

Knowledge, Attitudes and Practices of Health Care Professionals as Regards Breast Cancer in the Municipality of Parakou (Benin) in 2015

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Abstract

Introduction: In Africa and developing countries, breast cancer is the 2nd cancer after cervical one.

Objectives: To study knowledge, attitudes and practices of health care professionals as regards breast cancer.

Methodology: It was a cross-sectional study with a prospective data collection and a descriptive purpose. The study was conducted from 05 August to 05 October 2015, that is to say a period of two years.

Results: Health care professionals (n=281) were mostly insufficiently informed about breast cancer and diagnosis methods. The study revealed that 12.46% of the surveyed had accurate knowledge of risk factors and family history of breast cancer was the most cited. For some of them (55.36%), breast cancer screening is poorly organized in Benin. Systematic practice of clinical examination of breasts was reported by 50.18% of the surveyed. Mammography was requested by only 48.1% of the surveyed in case of warning signs. 97.50% of the surveyed reported that the women admitted for consultation were systematically advised to perform breast self-examination. The average KAP score was 5.81 ± 1.75 . In total 101 (35.94%) agents totaled a score ≥ 7 and 180 (64.06%) had a score under 7.

Conclusion: These results suggest the need for continuing education of health care professionals.

Keywords: Breast cancer; Health care professionals; Attitudes; Knowledge; Practices; Screening; Early diagnosis

Introduction

Cancers remain a crucial public health issue in the world. In 2012, there were 32.6 million living people (over 15 years of age) in whom a cancer was diagnosed in the five previous years [1]. More than half of (56.8%) all cancers and deaths by cancer (64.9%) in 2012 occurred in the least developed regions of the world. The most commonly diagnosed cancers in the world are lung cancers, breast ones and colorectal cancer [1]. Today, in France, as in many countries with high standard of living, breast cancer is in women, the most common cancer [2].

In Africa and developing countries, breast cancer is the 2nd cancer after cervical one [3]. In Benin, in 2008 the work done by the National Directorate for Health protection through the national program for fighting against non-communicable diseases ranks breast cancer as the leading cancer with an incidence of 32.5% before cervical cancer which represented 16.8% [4].

It was proved that a diagnosis of breast cancer at an early stage would enable a much more effective and less intensive therapeutic management [5] and then would ensure an improvement of the overall prognosis. Hence, health care professionals who play an important part in the early detection program of cancers must systematically apply screening methods including those of breast (clinical examination,

demand for screening mammography for women at high risk), motivate women in order to make them adhere to screening. Studies carried out in medium and low level socioeconomic countries, namely in Tunisia [6], Pakistan [7] and Nigeria [8], showed that a better knowledge of breast cancer by health care professionals helps to improve the management of this cancer. In northern Benin, especially in Parakou studies carried out in the field of mammary pathology focused on benign breast tumors; to the best of our knowledge, no study dealt with breast cancer and especially knowledge, attitudes and practices of health care professionals as regards breast cancer.

Material and Study Methods

It was a cross-sectional descriptive study which was conducted from 05 August to 05 October 2015. It focused on health professionals of different health facilities of the municipality of Parakou (Gynecologists, general practitioners, midwives and nurses). Were included, the care providers working in the health centers of Parakou, involved in the activities of prenatal, general, postnatal consultations of gynecology or family planning. They had given their consent for the study. Those who were absent during the collection day or those who refused secondarily to pursue the study were excluded. We had carried out an exhaustive census of all the care providers who met selection criteria.

The dependent variable was related to knowledge, attitudes and practices (KAP) of health care professionals. They were assessed from a KAP score calculated on the model of a study on Pakistani nurses'

KAPs towards breast cancer. So, every right answer was worth one (1) point. At the end, a KAP score more than or equal to 7 reflected a good KAP of care providers towards breast cancer. However, a KAP score under 7 expressed a bad KAP. Independent variables were related to:

- Sociodemographic data: age, sex, seniority, level of intervention.
- Professionals' knowledge of breast cancer (definitions, severity, incidence, number of cases, clinical signs, screening means, treatment means, risk factors).
- Attitudes towards screening means (effectiveness or otherwise of breast self-examination, effectiveness or otherwise of breast clinical examination by a doctor, attitude towards a woman at risk, effectiveness or otherwise of mammography).
- Health care professionals' (advice on breast self-examination, systematic practice of breast clinical examination, period of learning breast examination, main difficulties for mass screening management).

A double data entry was performed with Epi data 3.1 Software. Data analysis was done with Epi 7.1 Software.

Tables and Figures were made with Microsoft Word and Excel version 2007 software. Averages were presented with their standard deviations. Qualitative variables were expressed in frequencies.

Results

Sociodemographic characteristics of surveys

Out of a total of 302 workers inclusive, 281 were available during the days of collection that is to say a participation rate of 93.04%. They were distributed in 115 (40.93%) men for 166 women (59.07%). That is to say a sex ratio of 0.69.

The average age of the surveyed workers was 36.40 ± 8.49 years (Extremes of 20-76 years). The most represented age group was that of 30 to 39 years. The workers of our study were mostly nurses (68.33%). As for the level of employment, most of the surveyed work in peripheral centers (62.99%).

Most of them had seniority between 1 and 10 years (65.84%). Almost all the surveyed were Beninese (96.44%). Table 1 presents the socio demographic characteristics of the surveyed.

Variables	Number (n)	Incidence (%)
Sex		
Male	115	40.93
Female	166	59.07
Age		
[20-29]	48	17.08
[30-39]	142	50.53
[40 and +]	91	32.38
Qualification of the worker		
Gynecologist	7	2.49
Nurse	192	68.33
Doctor	35	12.46
Midwife	47	16.73
Level of employment		
Central level	61	21.71
Intermediate level	43	15.3
Peripheral level	177	62.99
Seniority (year)		
01-Oct	185	65.84
Nov-20	68	24.2
21-30	27	9.61
≥ 31	1	0.36

Nationality		
Beninese	271	96.44
Foreign	10	3.56

Table 1: Distribution of workers surveyed according to socio demographic characteristics, Municipality of Parakou 2015 (N=281).

Health workers' knowledge of breast cancer

Among the 281 workers surveyed, 254 (90.43%) had asserted that they knew breast cancer. Among the latter, 114 (44.88%) could give an accurate description, 95 (37.40%) an approximate answer and 35 (13.39%) had no idea.

Knowledge of screening means: We determined 202 (71.89%) workers with accurate knowledge of screening methods, 64 (22.78%) approximate knowledge and 15 (05.34%) had no idea.

Knowledge of risk factors of breast cancer: Familial predisposition (46.09%) was the most cited risk factor by the surveyed followed by the history of colon and endometrial cancer 36.52%, as shown in Table 2 below.

Knowledge of warning signs: Among the 281 workers surveyed, 116 (41.28%) knew the warning signs as against 155 (54.16%) who approximately knew them. It should be noted that a minority (03.56%) knew nothing about them.

Risk factors	Number (n)	Incidence (%)
Endometrial and colon cancer	103	36.52
Obesity	56	20
Lack of breastfeeding	95	33.91
Familial predisposition	130	46.09
Age of the first pregnancy ≥ 30	61	21.74
Early age for first menstruation	46	16.52
Late menopause	86	30.43

Table 2: Distribution of workers according to their general knowledge of risk factors of breast cancer. Municipality of Parakou 2015 (N=281).

Knowledge of para clinical examinations: Among the 281 workers surveyed, 150 (53.38%) knew para clinical examinations as against 114 (40.57%) who approximately knew them. It should be noted that a minority (6.05%) knew nothing about them.

Knowledge of therapeutic methods: Among the 281 workers surveyed, 119 (42.35%) knew therapeutic methods as against 146 (51.96%) who approximately knew them. It should be noted that a minority (05.69%) knew nothing about them.

Perception and attitudes as regards breast cancer

Perception of the severity of breast cancer: Among the 281 workers surveyed, 275 (97.86%) asserted that cancer is a severe disease as against 06 (2.14%) who think that it is a non-severe one.

Appreciation of the conduct of breast cancer screening in Benin: Among the 281 workers surveyed, only 62 (22.14%) found that breast cancer screening was well-organized in Benin. For the others, it was badly organized (55.36%) or altogether lacking (08.21%) and, 40 (14.29%) of the workers didn't know anything about it either.

Attitude of the workers surveyed on breast cancer screening: Attitude towards systematic breast cancer screening- Among the 281 workers surveyed, 171 (60.85%) had declared that they were in favour of systematic breast cancer screening as against 110 (39.15%) who were not. Among the latter, staff shortage (57.27%) and the uselessness of systematic screening in the absence of warning signs (42.73%) were the

two arguments mentioned. As for the workers who gave a favorable opinion, several reasons were stated to justify their choice. The most frequent was prevention (45.88%) as shown in Figure 1 below. Systematic mammography every two years- In total, 206 workers (73.30%) were in favor of systematic mammography every two years as against 75 (26.70%) who disagreed.

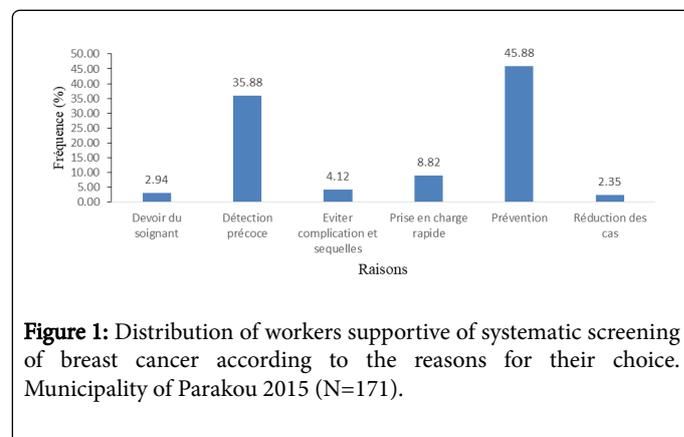


Figure 1: Distribution of workers supportive of systematic screening of breast cancer according to the reasons for their choice. Municipality of Parakou 2015 (N=171).

Practice of breast cancer screening

Training on breast examination: Among the 281 workers surveyed, 216 (76.86%) were trained on breast examination as against 66 (23.14%) who didn't have this opportunity.

Practice of systematic breast examination: The majority of the workers surveyed (50.18%) systematically practiced the examination of the breasts of the women admitted for consultation as against 140 (49.82%) who didn't. The latter didn't often do that because women often refuse to be examined by men (18.44%) as shown in Figure 2 below.

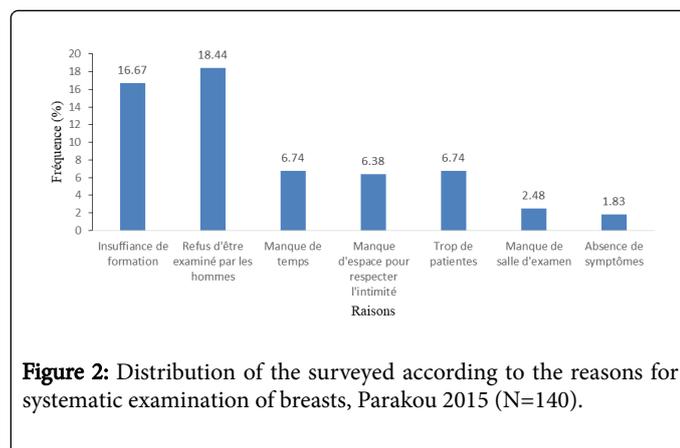


Figure 2: Distribution of the surveyed according to the reasons for systematic examination of breasts, Parakou 2015 (N=140).

Advice on breast self-palpation during consultations: Among the 281 workers surveyed, 07 never give advice on breast self-palpation. Two reasons justified this stance: insufficient training according to 04 workers and the 03 others.

KAP score

The average score was 5.81 ± 1.75 with 1 and 10 as extremes. In total 101 (35.94%) workers totaled a score ≥ 7 and 180 (64.06%) had a KAP score under 7.

Discussion

Characteristics of the sample

The age of the surveyed ranged from 20 to 76 years old and the most represented age group was that of 30-39 years that is to say 50.53%. It is a young population as mentioned in Mamane et al. studies [9] which reported 40.2% as the most represented age group 30-39 years in Niamey, Niger in 2010.

Knowledge of risk factors of breast cancer

Only 12.46% of the surveyed have accurate knowledge of risk factors of breast cancer. But it is observed that at least one risk factor was known by 82.57% of the surveyed; the most cited factor was in 46.09% "to have a family history of breast cancer": this rate is higher in the study carried out by Nejari et al. in Morocco [10] who found that 93.6% of their surveyed had cited family history of breast cancer. We think that the lack of continuing training, insufficient training and negligence are the main factors which hamper good knowledge of breast cancer by professionals.

Knowledge of screening means

According to our study, most of the surveyed (71.89%) have good knowledge of means of screening breast cancer. The same observation was made by Komogui et al. [11] with a 91.1% rate of good knowledge of means of screening breast cancer in Cotonou.

Perception as regards breast cancer

Perception of severity: Breast cancer of women, by its frequency and severity, will be in the forthcoming years one of the biggest challenges of populations' health in Africa [12,13]. So, almost all the workers surveyed 275 (97.86%) are aware of this severity of breast cancer. Komongui et al. [11] had already reported a 100% in their study in Cotonou in 2001.

Conduct of screening: More than half of the surveyed (55.36%) think that breast cancer screening is poorly organized. These results are in accordance with Komogui et al. [11] in which 62.1% of the surveyed in Cotonou had regretted disorganization as regards screening in Benin. Some countries have a cancer registry, a cancerology unit per region and a ministerial system in which the screening plan is mentioned [10].

We think that the fight against breast cancer in Benin remains insufficient unlike the fight against infectious diseases such as HIV or malaria which is more relayed through the media, followed by awareness sessions. In addition, 66.20% of the surveyed assert that they have never been given the opportunity to take part in a screening or a training campaign about breast cancer apart from their initial training.

Curability of breast cancer: It has been proved that early diagnosis of breast cancer helps to carry out a much more effective and less intensive therapeutic management [5] and would ensure an improvement of the global prognosis. Grosclaude et al. [14] estimated five-year survival up to 80% for an early stage T1 (tumor size), 74% for T2, 62% for stage T3 and 44% for stage T4 [15]. However, this survival estimate decreases in case of high histologic grade or lymph node involvement [16].

For most of the surveyed (90.04%) breast cancer is curable provided it is diagnosed early and managed properly.

It is observed that surveys show fewer trends for systematic mammography than clinical examination of breasts. Although clinical examination is a simple and easy method, yet it is not too specific especially when it is implemented alone. Nevertheless, mammography and clinical examination of the breasts complete each other. By associating a clinical examination with mammography, Feig showed a 70% decline in mortality of women over 50 years [17]. Moreover, advantages of mammography as a method of screening breast cancer have already been demonstrated. As a matter of fact, mammography brings to light subclinical cancers and helps to have an important decline in mortality [18] in spite of the difficulty to gain access to it on account of its high cost. However, one cancer out of ten cannot be discovered during mammography, particularly in dense breasts [19]. For those who were not favorable to it, the main reasons mentioned are respectively the fact that this examination would not be useful in the absence of warning signs and staff shortage.

Practice of screening breast cancer

Nearly half of the health care professionals surveyed (50.18%) practice screening of breast cancer through systematic examination of

breasts during consultations. This rate remains under Komongui et al. one [11] who had found 82.3% of professionals who practiced systematic examination of breasts in their consultation rooms. Among the factors which hamper systematic examination of breasts are cited among others some patients' refusal to be examined by male professionals. This observation could be accounted for by a lack of sensitization or people's ignorance. Sometimes, socio cultural requirements compel women to refuse to be examined by male professionals.

KAP score

In our study, the surveyed of level III mostly consisted of midwives and nurses. This phenomenon contributed to bias the results. In addition, these paramedics of level III are not interested in postgraduate activities (staff, reading of article) and not involved in gynecological consultations. This category of care providers directly refer the patient to a specialist; unlike their counterparts of level I and II who are much more involved in consultation activities apart from the fact that they are first rate places of consultation for women on account of the difficulties they have to cope with to meet specialists at level III. Therefore this situation would lead professionals of level II and I to have better education than those of level III. This KAP survey showed the need for continuing training for all health care professionals. Indeed, it is essential for them to be well informed about breast cancer, owing to the influence they can exert to convince women to get diagnosed earlier and therefore improve the prognosis of this pathology. The results of several studies reported insufficient information and training in the fight against cancers in faculties of medicine [20,21]. In fact, the course related to the fight against cancer in the faculty of medicine and training centers for paramedics is not well developed. For instance, no teaching of cancerology is included in the first cycle of medical studies. It is true that theoretical teaching programs are presently full enough and it would be difficult to increase the teaching hours for cancerology. Nevertheless, it would be possible to reorganize this teaching avoiding its dilution in the different medical specialties and include it in a single module. Besides the improvement of health care professionals' initial training as regards breast cancers, it would also be appropriate to strengthen awareness actions for women about screening to get their adherence to these programs, facilitate access to these services, and thus improve coverage by these services. Current health care providers on the front line should also be offered continuing training as regards listening, advice and practice of clinical examination of breasts.

The outcomes observed in this work clearly underline the need for implementing actions to improve their knowledge as regards breast cancer. Apart from the initial training during their studies, the best moment to improve this knowledge is likely to be during continuing training; the only possibility which seems relevant.

Conclusion

The results of this work obviously outlines the need for taking actions to enhance health care providers' knowledge about breast cancer. Practicing care providers should be delivered continuing medical training related to listening, advice and practice for screening cancers in general and breast cancer in particular.

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