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Breast and cervical cancer screening activities among family physicians in Nigeria

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Summary

Breast and cervical cancers are the two commonest malignancies among Nigerian women; where they constitute about 50% of female cancers. A total of 63 out of 82 family physicians from 4 out of the 6 health zones in Nigeria and the Federal Capital Territory, Abuja, Nigeria completed a self-administered questionnaire to determine their knowledge and screening practices for breast and cervical cancers. Forty nine percent (49%) of family physicians perceived cancer as one of the serious health problem facing women in Nigeria. Although 93.7% of responding physicians have heard of breast cancer screening facilities and 96.8% of cervical screening facilities, only 74.6% and 55.6% of these respondents offered screening services for breast and cervical cancers respectively. Breast examination was carried out monthly by 48.9% of the physicians on their regular patients. A comprehensive programme of continuing medical education and training in view of setting up facilities and offering service are recommended for family physicians. These stand to bridge the gap between the knowledge and the practice of breast and cervical cancer screening activities. The umbrella Association for Family Physicians and other regulating bodies should facilitate access to screening facilities and initiate training of willing physicians with a view to setting up services.

Keywords: *Cancer, screening, family physicians, cervix, breast*

Résumé

Le cancer du sein et du col de l'utérus sont les plus commun des cancer malignes chez les femmes Nigérienne, oei ils constituent 50% des cancers féminins. Soixante trois sur quatre vingt deux famille des medecins venant de quatre sur six zones de santé au Nigeria et de la capitale federale, de Nigeria ont complete rehacone un questionnaire pour determiners leur savoir et les methods de detection du cancer de sein et du col de l'uterus. Quarante neuf pour cent (49%) de ces medecins conçoivent le cancer comme l'un des problems grave de la sante que font face les femmes Nigériennes. Bienque 93.7% des mèdecins ont entendu parle' des facilities de detection du cancer de sein contre 96.8% de cancer du col de li uterus; seulement 74.6% et 55.6% offer les tester du cancer de sein et du col de t'uterus respectivement. Latest du cancer de sein etait faite mensuellement par 48.9% des medecins sur leur patients regular. Un programme continue d'education mèdicale et de formation en vue de meltre sur pied des facilities et offior des services etait recommande pour les mèdecins. Ceux-ci mettent un point entre la connaissance et la pratique du depistage des cancers du sein et du col de l'uterus. L'association mere du corps medical et ses organismes doivent donner l'accès aux equipments de depistage el initiek des séances de formations aux medecins recontaires envue de bien meltre sur pied ses services.

Introduction

Breast and Cervical cancers are the two commonest malignancies among Nigerian women where they constitute about 50% of female cancers [1] and Nigerian health care providers and policy makers face enormous problems in the prevention of these two cancers [2].

In recent years, the traditional role of hospitals and other health care settings have been expanded. The perception of these facilities as being the focal point for disease treatment and illness care has been extended to include the concept of health promotion and disease prevention [3,4]. Family physicians have been identified as important resources for health promotion and disease prevention thus, they have the potentials to assume a key role in the prevention and early detection of cancer [5,6] by virtue of their constant contact with the people especially women and children.

Cancer, a major public health problem, requires a conscious effort by health providers to advise and initiate prevention programmes. It can be assumed that if a general practitioner makes an effort at preventing cancer which he sees less often than communicable diseases, he is likely to also offer such services for less serious but more common preventable conditions. In order to determine the disease prevention activities of family physicians/general practitioners in Nigeria therefore, cancer screening practices for breast and cervical cancers were evaluated and the determining factors elucidated.

Subject and method

At the time this survey was conducted there were 60 fellows by examination and 70 residents in family medicine in Nigeria.

A semi-structured questionnaire was designed using questions from related past survey [7]. This was face validated and then pre-tested among 8 general practitioners. The questionnaire sought information on demography of the respondents, practice details, perception of cancer as a serious disease, knowledge of screening facilities and screening practices [5].

The questionnaires were distributed to a convenient sample of 82 family physicians practising in 4 out of the 6 health zones in Nigeria and the Federal Capital Territory Abuja. Distribution was through physicians attending workshops and revision courses conducted in the health zones during the year 1997. The completed/uncompleted questionnaires were returned to investigators directly or sent through colleagues.

Non-respondents

The characteristics of non-respondents could not be ascertained in this study because of the method of distribution of the questionnaires and the non-identification of respondents for confidentiality.

Analysis

Analysis of the data was done using EPI INFO statistical package. The test of association between responses to these variables was performed using Chi-Square test. R X C Contingency tables were drawn up and uncorrected X^2 and X^2 test for

trend in binomial proportions were used to compare proportions as indicated.

Results

A total of 63 out of the 82 family physicians completed the questionnaire giving a response rate of 76.8%. Some of the characteristics of the respondents are shown in Table 1.

Table 1: Characteristics of the Respondents

Characteristic	Number of Respondents				SND (5)		All (63)	
	Fellows (21)		Resident (37)		n	%	n	%
Age group (yrs)	n	%	n	%				
25-35	-	-	17	46.0	1	20	18	28.6
36-45	12	57.1	13	35.1	2	40	27	42.8
> 45	8	38.1		12.7	-	-	9	14.3
Don't know	1	4.8	6	16.2	2	40	9	14.3
Total	21	100.0	37	100.0	5	100	63	100.0
Sex								
Male	17	81.0	29	78.4	4	80	50	79.4
Female	4	19.0	8	21.6	1	20	13	20.6
Total	21	100.0	37	100.0	5	100	63	100.0
Marital status								
Married	21	100.0	26	70.3	3	60	50	79.4
Not married	-	-	7	18.9	-	-	7	11.1
Not disclosed	-	-	4	10.8	2	40	6	9.5
Total	21	100.0	37	100.0	5	100	63	100.0
Type of practice								
Government	10	47.6	20	54.1	2	40	32	50.8
Private	7	33.3	3	8.1	2	40	12	19.0
Mission	3	14.3	13	35.1	1	20	17	27.0
Not stated	1	4.8	1	2.7	-	-	2	3.2
Total	21	100.0	37	100.0	5	100	63	100.0
Belong to a club								
Yes	19	90.5	29	78.4	3	60	51	81.0
No	2	9.5	3	8.1	1	20	6	9.5
Not disclosed	-	-	5	13.5	1	20	6	9.5
Total	21	100.0	37	100.0	5	100	63	100.0
Resident status								
SHO**	2	5.4						
Registrars	21	56.8						
Snr. Registrars	14	37.8						
Total	37	100.0						

*SND = Status not disclosed

**SHO = Senior House Officer

Table 2: Frequency distribution of health problems perceived by Physicians to be serious among Nigerian women. (other than pregnancy related problems).

Health problems	Number of respondents							
	Fellows		Resident		SND*			
	n	%	n	%	n	%	n	%
Cancer	8	38.1	20	54.1	3	60	31	49.2
Stress	8	38.1	9	24.3	-	-	17	26.9
Malaria	3	14.2	2	5.4	-	-	5	7.9
Diabetes	1	4.8	1	2.7	1	20	3	4.8
Heart disease	-	-	2	5.4	1	20	3	4.8
Others	-	-	2	5.4	-	-	2	3.2
Don't know	1	4.8	-	-	-	-	1	1.6
No response	-	-	1	2.7	-	-	1	1.6
Total	21	100.0	37	100.0	5	100.0	63	100.0

SND* - Status not disclosed.

Table 2 shows that thirty-one (49.2%) of the respondents perceived cancer as one of the serious health problems facing Nigerian women today other than the high maternal mortality from pregnancy related conditions. This was followed by stress (26.9% of respondents). Table 3 shows responses to questions on cancer screening programmes. Fifty-nine physicians (93.7%) had heard of breast cancer screening programmes while

61 (98.6%) had heard of cervical cancer screening programmes. Fifty (79.4%) of these physicians talked with women about the programmes. It is to be noted that 20 out of 51 family physicians (39.2%) that belong to clubs gave talks on cancer to members of their clubs occasionally.

Screening services for breast cancer were offered by 47 physicians (74.6%) while services for cervical cancer were offered by 35 (55.6%) of the physicians. Thirty-three (52.4%) of the respondents offered screening for both breast and cervical cancers. About 17 (60.7%) of the physicians who did not offer screening services for either/or both breast and cervical cancers referred patients to centers where screening was available; this was mostly 14 (82.4%) for cervical cancer screening. Out of those that offered screening services, 23 physicians (65.7%) advised a Pap smear test every year, 5 physicians (14.3%) advised it every 3 years and 4 physicians (11.4%) advised it every 5 years. Patients were advised to carry out breast examination monthly and where feasible this was done monthly

on regular patients by 23 physicians (48.9%), when convenient by 14 physicians (29.8%) and at every encounter by 7 physicians (14.9%).

training. Thirty-seven (90.2%) of the 41 physicians who responded to the question on willingness to have Pap smear facilities would like to have them so as to make screening pos-

Table 3: Response to some questions on screening programmes for cervical and breast cancers

Variables	Number of respondents							
	Fellows N=21		Residents N=37		SND* N=5		All N=63	
	n	%	n	%	n	%	n	%
Heard of screening Programme on								
-breast cancer	20	95.2	34	91.9	5	100	59	93.7
-cervical	21	100.0	35	94.6	5	100	61	96.8
-both	20	95.2	34	91.9	5	100	59	93.7
Gave talk to women about both programmes	20	95.2	27	73.0	3	60	50	79.4
Offer services for								
-breast cancer	14	66.7	31	83.8	1	20	47	74.6
-cervical	11	52.4	23	62.2	1	20	35	55.6
-both	9	42.9	23	62.2	1	20	33	52.4
Comfortable with								
-taking pap smear	11	52.4	23	62.2	2	40	36	57.1
-examining breast	20	95.2	35	94.6	4	80	59	93.7
Intervals advised for pap smear	N=11		N=23					
-yearly	7	63.6	15	65.2	1	20	23	65.7
-every 3 years	1	9.1	4	17.4	-	-	5	14.3
-every 5 years	2	18.2	2	8.7	-	-	4	11.4
Intervals advised for breast examination	N=14		N=23					
-monthly	6	42.9	17	54.8	-	-	23	48.9
-when convenient	4	28.6	9	29.0	1	20	14	29.8
-every encounter	4	21.4	3	9.7	1	20	7	14.9

*SND: Status not disclosed.

The reasons given by physicians for not having Pap smear facilities in their practices include: "not considered necessary or a priority" (30%); "non-provision by the hospital authority" (26.6%); "availability of referral centers" (13.3%); and "low demand" (10%).

Thirty-six of the physicians (57.1%) were comfortable with their ability to take Pap smear and were significantly more likely to offer cervical cancer screening services ($P = 0.05$); while 13 (20.6%) of them were uncomfortable. Almost all the physicians 59 (93.7%) were comfortable with their ability to examine the breasts but this was not significantly associated with the offering of screening services ($P > 0.05$). Only 4 of 35 physicians (11.4%) who reported they offer Pap smear services did so within one month prior to completing the questionnaire while 15 (42.9%) had not offered the service a year or more prior to the survey. The remaining 16 (45.7%) could not say when last the services were offered. Eighteen physicians (42.9%) out of 42 who responded to the questions on how they learned Pap smear technique mentioned it was learned during residency training. Twenty-four physicians (40.0%) of 60 respondents learned breast examination techniques during undergraduate training while only 8 (13.3%) learned them during residency

sible for the prevention and early detection of cervical cancer.

The important information that physicians would like to have about cancer and cancer screening in women are shown in Table 4. Notable among the "others" are the role of the Ministry of Women Affairs, the Cancer Society of Nigeria and General Practitioners in cancer screening. Questions on why cancer screening is not incorporated in Primary Health Care and the acceptance or otherwise of cancer screening methods by the general population and religion were raised.

Discussion

The findings in this study showed that general practitioners/family physicians in Nigeria are aware of the magnitude of cancer as a disease among women in this country and the need to prevent it. The data presented are self-reported. Because of the implications for a normative behaviour and socially desirable responses, it is highly probable that cancer prevention practice may be over-reported. However, the practice of cancer prevention by family physicians was found to be fair although cervical cancer screening practice was relatively low. The difference may be partly due to the fact that clinical breast examination (which is the screening method commonly used in Nige-

Table 4: Important information on cancer and cancer screening required by the Physicians

Information required	Fellows		Number of respondents Residents		All n	%
	n	%	n	%		
Available screening centers	6	30.0	10	27.0	16	25.4
How to establish programm including cost and instruments	1	5.0	7	18.9	8	12.7
Epidemiology	4	20.0	3	8.1	7	11.1
Current management	1	5.0	6	16.2	7	11.1
Aetiology	5	25.0	1	2.7	6	9.5
Current screening methods and advances	-	-	6	16.2	6	9.5
Cost effectiveness and predictive index to test	3	15.0	3	8.1	6	9.5
Cost of screening	1	5.0	4	10.8	5	7.9
More seminars/workshop and provision of training facilities	3	15.0	1	2.7	4	6.3
How often should it be done.	2	10.0	1	2.7	3	4.8
Others	3	15.0	5	13.5	8	12.7

Note: Multiple information was requested by some respondents.

ria) requires no specific instrument other than the physicians' fingers, unlike Pap smear, which requires physical facilities and considerable financial commitment. In addition, breast examination is usually part of a routine clinical examination. Other reasons adduced from the findings are the knowledge, ability and confidence of the practitioner in carrying out the procedures and lack of provision of facilities by the hospitals.

There is limited availability of the current methods for prevention of cancer in women and where available the cost precludes many women from benefiting from the facilities. Also many family physicians are not aware of their availability in some centers in Nigeria. An example is the mammography that is yet to be commonly used in this country. There are suggestions that BSE may contribute to the reduction of the risk of death through early detection of breast cancer. However, mammography has been shown to be a superior technique [8]. The non-availability of mammography in Nigeria can be adduced mostly to cost, but physicians' recommendation have also been shown to be a predictor of the use and adherence to the use [9]. The inadequacy in promoting the programme is corroborated by the fact that during the one-year period of data collection, no lecture, workshop or seminar was conducted on cancer or disease prevention, despite the request by respondents for more training workshops on cancer screening methods. Further education and training of both trainers and trainees on cancer prevention for family physicians will improve their confidence and subsequently the practice.

This survey shows that family physicians in Nigeria are aware of the magnitude of the problem of cancer as a major public health problem in Nigerian women and they are making considerable efforts at its prevention. However, they demonstrated a need for continuing medical education and information on available screening centers and modalities for establishing screening services in their practices. They rated these higher than information on aetiology, epidemiology and current man-

agement of the diseases. Also, the health promotion and disease prevention activities of family physicians need to be improved upon. The residency-training programme contributed positively to cancer screening. Health promotion and disease prevention should therefore be well spelt out and emphasized in the curriculum for General Practice/Family Medicine specialty training.

There is no National Cervical Screening programme in Nigeria hence any recommended frequency of screening for Nigerian patients. The frequency suggested by the respondents (yearly, every three years and every 5 years) must have been informed by practices in other countries where cervical screening programmes are well established. This has cost implications for cervical screening programme and its effectiveness in reducing the incidence and mortality from cervical cancer. The World Health Organisation (WHO) has even a less frequent programme for poor countries based on achieving wider coverage and not on re-screening of a small population. This calls for the establishment of a National Screening Programme in Nigeria and a large prospective study to determine the most appropriate and cost effective screening guidelines for breast and cervical cancer for the Nigerian women population.

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