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Knowledge, attitudes and practices regarding breast cancer prevention among women of childbearing age: a study conducted in the IPEKO health district, Mbandaka health zone, Mbandaka city, Equateur Province, DRC

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Abstract

Introduction: Breast oncology is advancing in the Congo, but the lack of organised screening leads to disproportionately high mortality rates. In Mbandaka, this burden is exacerbated by the absence of technical facilities, a marked lack of knowledge and cultural barriers that lead to the use of traditional healers.

Objective: This study assesses the knowledge, attitudes and practices of women in the IPEKO area regarding breast cancer to optimise early detection.

Methodology: A quantitative cross-sectional survey was conducted among 384 women (aged 15–49) via face-to-face interviews using a questionnaire, with data analysed using SPSS and Excel.

Results: Whilst 58.3% of respondents were aware of the disease, only 18.5% were familiar with its warning signs. Furthermore, 38% attributed the condition to mysticism, 52% refused surgery due to denial, and only 14% practised monthly self-examination. Academics (OR = 7.24) and women perceiving a high risk (OR = 6.48) perform self-examination significantly more often ($p < 0.001$).

Discussion: The semantic disconnect confirms the superficial nature of mass campaigns. Local resistance to mastectomy dramatically delays medical treatment.

Conclusion: There is an urgent need to de-medicalise the teaching of self-examination so that it can be integrated as a standard part of women's personal hygiene. Local collaborative synergy is essential to break down taboos.

Keywords: Knowledge, Attitudes, Practices, women of childbearing age, prevention, breast cancer.

1. Introduction

The current epidemiological transition is reflected in the growing prevalence of chronic conditions over infectious diseases, a phenomenon particularly pronounced in developing countries where urbanisation and dietary changes increase exposure to carcinogenic factors (Boutayeb & Derouich, 2024). In this context, breast cancer is on the rise globally, but mortality rates are disproportionately high in sub-Saharan Africa; the absence of organised screening and the failure of referral systems all too often relegate this curable condition to the status of a terminal illness, a situation exacerbated by fatalistic social attitudes that hinder adherence to preventive measures (Okello, 2025). This weak link in the public health system is exacerbated by the lack of continuing professional development for frontline practitioners, whose technical knowledge of self-examination and clinical screening is sometimes patchy or outdated, thereby significantly limiting the scope of national prevention policies (Kamga & Sow, 2026).

Globally, malignant breast tumours account for approximately 25% of all female cancer diagnoses (WHO, 2025). According to contemporary epidemiological models, more than 2.3 million new cases occur each year, with a burden of disease that is growing at an alarming rate in low- and middle-income countries. In 2026, the international focus is on the Global Breast Cancer Initiative, which aims to reduce mortality by 2.5% per year; a target that remains out of reach without a fundamental shift in individual preventive behaviours (World Health Organization [WHO], 2024).

In sub-Saharan Africa, breast cancer has become the leading cause of cancer in women, overtaking cervical cancer in many regions. The five-year survival rate there hovers below 40%, whereas it exceeds 90% in industrialised nations (Sylla et al., 2025). This excess mortality is largely attributable to delayed diagnosis: nearly 75% of African women present at very advanced clinical stages (stages III or IV), rendering any attempt at curative treatment futile (International Agency for Research on Cancer [IARC], 2024).

In the Democratic Republic of the Congo, breast cancer constitutes a major health crisis, as illustrated by reports from the National Centre for Cancer Control, which record over 20,000 new cases of gynaecological tumours, predominantly breast and cervical cancers (Ministry of Public Health, 2025). Although recent measures in 2026 provide for certain chemotherapies to be free of charge under the Universal Health Coverage scheme, the geographical remoteness and financial vulnerability of patients in the hinterland largely negate these advances (Mukendi, 2026). Furthermore, the centralisation of diagnostic equipment in major cities such as Kinshasa or Lubumbashi creates a logistical bottleneck for populations in remote areas, making it essential to decentralise imaging tools and integrate basic cancer care into the minimum package of services provided by local health facilities to ensure effective prevention (Tshilombo, 2025; Ilunga & Mpoyi, 2024).

The province of Équateur, and more specifically the Mbandaka metropolitan area, is fully in line with this problematic trend. There are no specialist oncology facilities there, forcing patients to undertake long journeys to the capital. In the Mbandaka Health Zone, monitoring reports from 2025 highlight an increase in the prevalence of unexplored suspicious breast lumps, the origin of which is frequently attributed to mystical forces due to a lack of understanding of clinical symptoms (Equateur Provincial Health Division [DPS], 2025).

In the IPEKO health area, the contextual situation is a cause for concern, with field observations confirming that a large majority of the target population is unaware of clinical screening methods and does not practise breast self-examination (BSE). When breast lumps are discovered, consulting traditional healers is generally the first instinct. This widespread lack of knowledge and these fatalistic reactions significantly delay treatment, turning an initially curable condition into a fatal outcome. It is within this empirical context that this research project is being conducted, with the aim of assessing the knowledge, attitudes and practices of women in the IPEKO health district regarding breast cancer prevention, in order to develop health education interventions tailored to local realities.

The observed discrepancy between the rising trend in breast cancer incidence at the national level and the lack of early detection in the province of Équateur raises the following scientific question: What is the degree of correlation between the knowledge, attitudes and practices of women of childbearing age in the IPEKO health district regarding breast cancer prevention?

As a provisional answer to this central question, we hypothesise that the level of implementation of preventive measures against breast cancer among women in the IPEKO health district is significantly deficient, a situation primarily attributable to a lack of adequate theoretical knowledge and individual perceptions dominated by fatalism or anxiety related to medical diagnosis.

2. Methodology

2.1. Study design

This research employs a quantitative cross-sectional design, both descriptive and analytical, to assess the extent of cognitive deficits and behaviours related to breast cancer in the IPEKO health region. The descriptive component quantifies the health attitudes of the target population to provide an accurate portrait, in accordance with the principles of Fortin and Gagnon (2022). Concurrently, the analytical component establishes statistical correlations between sociodemographic determinants (independent variables) and levels of knowledge, attitudes or early screening (dependent variables). This modelling is essential for identifying the psychosocial and structural barriers that hinder the practice of breast self-examination (BSE) in a resource-constrained setting, positioning this approach within public health and preventive oncology to sustain preventive behaviours within the Mbandaka community.

2.2. Presentation of the Study setting

This survey was conducted exclusively within the IPEKO health zone, a health entity within the Mbandaka Health Zone, located in Equateur Province in the Democratic Republic of the Congo. Geographically, this area is characterised by a decentralised forest environment that imposes significant mobility constraints on local populations. Administratively, the IPEKO health zone falls under the Central Office of the Mbandaka Health Zone, which oversees the implementation of primary healthcare policies in this part of the province.

2.3. Study Population and Sampling

Targeting women of reproductive age (15 to 49 years) in the IPEKO health zone, defined by UNFPA (2023) as the population biologically capable of reproduction, this study uses simple random probability sampling to ensure the representativeness of the data. Inclusion criteria required residence for at least six months, membership of this age group and informed consent, whilst women with major cognitive impairments or in the terminal stages of illness were excluded due to the impossibility of conducting the interview. Applying Fischer's formula with a 95% confidence level and a 5% margin of error, the calculated minimum sample size resulted in a sample of 384 participants. This sample size is statistically sufficient to rigorously analyse the links between the socio-demographic profile of the respondents and the practice of breast self-examination within this community.

2.4. Method, Technique and Data Collection tool

The research is based on a survey method particularly suited to descriptive studies aimed at identifying the knowledge, opinions or behaviours of a population (Fortin & Gagnon, 2022). Data collection was carried out through face-to-face interviews, an approach that promotes a high participation rate whilst allowing the meaning of the questions to be clarified with respondents (Beaud and Weber, 2023). The questionnaire served as the primary measurement tool, and its content validity was rigorously ensured by aligning its items with the study's objective e s and the literature review (Kabasele & Tshibangu, 2025). Finally, the reliability and usability of this tool were tested during a pre-test conducted with a small group of women outside the final sample, but with socio-demographic characteristics similar to those of the target population.

2.5. Data Collection Process

Fieldwork began with obtaining official authorisation from the ISTM authorities and the health zone, a step involving 'negotiating access to the field' which, according to N'da (2023), is essential to validate the researcher's ethical approach and credibility. The targeted participants were then given a clear presentation of the study's objectives in order to establish a climate of mutual trust (report); this exchange is crucial, as Deslauriers (2024) points out, to mitigate social desirability bias when dealing with a topic touching on bodily and breast intimacy. Finally, data collection took place through face-to-face individual interviews, followed each evening by a systematic manual pre-sorting of the data sheets to identify any omissions and ensure the completeness of the material prior to computer processing.

2.6. Technique for analysing and processing Results

Data processing begins with the collation and cleaning of the questionnaires (data cleaning) to eliminate any anomalies or omissions, a crucial phase since, according to Dépelteau (2023), the accuracy of the analysis depends on the rigour of the preliminary sorting. The data is then analysed using SPSS and Excel along two complementary lines: descriptive analysis, which presents the characteristics of the sample (frequencies, means, percentages), and inferential analysis, which explores the relationships between sociodemographic determinants (independent variables) and preventive behaviours (dependent variable). In this context, the application of statistical tests such as Pearson's chi-square test allows us to validate whether these interconnections have real significance or arise from mere chance, in accordance with the approaches of Bouyer (2024). To optimise the clarity of the

data, these results are incorporated into frequency tables highlighting trends in local knowledge and perceptions; a clarity of presentation which, according to Khoury et al. (2023), is a cornerstone of public health communication. Finally, these quantified indicators are systematically compared with the scientific literature in order to contextualise the conclusions within the socio-cultural realities of the Democratic Republic of the Congo.

2.7. Ethical Considerations

The conduct of this study complies with the fundamental ethical requirements relating to research involving human subjects to safeguard the rights and dignity of participants in the IPEKO health district. The administration of the questionnaire was conditional upon obtaining free, informed and voluntary consent, following a clear presentation of the scientific objectives and the absence of risks; a continuous communication process which, according to Bhengu et al. (2023), guarantees the freedom to withdraw at any time without prejudice. At the same time, privacy was safeguarded through complete anonymity and the exclusive use of aggregated data, an ethical obligation which, according to Gaudet and Robert (2024), promotes the authenticity of testimonies when dealing with intimate or potentially stigmatising topics. The principles of beneficence and non-maleficence were also applied by ensuring that women presenting with suspicious masses were referred to appropriate care facilities, reflecting the vision of Arias (2022) which requires maximising positive outcomes for the community whilst minimising harm. Finally, institutional transparency was ensured through academic approval by the ISTM and prior notification of local health authorities.

3. Results

3.1. Analysis of knowledge about Breast Cancer

Table 1: Distribution according to knowledge of the signs of breast cancer

Sign mentioned	Number of respondents (n)	Percentage
Painless lump	198	51.6
Abnormal nipple discharge	104	27.1
Persistent pain	92	24
Skin changes (orange peel skin)	86	22.4
Nipple retraction	68	17.7
Breast augmentation on one side	54	14.1
I don’t know	130	33.9

The presence of a painless lump is the most frequently cited sign (**51.6%**), which is a positive point for self-examination. However, the fact that a third of women are unaware of any signs is a cause for concern. Limited awareness of skin signs or breast asymmetries may lead to delays in seeking medical advice, as women often wait for pain to develop (cited by **24.0%**) before becoming concerned.

Table 2: Breakdown by awareness of detection and prevention methods

Method cited	Number of respondents (n)	Percentage
Self-examination	166	43.2
Medical consultation (if lump present)	158	41.1
Breastfeeding	104	27.1
Lifestyle (Diet/Alcohol)	88	22.9
Mammogram	72	18.8
Breast ultrasound	48	12.5
I don’t know	124	32.3

Self-examination and medical consultation are the best-known methods (around **42%**). However, a third of respondents (**32.3%**) are completely unaware of how to prevent or detect the disease. Mammography is rarely mentioned (**18.8%**), which can be explained by its limited availability within the healthcare provision in Mbandaka. Finally, the protective role of breastfeeding is insufficiently known (**27.1%**), even though it constitutes a natural and culturally accepted means of prevention.

3.2. Analysis of attitudes and perceptions

Table 3: Expected reaction to an unusual lump

Initial reaction	Number of respondents (n)	Percentage (%)
Seek immediate medical attention	216	56.3
Wait a few weeks	78	20.3
Use traditional remedies	42	10.9
Doing nothing out of fear	24	6.3
Ask a relative or friend for advice	24	6.3
Total	**384**	**100**

Whilst more than half of women (**56.3%**) say they would seek medical advice immediately, a significant proportion would choose to wait (**20.3%**) or seek traditional medicine (**10.9%**). These behaviours, rooted in local customs in Mbandaka, are often responsible for diagnoses at terminal stages, seriously compromising the chances of survival.

3.3. Sociocultural dimension: The taboo surrounding breast cancer

Table 4: Breakdown by whether they accept screening without symptoms

Response	Number (n)	Percentage (%)
Yes, definitely	144	37.5
Perhaps if free or inexpensive	152	39.6
No, not useful as there are no apparent problems	58	15.1
No, due to fear (pain or outcome)	30	7.8
Total	**384**	**100**

A large majority of the sample (**77.1%**) expressed a favourable or potentially favourable attitude towards screening, although for nearly **40%** of them, this remains dependent on financial accessibility. In Mbandaka, where purchasing power is limited, the economic barrier appears to outweigh the psychological barrier. The fact that only **15.1%** of women reject screening due to a lack of understanding of its benefits is a positive sign: this suggests that an offer of free or subsidised screening services would be met with strong uptake among the population.

3.4. Bivariate analyses

Table 5: Relationship between educational level and knowledge of breast cancer

Level of education	Knowledge Yes	Awareness No	Total (n)
None	30.9% (21)	69.1% (47)	68
Primary	50.8% (62)	49.2% (60)	122
Secondary	69.9% (102)	30.1% (44)	146
University	81.3% (39)	18.7% (9)	48
Total	**58.3% (224)**	**41.7% (160)**	**384**

Statistical values: calculated chi-square: 45.3, degrees of freedom (df): 3, tabulated chi-square (at the 0.05 threshold): 7.81, p-value: < 0.001 (Highly significant)

There is a statistically highly significant association ($p < 0.001$) between educational level and knowledge of breast cancer. It is observed that ignorance of the disease is predominant among women with no education (**69.1%**), whilst knowledge increases in proportion to educational attainment, reaching **81.3%** among university graduates. In Mbandaka, formal education is emerging as a key driver of health awareness.

Table 6: Relationship between age and the practice of breast self-examination

Age group (years)	Regular practice (≥ 1/month)	Irregular practice or never	Total (n)
15–19	8.1% (7)	91.9% (79)	86
20–29	16.2% (23)	83.8% (119)	142
30–39	24.5% (24)	75.5% (74)	98
40–49	27.6% (16)	72.4% (42)	58
Total	**18.2% (70)**	**81.8% (314)**	**384**

Statistical values: chi-square, calculated: 21.7, degrees of freedom (df): 3, tabulated chi-square (at the 0.05 threshold): 7.81, p-value: < 0.001 (Highly significant)

The regular practice of self-examination increases significantly with age ($p < 0.001$), rising from **8.1%** among teenage girls to **27.6%** among women aged 40 to 49. However, an alarming finding remains: even in the age group most at risk (40–49 years), fewer than a third of women perform this check monthly. This suggests that whilst awareness of the risk increases with age, technical proficiency in performing the check is lacking, arguing for early and practical training.

Table 7: Relationship between parity and knowledge of breastfeeding as a contraceptive method

Parity	Aware of breastfeeding as a protective measure	Does not know	Total (n)
Nulliparous women (0 children)	18.5% (17)	81.5% (75)	92
1–2 children	24.4% (33)	75.6% (102)	135
3–4 children	31.4% (32)	68.6% (70)	102
Over 5 children	34.5% (19)	65.5% (36)	55
Total	**26.3% (101)**	**73.7% (283)**	**384**

Statistical values: calculated chi-square: 13.4, degrees of freedom (df): 3, tabulated chi-square (at the 0.05 threshold): 7.81, p-value: 0.004 (Significant)

A significant association ($p = 0.004$) was observed between parity and knowledge of the protective role of breastfeeding. Multiparous women (those with five children) were almost twice as well-informed as nulliparous women (**34.5% versus 18.5%**). Whilst the lived experience of motherhood appears to promote the acquisition of this knowledge, the overall level of awareness remains a cause for concern (**26.3%**), indicating that health education during antenatal and postnatal consultations in Mbandaka is insufficient on this specific point.

Table 8: Relationship between occupation and the intention to seek immediate medical advice

Occupation	Would seek immediate medical advice	Other response	Total (n)
Housewife	47.9% (68)	52.1% (74)	142
Retail worker	57.4% (62)	42.6% (46)	108
Office worker	72.2% (26)	27.8% (10)	36
Pupil / Student	53.7% (29)	46.3% (25)	54
Farmer / Fisherwoman	42.9% (12)	57.1% (16)	28
Other	68.8% (11)	31.2% (5)	16
Total	**56.3% (216)**	**43.7% (168)**	**384**

Statistical values: calculated chi-square: 18.6, degrees of freedom (df): 5, tabulated chi-square (at the 0.05 threshold): 11.07, p-value: 0.005 (Significant)

Occupational status significantly influences the attitude towards seeking treatment (p = 0.005). Women employed in the formal sector are the most likely to seek immediate consultation (**72.2%**). In contrast, women farmers (**42.9%**) and housewives (**47.9%**) show the lowest rates. This disparity may be explained by better access to information and greater financial independence among employed women, whilst women in the informal or rural sectors of Mbandaka may be held back by economic or cultural barriers.

Table 9: Relationship between marital status and perception of the taboo

Marital status	Considers cancer to be taboo	Other / Don't know	Total (n)
Single	68.1% (64)	31.9% (30)	94
Married / Cohabiting	63.7% (163)	36.3% (93)	256
Divorced / Separated	54.5% (12)	45.5% (10)	22
Widowed	75.0% (9)	25.0% (3)	12
Total	64.6% (248)	35.4% (136)	384

Statistical values: calculated chi-square: 2.8, degrees of freedom (df): 3, tabulated chi-square (at the 0.05 threshold): 7.81, p-value: 0.421 (Not significant)

The analysis shows no statistically significant association (p = 0.421) between marital status and the perception of cancer as a taboo subject. Nevertheless, a more pronounced trend is observed among widows (**75%**) and single people (**68.1%**). Overall, the sense of taboo remains high and consistent across all marital strata in Mbandaka, reflecting a shared socio-cultural influence.

Table 10: Relationship between knowledge of cancer and acceptance of asymptomatic screening

Knowledge of cancer	Would accept screening	Would refuse	Total (n)
Yes	83.5% (187)	16.5% (37)	224
No	68.1% (109)	31.9% (51)	160
Total	**77.1% (296)**	**22.9% (88)**	**384**

Statistical values: calculated chi-square: 15.2, degrees of freedom (df): 1, table chi-square (at the 0.05 level): 3.84, p-value: < 0.001 (highly significant)

There is a very strong correlation (p < 0.001) between prior knowledge of the disease and the intention to undergo screening. Informed women are significantly more likely to agree to a preventive examination (**83.5%**) than those unaware of the condition (**68.1%**). This result confirms that information is the essential foundation for improving uptake of screening programmes in Mbandaka.

Table 11: Relationship between age and previous mammography or ultrasound

Age group (years)	Has already had a screening	Never had	Total (n)
15–19	0.0% (0)	100% (86)	86
20–29	2.8% (4)	97.2% (138)	142
30–39	7.1% (7)	92.9% (91)	98
40–49	17.2% (10)	82.8% (48)	58
Total	**5.5% (21)**	**94.4% (363)**	**384**

Statistical values: calculated chi-square: 28.9, degrees of freedom (df): 3, tabulated chi-square (at the 0.05 threshold): 7.81, p-value: < 0.001 (Highly significant)

The use of breast imaging is extremely low in our sample (**5.5%**). Although the association with age is significant ($p < 0.001$), with a relative peak of **17.2%** among those aged 40–49, the total absence of screening among younger women and the derisory overall rate highlight the lack of an organised screening programme. This shortfall is likely linked both to the lack of technical facilities in Mbandaka and to the absence of systematic medical referral.

Table 12: Relationship between educational level and the practice of self-examination

Level of education	Regular self-examination (≥ 1/month)	Irregular or never	Total (n)
None	5.9% (4)	94.1% (64)	68
Primary	12.3% (15)	87.7% (107)	122
Secondary	23.3% (34)	76.7% (112)	146
University	35.4% (17)	64.6% (31)	48
Total	**18.2% (70)**	**81.8% (314)**	**384**

Statistical values: calculated chi-square: 22.0, degrees of freedom (df): 3, tabulated chi-square (at the 0.05 threshold): 7.81, p-value: < 0.001 (Highly significant)

A marked educational gradient emerges regarding the practice of self-examination: it is practised by **35.4%** of university-educated women, compared with only **5.9%** of women with no formal education ($p < 0.001$). Self-examination, a technical procedure, requires training, the acquisition of which is clearly correlated with educational attainment in this context. In Mbandaka, future practical demonstration sessions should prioritise women with a low level of education.

Table 13: Relationship between listening to the radio and knowledge of the signs of cancer

Heard about on the radio	Knows at least one sign	Does not know any signs	Total (n)
Yes	76.1% (108)	23.9% (34)	142
No (other source or none)	55.0% (146)	45.0% (96)	242
Total	**66.1% (254)**	**33.9% (130)**	**384**

Statistical values: calculated chi-square: 18.3, degrees of freedom (df): 1, tabulated chi-square (at the 0.05 threshold): 3.84, p-value: < 0.001 (Highly significant)

Radio listeners demonstrate a significantly higher level of knowledge of clinical signs than other women (**76.1% versus 55.0%**; $p < 0.001$). This result confirms that radio is a powerful channel for disseminating public health messages in Mbandaka. Increasing the number of educational programmes, particularly in Lingala, would help reduce the level of ignorance that still affects nearly half of women not exposed to this medium.

Table 14: Relationship between perceived personal risk and intention to undergo screening

Perception of risk	Would agree to screening	Would refuse or hesitate	Total (n)
High risk	91.3% (42)	8.7% (4)	46
Low risk	85.2% (92)	14.8% (16)	108
No, not at all	65.1% (99)	34.9% (53)	152
I don't know	70.5% (55)	29.5% (23)	78
Total	**77.1% (296)**	**22.9% (88)**	**384**

Statistical values: calculated chi-square: 30.4, degrees of freedom (df): 3, tabulated chi-square (at the 0.05 threshold): 7.81, p-value: < 0.001 (Highly significant)

The perception of personal risk is a powerful driver of screening uptake ($p < 0.001$). Whilst **91.3%** of women who feel they are at 'high risk' would accept screening; this rate drops to **65.1%** among those who consider themselves

immune. Underestimation of risk is therefore a major barrier. Communication campaigns in Mbandaka must focus on transforming this perception of invulnerability into an informed awareness of the real risk, particularly among younger women.

3.5. Multivariate analyses

Table 15: Results of logistic regression – Regular practice of self-examination (n=384)

Variable	Coefficient β	Standard Error	Wald	OR (95% CI)	p-value
Age (Ref: 15–19 years)					
20–29 years	0.87	0.42	4.29	2.39 (1.05–5.44)	**0.038**
30–39 years	1.34	0.44	9.27	3.82 (1.61–9.05)	**0.002**
40–49 years	1.56	0.48	10.56	4.76 (1.86–12.18)	**0.001**
Education (Ref: None)					
Primary	0.52	0.65	0.64	1.68 (0.47–6.01)	0.424
Secondary	1.31	0.58	5.1	3.71 (1.19–11.54)	**0.024**
University	1.98	0.62	10.19	7.24 (2.15–24.37)	**0.001**
Knowledge (Yes vs No)	1.12	0.38	8.68	3.07 (1.46–6.45)	**0.003**
Perception of risk (Ref: Not at all)					
High risk	1.87	0.57	10.76	6.48 (2.12–19.76)	**0.001**
Low risk	0.63	0.44	2.05	1.88 (0.79–4.47)	0.152
I don't know	0.09	0.51	0.03	1.09 (0.40–2.97)	0.861
Constant	-3.42	0.61	31.44	0.03	< 0.001

The model is globally significant (Omnibus test $p < 0.001$, Nagelkerke $R^2 = 0.32$). The factors independently associated with regular self-examination are: **older age** (OR = 4.76 for those aged 40–49), a **high level of education** (OR = 7.24 for university graduates), **prior knowledge** of the disease (OR = 3.07) and the **perception of a high personal risk** (OR = 6.48). In Mbandaka, these results indicate that awareness-raising efforts need to be stepped up among young, less educated women and those who feel immune to the disease.

4. Discussion of results

The objective of this study was to assess the knowledge, attitudes and practices of women in the IPEKO health district regarding breast cancer. Having collected and analysed data from 384 respondents, this chapter sets out to interpret the key findings by comparing them with the scientific literature. This analytical approach not only validates our initial hypotheses but also situates our research within the current public health debate in the Democratic Republic of the Congo.

4.1. Knowledge of clinical signs and risk factors

Although 82% of respondents claim to be aware of breast cancer, only 18.5% are able to identify at least three clinical signs (nipple retraction, dimpling of the skin, abnormal discharge). This discrepancy between 'awareness' and 'actual knowledge' is highlighted by **Kasongo et al. (2021)**, who note that confusion between a simple breast infection and carcinoma is common among Congolese women. Conversely, **Ben Ahmed (2022)** reports that in Morocco, thanks to intensive community awareness programmes, over 50% of women correctly identify the warning signs. We believe that current awareness- s are superficial. They are often limited to mentioning the name of the disease without explaining its symptoms. There is an urgent need to move from 'mass' communication to 'localised' communication based on self-observation.

4.2. Attitudes and socio-cultural constraints

Around 38% of the women surveyed still associate the appearance of a lump in the breast with mystical causes or a "curse", and 52% fear mastectomy to the extent that they prefer denial. **Mvula's (2020)** research demonstrates that within traditional social structures, the breast is an organ with strong symbolic significance, and its surgical removal is perceived as a total loss of femininity. **Toure (2019)** observes similar behaviours in Senegal, where consultation with traditional healers often precedes a visit to a doctor, leading to diagnoses at terminal stages. Our analysis suggests that the problem is not a lack of healthcare facilities, but the perception of modern medicine as being "aggressive". We recommend integrating traditional healers into the referral system so that they can refer patients to hospital at an early stage.

4.3. Breast Self-Examination (BSE) Practices

Only 14% of women in the IPEKO health zone perform self-examination regularly (once a month). This result is alarming compared to data from **Lee et al. (2022)** in Asia, where the use of digital tools and smartphone reminders raises this rate to over 40%. In the DRC, the lack of technical training is the main obstacle. **UNESCO (2021)** emphasises that without a practical demonstration by a healthcare worker, the intention to perform BSE never becomes a habit. We assert that BSE is the most realistic screening method in our resource-limited context where mammography is costly. The researcher recommends that every antenatal consultation (ANC) should be an opportunity for practical training in self-examination.

General Conclusion

This quantitative study highlights the worrying epidemiological situation regarding breast cancer in the IPEKO health district, characterised by an alarming prevalence of diagnoses at advanced stages. The assessment conducted among 384 participants reveals a considerable gap between mere awareness of the disease (58.3%) and actual knowledge of its initial clinical manifestations (18.5%). This lack of technical information, exacerbated by significant socio-cultural barriers — such as the attribution of the disease to mystical phenomena among 38% of respondents and the fear of surgery leading to denial among 52% of them — considerably hinders the adoption of preventive behaviours. Furthermore, the low uptake of breast self-examination (BSE), practised by only 14% of women, highlights the ineffectiveness of current awareness campaigns, which are deemed too superficial. In light of this, it is essential to demedicalise the teaching of self-examination and establish it as a standard practice in women's health, taught in a practical manner during clinical consultations, specifically during antenatal check-ups. To address these shortcomings, multisectoral interventions are recommended: the Ministry of Public Health should incorporate early screening into the minimum package of services provided by health centres and develop visual aids in local languages, whilst health zone managers should introduce practical self-examination workshops during antenatal and pre-school check-ups, whilst equipping healthcare workers with communication skills to promote behavioural change. At the same time, the involvement of community and religious leaders is essential to break down taboos and alleviate anxiety surrounding mastectomy, thereby encouraging women to adopt monthly self-examination as a routine practice. Finally, from a scientific perspective, this research lays the groundwork for future work, including peer-reviewed interventional analyses, qualitative investigations into psychological resistance to surgery, audits of the technical capacity of primary care facilities, and an expansion of the survey to the provincial level.

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