated that cancer which is also called malignancy or neoplasm is referred to as abnormal cell which has the tendency to grow uncontrollably, metastasize or spread; though early detection through proper screening prevents its growth and spread.

Cancer occurs in male as well as in female and can appear in any part of the body. Breast and cervical cancer occurs more in women while testicular and prostate glands cancer occur more in males. Other forms of cancer like stomach, colon, rectum, lung, bone and blood cancers can affect any sex equally. Breast cancer can as well occur in males but the rate is one in every 1000 (Bony and Jody, 2000).

A cancerous cell loses its ability to control its rate of division and growth without regard to body needs. It also lacks specificity and becomes poorly differentiated. In women the commonly occurring cancers are breast, cervical, endometrial, gestational, ovarian, uterine scarcoma, vaginal and vulvar cancers. According to Danielle and Charette (2000), Cancers occurring in female reproductive organs are termed gynaecological cancers however, breast and cervical cancers are the most frequent worldwide. Breast cancers remain the first most frequent diagnosed cancer seconded by cervical cancer in women (Nubkey, 2010). Breast self examination, breast examination by a physician and mammography are usually among the cancer screening tests recommended. Mammography is effective in screening asymptomatic women for very early stage breast cancer detection. The test is recommended yearly after the age of 40 years. Papanicolaou Smear (Pap smear) screening which examines cervical smear for any possible cancer cells is recommended to be done in women at the age of 18 years or when sexual activities begin. Among Nigerian women breast and cervical cancer account for nearly 60% of all cancers. Several studies like that of Rigomi (2001), Rivet (2005), Abimbola (2008) and Oparaji (2011) reveal a close association of cervical cancer with poor genital hygiene, early consummation of marriage, multiple pregnancies and contact with multiple sexual

partners. These studies also reveal that breast cancer relate to late marriage, birth of the first child at a later age, fewer children and shorter periods of breast feeding (Park, 2007). This then means that proper control of risk factors, and adequate performance of the screening tests will enhance prevention. Since the variables age, education, location among others predispose women to cancer diseases, they may also influence the utilization of cancer prevention strategies by women of child bearing age in Enugu State.

Regrettably, the women in Enugu State still pay less attention to issues in preventive and promotive health care. This is borne out of long held belief that one should not bother about a disease condition until it manifests otherwise, going for screenings and tests amounts to an invitation for such diseases to visit the person. As a result most women present themselves in the hospitals or to physicians very late with problem of breast and cervical cancers. Sadly, such women eventually lose their lives causing pain and sorrow to those they leave behind. The above situation motivated the researchers to embark upon this study which sought to determine the level of knowledge and extent of utilization of cancer prevention strategies as well as the extent to which constraining factors militate against the utilization of cancer prevention strategies by women of child-bearing age in Enugu State. To achieve the objective of the study, the following research questions and hypotheses guided the study.

### **Research Questions**

In order to achieve the objective of the study the following research questions were posed:

1. What is the level of knowledge of cancer prevention strategies possessed by women of child-bearing age in Enugu State?
2. To what extent do women of child-bearing age in Enugu State perform screening test for cancer prevention?
3. What are the constraining factors that militate against the utilization of cancer prevention strategies by women of child bearing age in Enugu State?

### **Hypotheses**

The following hypotheses were postulated for the study. They were tested at .05 level of significance and at their appropriate degree of freedom.

**Ho1:** There is no significant difference between the responses of urban and rural women of child bearing age in Enugu State on their level of knowledge of cancer prevention strategies.

**Ho2:** There is no significant difference between the mean ratings of urban and rural women of child-bearing age in Enugu State on the extent to which they perform screening test for cancer prevention.

**Ho3:** There is no significant difference between the mean ratings of urban and rural women of child-bearing age in Enugu State on the extent to which constraining factors militate against their utilization of cancer prevention strategies

### **Research Method**

Cross-sectional descriptive survey research design was utilized for the study. This is because descriptive survey permits generalization to be made over a population through a sample (Nworgu, 1991). Furthermore, through descriptive research design, conditions are studied and described as they exist in their natural settings (Best, 1981). The design is appropriate for this study because a sample of women of child bearing age in Enugu state was studied through the use of questionnaire to solicit information directly from them. The study was carried out in Enugu State, Nigeria. The state has seventeen (17) local Government Areas, and is situated in the south eastern part of Nigeria. The

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population comprised eight hundred and fifty five thousand, six hundred and sixty five (855,665) women of childbearing age in Enugu state Nigeria. (National Population Table, 2006).

The sample size of one thousand two hundred and fifty five (1,255) respondents was used for the study. The sample size was determined by Yaro Yamane formular. In order to select the sample, a Multi-stage sampling procedure was adopted. First, Enugu State was clustered into three (3) senatorial zones, Enugu West, Enugu East and Enugu North. Using simple random procedure Enugu West and Enugu East senatorial zones were selected to represent urban and rural populations respectively.

Five hundred and forty-four health facilities in Enugu State made up the study area. Fifty four (54)(10%) health facilities were randomly selected from the ten (10) local government areas that make up the two(2) senatorial zones used for the study. This percentage was considered appropriate because Nwana (1981) stated that when the population is of hundreds or few thousands, ten (10) percent of the population can be used as a sample. Proportionate sampling procedure was used to determine the number of respondents that were drawn from each local government area, while purposive sampling technique was used to determine the number drawn from each health facility used for the study. Finally, systematic sampling procedure was used to select the respondents that made up the study group.

The instrument for data collection was a structured questionnaire with two sections A and B. Section A was concerned with information on personal data of the respondents. Section B was made up of three parts (1 to 2) containing questionnaire items that elicited answers to research questions 1 – 3. Part 1 attracted responses of “correct” or “incorrect” because the level of knowledge was tested. Parts 2 and 3 were rated using a four point scale of very great extent (VGE), Great extent (GE), Low extent (LE), very low extent (VLE); assigned with the numerical values of 4,3,2, and 1 respectively.

The questionnaire was validated by three experts. The instrument was also subjected to reliability test. Kuder Richardson’s formular was used to determine the co-efficient of the reliability for part 1 with high reliability of .82, while .70 and .72 were obtained for parts II and III respectively after testing with cronbach alpha. One thousand two hundred and fifty-five (1,255) copies of questionnaire were administered by the researchers and three research' assistants. Out of these, one thousand, two hundred and twenty three (1,223) were found usable.

**Results**

**Table 1: Frequency and Percentage Responses of the Respondents on The Level of Knowledge of Cancer Prevention Strategies (N= 1223)**

Item	Items	Freq for correct resp.	Percent for correct resp	Freq for incorrect resp	Percent for incorrect resp	Dec
1	Breast examination	1073	87.7	150	12.3	Hk
2	Pelvic examination	283	23.1	940	76.9	Mk
3	Pap smear	503	41.1	720	58.9	Lk
4	Mammography	404	33.0	819	67.0	LK
5	Chest x-ray	289	23.6	934	76.4	Lk
6	Colposcopy	238	19.5	985	80.5	Lk

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7	Cervical biopsy	291	23.8	932	76.2	Lk
8	Abdominopelvic ultrasound	267	21.8	956	78.2	Lk
9	Immunization against cancer	285	23.3	938	76.7	Lk
10	Group/personal health education on cancer diseases	889	72.7	334	27.3	Hk
<b>Cluster percentage</b>		<b>4522</b>	<b>37.0</b>	<b>7708</b>	<b>63.0</b>	<b>LLK</b>

Field survey, March 2012

Data in table 1 indicated that generally, women of child-bearing age in Enugu State have a low level knowledge on cancer prevention strategies.

**Table 2: Mean Rating and Grand Mean of the Respondents on the Extent to which they Perform Screening Tests for Cancer Prevention**

(n= 1223)

S/N	ITEMS	X	SD	DEC
11	Breast examination	2.55	1.25	GE
12	Breast examination by a health worker	1.75	1.01	LE
13	Pelvic examination	1.26	0.65	VLE
14	Pap smear	1.40	0.81	VLE
15	Mammography	1.22	0.65	VLE
16	Chest x-rays	1.19	0.57	VLE
17	Colposcopy	1.12	0.47	VLE
18	Cervical biopsy	1.18	0.59	VLE
19	Abdomino pelvic ultrasound	1.23	0.67	VLE
20	Immunization against cervical cancer	1.23	0.74	VLE
21	Group / personal health education on cancer diseases	2.15	1.22	VLE
<b>Grand mean</b>		<b>1.48</b>	<b>0.47</b>	<b>LE</b>

Field survey, March 2012

Data in table 2 revealed that women of child-bearing age in Enugu state perform screening test for cancer prevention to a very low extent (grand mean 1.48)

**Table 3: Mean Rating, Grand Mean of the Respondents on the Extent to Which Constraining Factors Militate Against Their Utilization of Cancer Prevention Strategies**

(n= 1223)

S/N	ITEMS	X	SD	DEC
22	Lack of awareness	2.92	1.22	GE
23	Not easily accessible	3.16	1.05	GE
24	Not available	3.00	1.11	GE
25	I believe that cancer diseases are caused by God and cannot be prevented	1.95	1.23	LE
26	It is improper to go to hospital when one is healthy	2.65	1.22	GE

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27	Inability to get money from husband for screening because there is no visible illness	2.73	1.22	GE
28	Fear to hear and talk about cancer and related diseases	2.77	1.24	GE
29	The tested need multiple visits	3.15	1.08	GE
30	The tests are costly e.g. (mammography)	3.31	1.09	GE
	<b>Grand mean</b>	<b>2.85</b>	<b>0.40</b>	<b>LE</b>

Field survey, March 2012

Data in table 3 revealed that certain factors posed constraints to a great extent on the respondents (grand mean = 2.85).

**Table 4: Chi-Square (X<sup>2</sup>) Test on Relationship Between Location of the Women and Level of Knowledge of Cancer Prevention Strategies**

(N = 1223)

S/N	ITEMS	X <sup>2</sup>	Df	SIG	DEC
1	Breast examination	2.66	1	0.10	NS
2	Pelvic examination	24.54	1	0.00	S
3	Pap smear	1.53	1	0.22	NS
4	Mammography	14.87	1	0.00	S
5	Chest x-ray	3.18	1	0.07	NS
6	Colposcopy	12.63	1	0.00	S
7	Cervical biopsy	4.16	1	0.04	S
8	Abdominopelvic ultrasound	.63	1	0.43	NS
9	Immunization against cervical	19.26	1	0.00	S
10	Group/personal health education on cancer diseases	7.22	1	0.01	S
	<b>Cluster (x<sup>2</sup>)</b>	<b>26.03</b>	<b>1</b>	<b>0.00</b>	<b>S</b>

Field survey, March 2012

Data in table 4: revealed chi-square value of 26.03 at 1 degree of freedom was at .00 significant level. This showed that there was a significant difference in the responses of rural and urban women on level of knowledge of cancer prevention strategies.

**Table 5: T-Test of Significant Difference Between the Mean Ratings of Urban and Rural Women of Child-Bearing Age on the Extent they Perform Screening Tests for Cancer Prevention (N= 1223)**

Location	N	$\bar{X}$	SD	t	Df	Sig	DEC
Urban	655	16.67	5.60				
				3.02	1221	.00	S
Rural	568	15.79	4.52				

Field survey, March 2012

Data in table 5 shows that the calculated t-value was (3.02) at .00 level of significance and at 1221 degree of freedom. Hence the null hypothesis was rejected.

**Table 6: T-Test of Significant Difference between the Mean Ratings of Urban and Rural Women on Extent of Militating Factors.**

Location	N	$\bar{X}$	SD	t	Df	Sig	DEC
Urban	655	25.10	6.55				
				3.02	1221	.17	NS
Rural	568	26.26	6.83				

Field survey, March 2012

Data in table 6 showed that, t-value (3.02) was at .17 significant level which is greater than .05 the base line level in the decision rule for no significant difference. Hence the null hypothesis was not rejected.

### **Discussion**

Data in table 1 in response to research question one indicated that women of child-bearing age in Enugu State showed very low level knowledge on cancer prevention strategies. This finding is in line with Hoque, and Kader (2008) who found that women have poor knowledge on cancer prevention strategies like pap smear. The findings also agreed with Nwankwo, Aniebue, Aguwa, Anarado Agunwah (2010) who reported that there was low level knowledge on cancer prevention among women. This low level knowledge may be as a result of inadequate method used in disseminating health information to the public. In addition, to the use of high sounding and technical language could also be a contributing factor. This finding agrees with ACCP (2003) who stated that women generally lack knowledge on types of cancers common to women and mode of prevention. Table 4 (hypotheses 1) showed that there was a significant association between location of the women and level of knowledge of cancer prevention strategies. This result agrees with other findings of ACCP (2003), Abimbola (2008) and Wright Kuyinu and Faduyile (2010) who reported that rural women have low level knowledge on health issues including cancer prevention strategies. This finding could be explained from the fact that education enhances knowledge and that location influences the chances of some individuals acquiring knowledge.

Table 2 in response to research question 2 showed that women of child-bearing age in Enugu state performed screening tests to a low extent. This finding may be attributed to the lamentation of Abimbola (2009) that women pay less attention to periodic screening and few came when the disease process has advanced to a serious level. In this vein, Ayinde Omigbodun and Ilesanmi (2009) noted that Nigerian women are backward in utilization of screening tests. This situation may result to delay in clinic diagnosis because simple detection by inspection (colposcopy) is ignored. This attitude may probably be as a result of some constraining factors identified in this study among others. However, the result recorded that breast self-examination was performed to a great extent by the women. This finding supported Parks (2007) who reported that women perform breast self examination to a great extent and that it seems to be the only possible approach to wider population coverage. This finding is

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not surprising, and can be explained by the fact that simple procedure is involved in breast examination.

Tested hypotheses 2 (table 5) revealed that there was a significant difference between the mean ratings of urban and rural women on the extent to which they perform screening test for cancer prevention. This finding may not be unconnected with the assertion of Nanda (2006) who affirmed, that screening centres are mostly located in urban areas and that rural dwellers do not perform screening tests as urban dwellers do. This can be due to none availability of screening services in rural areas. It may also be as a result of non accessibility of screening centers in terms of good road and nearness.

Table 3 showed that the identified and tested factors militate against the women's utilization of cancer prevention strategies. Specifically, lack of awareness was one of the factors that constrain women to a great extent. This finding is in line with Wright, Kuyinu and Faduyile (2010) who reported that fewer women do not know about breast and cervical cancer screening and that this prevents them from going for the tests. Earlier, Alliance for Cervical Cancer Prevention ACCP (2003) had reported that women lack knowledge on the causes and prevention of cancer diseases. This prohibits them from using screening services. None availability and accessibility were among the factors that constrain women to a great extent. This finding is an affirmation of the assertion of Fabumni (2010) that huge a amount of money is needed to equip screening centers. Consequently, most times these centers are not equipped and few centers that are equipped are located far away from most women.

The t-test result in table 6 (Ho3) shows that there was no significant relationship between location and the extent to which constraining factors militate against the performance of screening tests by women of child-bearing age in Enugu State. This finding was not in line with the finding of Fabumni (2010) who reported that women in rural areas do not use screening centers adequately because these centers are not available and accessible to them. The researchers were surprised about this finding because the finding appears to contradict the general notion that urban women have more opportunities than rural women and that could have prevented the constraining factors from affecting them.

### **Conclusion**

This study revealed that women of child-bearing age in Enugu state have low level knowledge on cancer prevention strategies hence they perform screening tests for cancer to a very low extent. The above finding may not be unconnected with some constraining factors. Although location significantly influenced the respondents on their level of knowledge and extent to which they practiced cancer screening test, but it did not influence the constraining factors identified by the women.

### **Recommendations**

Based on the finding of the study it was recommended they:-

1. Health workers should carry out extensive campaign and health education on cancer prevention strategies using Simple terms and the language of the local people.
2. Programme integration whereby health programmes for women are merged together should be utilized. Thus health care providers should plan to deliver many care services through one delivery process.
3. Government of Enugu state should reduce the cost or provide free cancer screening services to the women in order to increase patronage.

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