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Knowledge Practical Attitude of Health Professionals on Breast Cancer at the Hospital of the District of the Commune IV of Bamako

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Abstract

Introduction: The level of knowledge and attitude of health professionals about breast cancer are important determinants. **General objective:** To study the knowledge, attitude and practice of health professionals of the hospital of the district of the commune IV on breast cancer. **Methodology:** This was a cross-sectional, prospective, descriptive, qualitative and quantitative study. The study period was from 01 October 2022 to December 2022. **Results:** In one week of survey, 110 health workers (intern, obstetrician nurse, general practitioners and specialists) received the survey sheet, 80 health workers informed it, a participation rate of 73%. The male sex was most represented at 63.75% with a sex ratio of 1.76. The average age was 39.59 years with extremes of 22 and 61 years. The clinical signs evoked by the participants were: breast nodule (81.25%), followed by breast discharge (48.75%). In relation to risk factors: interns and obstetrician nurses had no good knowledge, 51.72% of general practitioners had good knowledge, 43.48% of specialist doctors had good knowledge, and 5.88% of the wise had good knowledge. Conclusion: Breast cancer is a common pathology around the world, health professionals are at the forefront of the fight against breast cancer, and this fight cannot be effective without trained personnel.

Keywords

Knowledge, Attitude, Practice, Health Personnel, Breast Cancer

1. Introduction

The level of knowledge and attitudes of health care staff about breast cancer are important determinants that influence the adoption of screening methods by women in their communities [1].

The disparity in breast cancer incidence and mortality between developed and developing countries is due to different levels of knowledge about disease risk factors, access to effective treatment, and in particular the existence of early detection and detection program [2].

It is estimated that 70% - 90% of breast cancer cases are advanced in African countries, which is a cause of decreased survival probabilities among patients. [3].

Studies have shown that breast cancer screening programs through mammography, breast self-examination (AES) and clinical breast examination (ECS) play an important role in early detection, increase survival, decrease the number of deaths and prevent recurrence in breast cancer patients [3].

However, the adoption of these methods by women depends on several factors, such as religious beliefs and the attitude of health workers according to Mitchell J. [4].

Y. A. Sawadogo [5] reported in their study that 90.9% of the gynecologists/doctors surveyed claimed to perform systematic breast examination. As for the wise midewife/Maieuticians (SFE/ME), 88.9% of them claimed to practice systematic breast examination.

Among gynecologists/doctors, 95.5% of people reported prescribing mammography in case of suspicious breast lesions, 9 providers would prescribe it in case of presence of risk factors and 15 providers would systematically prescribe mammography in patients over 35 years of age.

A study conducted in Morocco by Haya Salam [6] on nurses and doctors showed that 60% of nurses believe that breast cancer can be cured by adhering to prayer without any therapy.

A study conducted by KOUAMO II Eitel Igor [7] in Mali, revealed that 61.12% of the providers of the reference health center (csref) in Bamako do not perform breast cancer screening due to lack of training,

22.23% of gynecologists and 58% of general practitioners do not advise breast self-palpation during consultations.

It is very difficult to fight cancer effectively if health professionals do not have the right information, the right attitude and the right practice.

In our hospital, no studies have been carried out on the practical knowledge of health professionals about breast cancer, so we initiated this work whose objectives are the following.

1.1. Objectives

1.1.1. Overall Objective

To study the knowledge, attitude and practice of health professionals of the hospital of the district of the commune IV against breast cancer.

1.1.2. Specific Objectives

Determine knowledge of district hospital health professionals on breast cancer;

Analyze the attitude of health professionals of the district hospital on the policy against breast cancer in Mali;

To evaluate the practice of health professionals in the hospital of the district of commune IV in the management of breast cancer in Mali.

2. Methodology

It was a cross-sectional, prospective, qualitative and quantitative study (mixed study). It ran from 01 October 2022 to 31 December 022.

This mixed methodology allows to understand in depth the problem, to treat several aspects of the question, to bring details, to implement holistic strategies to improve the practical knowledge of health professionals in our center.

2.1. Sampling

We carried out a sampling by convenience, concerning all the health professionals selected in the inclusion criteria within the hospital of the district of the commune IV.

Our choice of the suitability method is explained by the fact that in this context, a non-random method is more appropriate, given the practical reasons, including the availability of health professionals at the time of the survey.

2.2. Inclusion Criteria: Included in This Study

All doctors, midwives, nurses and hospital residents of the district of commune IV available during the survey.

2.3. Exclusion Criteria: Not Included in This Study

Health professionals are not available during the survey.

2.4. Data Collection Tools

We used the survey sheet to collect the data.

The survey sheet was tested by administering it to 10 health professionals.

This test helped to correct the deficiencies of the investigation sheet.

The survey sheet is divided into four parts:

2.5. A Part Concerning Socio-Demographic Data

2.5.1. A Part Concerning Knowledge of Health Professionals

The questions focused on:

Definition of breast cancer, prevention, risk factors, clinical signs of breast can-

cer, breast cancer treatment.

2.5.2. A Part Concerning the Attitude of Health Professionals

The questions focused on:

The Health Professional's Perspective on Breast Cancer Prevention;

The health professional's perspective on breast cancer diagnosis;

Its assessment of the management of breast cancer in Mali;

Its analysis of the policy against breast cancer in Mali.

2.5.3. A Part Concerning the Practice of Health Professionals

Promotion of the clinical examination of the breast during consultations.

Promotion of self-catering during consultations.

The indication of mammography.

The advantages of the multidisciplinary consultation meeting (RCP).

The therapeutic means used by the health professional.

How to deal with a suspicion of breast cancer.

How to deal with breast cancer.

The difficulties that healthcare professionals face in the fight against breast cancer.

Responses regarding risk factors, clinical signs and treatment ranked the level of knowledge of health personnel.

2.6. Knowledge Assessment Grid

2.6.1. Risk Factors

Poor knowledge: 0 or 1 risk factor cited by health personnel.

Average knowledge: 2 or 3 risk factors cited by health personnel.

Good knowledge: 4 or more risk factors cited by health personnel.

2.6.2. Clinical Signs

Poor knowledge: 0 or 1 clinical sign cited by health personnel.

Average knowledge: 2 or 3 clinical signs cited by health personnel.

Good knowledge: 4 or more clinical signs cited by health personnel.

2.6.3. Processing

Poor knowledge: 0 or 1 treatment cited by health personnel.

Average knowledge: 2 or 3 treatments cited by health personnel.

Good knowledge: 4 or more treatments cited by health personnel.

2.7. Analysis Software and Statistical Tests

The data was entered on the Excel software, the analysis was done with the Epi info 7 software.

3. Results

3.1. Univariate Analyses

3.1.1. Administrative Data

We distributed 110 survey sheets among health professionals, 80 health profes-

sionals participated in this study after self-administration of the questionnaire, a participation rate of 73%.

Professional status: Professional status is summarized in Table 1.

General practitioners were the most represented (36.25%); followed by specialists (28.75%).

The male sex was the most represented at 63.75% with a sex ratio of 1.76 in favor of men

The average age was 39.59 years with extremes of 22 and 61 years.

The age group from 20 to 40 years was the most represented, 53.75%.

3.1.2. Knowledge of Health Professionals

The average number of years of experience was 11 years with extremes of 0 and 36 years.

Health professionals who received the knowledge in medical school accounted for 71.25%. Those who received breast cancer knowledge through health schools, radio, television and continuing education accounted for 27.50% respectively; 37.50%; 37.50% and 58.75%.

General practitioners were the most represented (36.25%); followed by specialists (28.75%).

Good knowledge of diagnostic means was observed in 47.50% of health professionals.

The multidisciplinary consultation meeting (RCP) was unknown by 56.25% of health professionals.

Knowledge of therapeutic means was good in 61.25% of health professionals.

The breast nodule was evoked in 81.25% of cases, followed by breast discharge (48.75%), pain (43%). Nipple retraction was mentioned in 12% of cases (Table 2).

Risk factors cited by participants included family history (48.75%); tobacco (48.75%); alcohol (48.75%); contraception (20%); no breastfeeding (18.75%) and hormonal substitution (15%) (Table 3).

The diagnostic methods discussed by the participants were: mammography (81.25%); biopsy (58.75%); ultrasound (55%).

Table 1. Breakdown by professional status.

Professional status	Workforce	Percentage
hospital intern	8	10.00
Obstetrician nurse	3	3.75
general practitioner	29	36.25
specialist	23	28.75
midwife	17	21.25
Total	80	100.00

Table 2. Based on knowledge of clinical signs.

Clinical signs	Workforce	Percentage
Breast flow	39	48.75
Pain	35	43.75
Orange peel	20	25.00
Nipple retraction	10	12.50
Breast nodule	**65**	**81.25**

Table 3. Based on knowledge of risk factors.

Risk factors	Workforce	Percentage
Family antecedent	39	48.75
Early menarche	5	6.25
Late menopause	4	5.00
Contraception	16	20.00
Rayon X	3	3.75
Tobacco	39	48.75
Alcohol	39	48.75
Nulliparous	7	8.75
Breast pathology	4	5.00
Female sex	5	6.25
Age > 40 years	5	6.25
Hormonal substitution	12	15.00
Lack of breastfeeding	15	18.75
Bra	6	7.50

The therapeutic methods suggested by the participants were: chemotherapy (81.25%); surgery (75%); radiotherapy (67.50%); hormone therapy (27.50%) and targeted therapy ((5%).

3.1.3. Attitude of Health Professionals

Prevention Perspective:

Participants believe that the screening campaign is struggling to mobilize the population because of the lack of political will, that is to say the absence of mass mammography screening campaign, the lack of awareness on public and private media, insufficient integration of preventive care into care provision and insufficient trained staff.

Among the health professionals, 75% advised women to breast self palpation.

Management Perspective:

Support must be free, the cost of support is unbearable for most families,

promote communication for behavior change, subsidize additional examinations and chemotherapy sessions, Making support accessible, even within Mali are the different proposals made by participants.

3.1.4. Health Professional Practice

Among the participants, 68.75% examined the breast during consultations; 31.25% did not examine it during consultations.

Among the participants, 73.75% proposed the reference of breast cancer cases in the treatment centers.

Overall, 23.75% of participants had good knowledge of the signs of breast cancer, 60% had average knowledge, and 16.25% had poor knowledge.

No hospital intern had good knowledge about the clinical signs of breast cancer, specialist doctors had 43.48% good knowledge, general practitioners 24.14%; obstetrician nurses 33.33% and midwives 5.88%.

Regarding knowledge of risk factors, 32 .50% of participants had a good knowledge of risk factors for breast cancer, 38.75% had a medium knowledge.

No hospital intern or obstetrician nurse in the study sample had a good knowledge of risk factors. General practitioners had the highest rate of good knowledge at 51.72%; 43.48% of specialists and 5.88% of midwives had a good knowledge of risk factors.

4. Comments and Discussion

We conducted a cross-sectional, mixed (quantitative and qualitative) study.

This type of study is interesting because it allows to understand deeply the problem and identify strategies for solving the problem.

It is an original, prospective study, with less bias than retrospective studies.

4.1. Participation in the Study

During the data collection period, 110 health professionals accepted the survey sheets, among these health professionals, 80 participated in this study by self-administration of the questionnaire, a participation rate of 73%.

Our participation rate is close to those of Charlotte Tchente Nguefac and Liese C. C. [2] [8] who found 68% and 76.1% respectively.

However our participation rate is lower than those of Y. A. Sawadogo and Karima Zine [5] [9] who respectively reported 79% and 87% in their studies.

This difference could be explained by the lack of culture of qualitative studies, staff may feel that their anonymity will not be respected.

4.2. Administrative Data

4.2.1. Age

- In our study the mean age was 39.59 years with extremes of 22 and 61 years, the age range of 20 - 40, was the most frequent at 54.75%

We found the same results as Charlotte Tchente Nguefac and Y. A. Sawadogo [2] [5], with an average age of 37 and 39 respectively.

The average age of health professionals in our study was lower than Karima Zine [9] (49) and higher than Samia Ghanem [10] (34).

This difference could be explained by recruitment bias.

4.2.2. Sex

- In our study, male represented 63.75% and female represented 36.25%.

In the other studies, the female sex was the most dominant, so women accounted for 77.85% in the Liese C. C study [8], 52.9% in the Karima study [9].

4.3. Knowledge

4.3.1. Knowledge of Risk Factors

In our study, 33% of healthcare professionals had good knowledge, 39% had average knowledge and 29% had poor knowledge of breast cancer risk factors.

No hospital intern had a good knowledge of risk factors, no obstetrician nurse had a good knowledge, however general practitioners and specialists had respectively 57.69% and 38.46% of good knowledge; 52.17% of midwives had poor knowledge of breast cancer risk factors. In the study by Y. A. Sawadogo [5], knowledge of breast cancer risk factors was 22% for all participants; 63.6% of gynecologists had good knowledge, 14.8% of SF/ME had good knowledge.

Samia [10] showed in her study that 22 participants (16%) had excellent knowledge of risk factors, 33% had very good knowledge, 14% had good knowledge, while the remaining 38% had poor knowledge of the risk factors assessed.

47% of physicians had excellent knowledge and no physician (0%) was considered to have poor knowledge. All the doctors had satisfactory knowledge. In contrast, 56.5% of nurses had poor knowledge and only 1% had excellent knowledge. The average knowledge score for nurses was 43% [10].

We note a lack of knowledge of breast cancer risk factors by health professionals, in our study as well as in those of the authors Burkinabés [5] and Moroccans [10]. This may be related to a lack of training in our health facilities and a lack of involvement of all health professionals in the policy against breast cancer.

Nevertheless some diapers make a good impression, 57.69% of general practitioners in our study had good knowledge, 63.6% of gynecologists in the Y. A. Sawadogo study [5] had good knowledge and 47% of doctors in the Samia study [10] had an excellent knowledge of risk factors. This can be explained by the level of study of doctors compared to other health professionals.

4.3.2. Knowledge of Breast Cancer Signs

In our study 23.75% of health professionals had a good knowledge of the signs of breast cancer, 60% had an average knowledge, 16.25% had a weak knowledge.

No hospital intern had a good knowledge of the clinical signs of breast cancer, specialist doctors had 43.48% of good knowledge, general practitioners 24.14%; obstetrician nurses 33.33% and midwives 5.88%.

In the study of Y. A. Sawadogo [5], a good knowledge of the signs of breast cancer was noted in 15.3% of cases; 63.6% of gynecologists had a good know-

ledge, 7% of midwife/maieuticians (SF/ME) had a good knowledge.

Liese C. C *et al.* [8] reported that 16% of participants could only evoke one clinical sign, while 57% of participants could evoke 4 or 5 clinical signs. 72.2% of doctors in hospitals and 88.9% of doctors in clinics had a good knowledge of breast cancer.

In the various studies [5] [8], doctors had a good knowledge of clinical signs; this can be explained by the high level of knowledge of doctors compared to other health professionals.

4.3.3. Sources of Knowledge

Health professionals who received breast cancer knowledge at medical school accounted for 71.25%. Those who received breast cancer knowledge through health schools, radio, television and continuing education accounted respectively 27.50%; 37.50%; 37.50% and 58.75%.

Liese C. C. [8] reported in her study that 75% of participants who saw the signs of breast cancer on television accounted 75%.

Participants who knew the signs of breast cancer on Radio accounted for 73%.

Participants who saw the signs through the capacity building trainings accounted for 56%.

Karima Zine [9] found that the main source of information for general practitioners on breast cancer was initial medical training (63.5%), followed by seminars (52.9%). Other sources of information were congresses, internet, colleagues, continuing education, medical journals, which accounted for 23.5%, 14.1%, 10.6%, 9.4% and 1.2% of general practitioner respectively.

Jean Dupont Kemfang Ngowa [11] highlighted in her study that the source of information on breast cancer was vocational training (73.5%) and the media (50.3%).

Health professionals who received knowledge through radio and television in our study have lower results than the (Liese C. C.) study. This can be explained by the development of other means of communication such as social networks.

We have the same results as (Liese C. C.) [8]. Compared to health professionals who received knowledge through capacity building (58.75% versus 56%).

4.4. Attitude

4.4.1. Promotion of Breast Self-Palpation

In our study, 75% of health professionals advised women to breast self-palpation.

Jean Dupont Kemfang Ngowa [11] reported that, 49.75% of participants advised breast self-examination at the recommended monthly frequency.

Gynecologists, general practitioners, midwives and state nurses advised women to breast self-palpation, respectively 77.77%, 42%, 50.81% and 25%, reported by KOUAMO II Eitel Igor) [7].

Our result is higher than that of Jean Dupont Ngowa [11], this difference could be explained by the fact that 55% of participants in the study of Jean Dupont Ngowa [11] were nurses and paramedics who do not necessarily work on

the breast.

4.4.2. Social Belief

In our study, staff reported that the delay in diagnosis can also be explained by several factors, among which we have: financial, cultural and religious barriers, social beliefs, ignorance, bad practices, the lack of knowledge of self-medication, the impracticality of self-palpation, the early use of traditional treatment, the denial of the diagnosis or treatment proposed by the doctor in favor of traditional treatment.

Forty-two percent of physicians and 53.5% of other participants believed that breast cancer could go away after prayer [12].

In the Samia Ghanem study [10], the majority (81%) doctors believed that herbal treatments or alternative medical therapies cannot cure breast cancer and all doctors believed that breast cancer cannot go away after prayer without treatment.

Among the nurses, only 22% believed that herbal treatments or alternative medical therapies cannot cure breast cancer and only 40% among nurses believed that breast cancer cannot go away after prayer without treatment.

4.4.3. Breast Cancer Screening

In our study, all participants stated that breast cancer screening was essential, however, it is clear that the screening campaign is struggling to mobilize the population because of the lack of political will. That is, the absence of a mass mammography screening campaign, insufficient awareness of public and private media, insufficient integration of preventive care into care offerings and insufficient trained staff.

In the study by Y. A. Sawadogo [5], all health professionals stated that breast cancer screening was necessary.

KOUAMO II Eitel Igor) [7] revealed that gynecologists, general practitioners, midwives and state nurses, respectively 100%; 94%, 83.06% and 73.07% claimed that screening is necessary.

We have the same results as the different authors [5] [7].

4.5. Practical

4.5.1. Clinical Breast Examination

In our study, 68.75% of participants performed the clinical examination of the breast (ECS) during consultations.

Samia Ghanem [10] reported in her study that 91% of participants performed the clinical breast exam.

- In the study of Y. A. SAWADOGO [5] 90.9% of gynecologists performed the clinical examination of the breast (ECS), 88.9% of SF/ME performed the clinical examination of the breast.

Nasiru A Ibrahim [12] found that 85% of participants performed the clinical breast exam.

Our result is lower than those of the other authors [5] [10] [12] this difference could be explained by the insufficient training of health workers, the insufficient involvement of staff in the fight against breast cancer.

4.5.2. Mammography

In our study, the screening methods evoked by the participants focused on mammography in 81.25% of cases.

Mammography in women aged 50 and over is seen as highly effective by 98% of physicians and 95% of nurses in screening, as reported by Benjamin D [13].

Y. A Sawadogo [5] found in his study that 95.5% of gynecologists reported prescribing mammography for suspicious breast lesions, 84.4% of SF/ME reported prescribing mammography for suspicious lesions.

In the presence of evocative signs, in the study of KOUAMO II Eitel Igor) [7], 55.54% of gynecologists, 67% of general practitioners, 62.84% of midwives and 67.30% of state nurses claimed that they would give a mammogram.

In many respects, mammography would be considered the main method of screening and diagnosis, it is made an abusive indication, the indications of ultrasound and mammography must be respected.

We found the same results as Y. A. Sawadogo [5].

However our result is higher than that of KOUAMO II Eitel Igor [7] this difference could be explained by the formulation of the questions, which formulation can have an impact on the perception and the answers.

4.6. Limitation of This Study

We conducted a cross-sectional, quantitative, qualitative study over 3 months (from 01 October 2022 to 31 December 2022).

This study is interesting because it allowed us to have data on the attitude knowledge and practice of health professionals in the hospital of the district of the commune IV of Bamako.

However it has limitations, the sample size is not large, it is a single-center study, a multicenter study was going to give a large sample and great power to the study.

4.7. Recommendation and Strategies

4.7.1. Healthcare Professionals

Early detection of breast cancer cases during regular consultations;

The organization of screening campaigns;

Promoting breast self-palpation among women;

Involvement of the press in communication for behavior change.

4.7.2. Policymakers

Training of health professionals in the management of breast cancer;

The implementation of a follow-up plan/evaluation of breast cancer control activities;

The endowment of the hospital with material resources for the fight against breast cancer.

4.7.3. Stakeholders

Supporting health professionals and decision-makers in the implementation of policies to fight breast cancer.

4.7.4. Population

Participation in breast cancer control activities.

5. Conclusions

Breast cancer is a common pathology throughout the world, health personnel are at the forefront of the fight against breast cancer, and this fight cannot be effective without trained personnel.

The authorities are struggling to mobilize the various stakeholders in the fight against breast cancer.

Although some efforts have been made, it is nevertheless important to revitalize the policy against breast cancer, through strategic axes, such as staff training, the establishment of infrastructure, the subsidy of acts, good communication about breast cancer.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Inquiry Form (Rest Assured That Your Anonymity Will Be Respected)

I) ADMINISTRATIVE DATA

Age Sex

Profession Quarter

Marital status Ethnicity

Level of study:

Service:

Number of years of professional experience:

Professional Status:

Specialist, General practitioner, intern, midwife, obstetrician nurse

Total number of participants:

II) KNOWLEDGE OF BREAST CANCER

Q1: How will you define breast cancer?

Q2: What is the incidence of breast cancer?

a: 1 - 1.5 million yes no

b: 1.5 million - 2 million yes no

Q3: Can breast cancer be cured?

a: yes b: no

Q4: What is the prognosis of breast cancer?

Q5: What preventive measures against breast cancer do you know?

Risk factors

Q6: What are the risk factors for breast cancer that you are aware of?

Clinical signs

Q7: What are the clinical signs of breast cancer that you are aware of?

Diagnostic

Q8: What are the diagnostic methods of breast cancer that you know?

Q9: What are the therapeutic ways you know?

Q10: What are the sources of knowledge:

Medical School:	yes	no
Nursing School:	yes	no
Radio:	yes	no
Television:	yes	no
Training/capacity building	yes	no

Other sources of information:

III) ATTITUDE TOWARDS BREAST CANCER

Q11: What is your view on breast cancer prevention?

Q12: What is your point of view regarding the diagnosis of breast cancer?

Q 13: How do you like the management of breast cancer in Mali?

Q14: What analysis do you make of the policy against breast cancer in Mali

IV) PRACTICAL

Q15: Do you examine the breast during your consultations?

Yes **No**

If so, what should be the frequency of this examination?

Q16: Do you advise women to self-examine during your consultations?

Yes No

If so, what should be the frequency of this examination?

Q17: What age group is asked for mammography for breast cancer screening?

a: 25 - 40 years yes no

b: 45 - 74 years yes no

Q18: Have you ever heard of the Multidisciplinary Consensus Meeting (MCM)

Yes No

Q19: If so, what are the benefits of MCM?

Q20: What are the therapeutic means you use?

Q21: In a few words, what do you do with a suspicion of breast cancer?

Q22: In a few words, what do you do about breast cancer?

Q23: In a few words what are the difficulties you face in the fight against cancer?