PRACTICE OF BREAST SELF-EXAMINATION OF WOMEN IN SELECTED BARANGAYS OF BAMBANG, NUEVA VIZCAYA: BASIS FOR HEALTH TEACHING PLAN

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ABSTRACT

In low-to middle-income countries such as the Philippines, where advanced breast cancer screening options are limited, breast self-examination (BSE) plays a valuable role in the early detection of breast abnormalities. Despite its benefits, numerous studies consistently show that while women are aware of BSE, they only practice it regularly due to a lack of proper knowledge and training. A qualitative-descriptive research design was employed to investigate the factors influencing women's BSE practices. Using purposive and snowball sampling, 18 participants from Barangay Banggot, Buag, and Homestead, Bambang, Nueva Vizcaya, were selected. Data was collected through face-to-face, in-depth interviews using a semi-structured, open-ended questionnaire. With participants' consent, interviews were audio-recorded. Subsequently, they analyzed their perspectives on BSE using thematic analysis to provide a deeper understanding. The study revealed a significant gap between awareness and actual practice of BSE. Although participants generally recognized the importance of BSE for early detection of breast problems, their techniques varied widely and often deviated from recommended guidelines for palpation, finger pad use, body positioning, and visual and nipple examinations. Additionally, the frequency and timing of BSE were inconsistent, with most women performing it irregularly rather than monthly. The preference for conducting BSE in private settings sometimes resulted in incomplete examinations. These findings highlight a critical need for targeted community health education and training programs to equip women with correct BSE techniques and routines, thereby maximizing their potential for early breast cancer detection and improving health outcomes.

Keywords: Breast cancer, breast self- examination, community health education, early detection, women

INTRODUCTION

BSE plays a significant role in safeguarding and advancing the health and well-being of women in the community. Its simplicity, affordability, and convenience enable women to be knowledgeable about their health conditions and encourage them to seek help whenever a problem arises. Nevertheless, even though BSE is one of the cheapest screening methods for early detection — allowing women to perform it themselves, in private, and on their own schedule —few practice it due to insufficient knowledge and awareness (Terfa et al., 2020).

Numerous researchers in countries such as Nigeria, Ethiopia, Bangladesh, India, and Pakistan have investigated awareness, knowledge, attitudes, and practices related to BSE. However, in the Philippines, despite some research on general health awareness, studies specifically examining BSE are scarce, particularly within community-based settings. Existing research tends to focus on smaller, defined groups such as students, as seen in the study by Amoroto et al. (2014) involving 496 students from Lyceum of the Philippines University-Laguna, and teachers, as in the study of Varona et al. (2021) with 348 public school teachers in Aurora, Philippines. This limited scope creates a gap in our understanding of how the broader female population in the Philippines perceives and engages in BSE. Hence, the researchers conducted a study with women from the general community to obtain a broader perspective on their BSE

practices and the reasons for doing so. More so, the results of this investigation allow the researchers to create a teaching plan that could contribute to the promotion of women' s health and prevent conditions that can be precursors for breast cancer, thus making lives longer and healthier for the great nurturers of the human race, the women.

Breast self-examination (BSE) is a simple and cost-effective method introduced in the 1950s by Dr. Cushman Haagensen to help women detect breast abnormalities early, especially in settings where mammography and regular health check-ups are not readily accessible. BSE involves visually and physically assessing the breasts for any changes, such as lumps, swelling, or nipple abnormalities. While its effectiveness remains debated, studies have shown that BSE contributed significantly to early detection in low-resource areas, with some research indicating it helped diagnose nearly half of breast cancer cases in certain regions. The American Cancer Society and the World Health Organization emphasize the importance of women becoming familiar with their breasts and recommend monthly BSE starting at age 20.

Although critics argue that BSE may not lower mortality rates and could lead to unnecessary biopsies, other experts support its value, especially when combined with clinical breast examinations and mammography. In many low- to middle-income countries, such as the Philippines, where access to advanced screening tools is limited, BSE offers a practical and empowering approach to early detection. The World Health Organization recommends performing BSE in three steps: in the shower, using different pressure levels with the fingers; in front of a mirror, visually inspecting for changes; and lying down to evenly palpate the breast and armpit areas. Despite the controversies, BSE remains an essential practice in raising breast cancer awareness and promoting women's proactive involvement in their health.

Statement of the Objectives

This study, conducted from January to March 2025, primarily aimed to explore breast self-examination (BSE) practices in selected barangays of Bambang, Nueva Vizcaya. Specifically, it seeks to address the following objectives:

1. To explore the practice of the participants on breast self-examination (BSE).
2. To determine the reasons for the participants performing breast self-examination (BSE).
3. To develop and propose a possible health teaching plan based on the identified results.

METHODOLOGY

A qualitative descriptive research design was employed to explore and describe women's experiences and practices regarding breast self-examination (BSE) in Bambang, Nueva Vizcaya. This design allowed for an in-depth understanding of participants' perspectives and reasons for engaging in BSE. The study was conducted in three central barangays of Bambang, Nueva Vizcaya (Banggot, Buag, and Homestead), selected for their high population density and the municipality's high incidence of breast cancer cases [according to Provincial Information Health Office (PIHO) data as of 2023].

Participants were women aged 20 and above, permanent residents of the selected barangays, able to communicate effectively, and with a family history of breast cancer. Exclusion criteria included women with disabilities, communicable diseases, or a current breast cancer diagnosis. Purposive sampling, combined with snowball sampling, was used to recruit participants. A minimum of 5 participants per barangay was initially targeted, and data collection continued until data saturation was achieved. (The final sample consisted of women aged 20-40, with tertiary education, married, employed in commerce, and a family history of

cancer).

Data was collected through individual in-depth interviews using a semi-structured interview guide. The guide included two sections: First, gathering of socio-demographic information (age, highest educational attainment, marital status, occupation, family history of breast cancer) as additional information about each respondent. Explored participants' experiences and practices related to BSE, using open-ended questions such as: "Can you tell me about your experiences with Breast Self-Examination?", "What factors influence your decision to engage in Breast Self-Examination?", and "Could you describe the process of Breast Self-Examination as you understand it?". Researchers also observed nonverbal cues during the interviews.

Thematic analysis was used to analyze the interview data. The process involved verbatim transcription of audio-recorded interviews, familiarization with the data, identification of recurring themes and patterns (saturated responses), code generation, theme development and refinement, and interpretation within the relevant theoretical framework.

Ethical approval was obtained from Saint Mary's University Research Ethics Board (SMUREB). Informed consent was obtained from all participants prior to the interview, including an explanation of the study's purpose, procedures, risks, benefits, confidentiality, and the right to withdraw at any time. Measures were taken to address potential vulnerabilities, particularly among older participants, by providing trusted kin when needed and ensuring participants' comfort throughout the interview process. Data confidentiality was maintained with codes to protect participant anonymity. The dissemination plan included sharing findings with the barangay council and conducting interactive demonstrations of proper BSE techniques.

RESULTS AND DISCUSSION

Section 1: Practice of Breast Self- Examination

Variations in Techniques and Methods

The findings revealed significant disparities in how participants conducted BSE, particularly in palpation patterns, finger pad usage, and body positions. While most participants utilized circular palpation patterns with the recommended two to three fingers, some deviated by employing side-by-side or gentle squeezing motions. This discrepancy highlights the need for standardized techniques to improve diagnostic accuracy and reduce false-positive findings. Educational interventions emphasizing proper palpation patterns can help enhance the effectiveness of BSE and minimize adverse outcomes associated with incorrect techniques.

Finger Pads Usage

Participants showed varying practices in using finger pads during palpation: some used three fingers, others two, and others all five. Recognizing the importance of tactile examination, promoting the consistent use of three finger pads can enhance lump detection accuracy and improve the overall effectiveness of BSE. Standardized training is crucial to ensure uniformity in finger pad usage and palpation pressure, ultimately enhancing early breast cancer detection rates.

This further supports that most participants recognize the importance of the tactile method when checking their breasts. It also suggests that most participants know which finger pads to use, as advised by the National Breast Cancer Foundation (NBCF). However, variation in

finger usage indicates a need for further health education or training on BSE, as participants may be improvising based on personal comfort or understanding. This could lead to missed lumps or abnormalities, reducing the effectiveness of BSE. Supporting this, Zeng et al. (2002) found that using three finger pads consistently improves lump detection accuracy. Variability in finger use and palpation pressure worldwide could decrease BSE sensitivity. These findings align with Kadir et al.'s (2023) earlier work, emphasizing the need for standardized training that provides a uniform approach to teaching BSE, ensuring that all women receive the same foundational knowledge and skills necessary for effective self-examination (Kadir et al., 2023). Overall, promoting the recommended three-finger technique through education could enhance BSE accuracy and early breast cancer detection.

Position

The study revealed variations in the positions adopted by participants during breast self-examination (BSE), with some preferring to perform it while standing and others while lying down. Both positions offer distinct advantages in detecting abnormalities, underscoring the value of incorporating both into regular BSE practice. This aligns with the National Breast Cancer Foundation's (NBCF) recommendations, which advise using multiple positions for thorough breast coverage. Complementing these findings, Nguyen et al. (2023) reported that training women to perform BSE in both positions significantly improved the detection of lumps during clinical evaluations, contributing to earlier diagnosis and intervention. Collectively, these findings highlight that adopting both standing and lying positions during BSE promotes more comprehensive breast assessment and enhances the likelihood of early abnormality detection.

Visual Inspection

The findings highlight that many women acknowledge the importance of visual inspection as an essential step in breast self-examination (BSE), which plays a critical role in detecting visible changes, such as variations in breast size, shape, or color. Nevertheless, barriers such as limited awareness, inadequate knowledge, and low confidence continue to impede consistent practice. Supporting this, Oku et al. (2021) found that many women remain uncertain about the correct BSE techniques and the specific signs warranting concern, underscoring the ongoing need for enhanced guidance and education. Overall, the practices expressed by the participants underscore the necessity of comprehensive health education programs that focus on the proper execution and significance of BSE. This conclusion resonates with the findings of Apatić and Lovrić (2023), who emphasized that effective health education interventions substantially improve women's awareness and regular self-examination. Similarly, Kandasamy et al. (2024) highlighted the importance of targeted educational initiatives to improve women's knowledge of BSE and technical proficiency. Collectively, these findings suggest that strengthening educational strategies can bridge the gap between knowledge and practice, empowering women to perform BSE confidently. Consequently, the promotion of structured and continuous health education is essential for improving early detection of breast abnormalities and ultimately reducing breast cancer morbidity and mortality rates.

Inconsistent Timing for BSE

Participants exhibited irregularities in the timing and frequency of BSE, with some engaging in self-examinations based on personal schedules, symptoms, or misconceptions. Addressing these deviations from recommended practices through targeted health education is essential to emphasize the importance of regular, timely BSE. Educating women on the significance of monthly self-examinations can help establish a routine that enhances early detection and reduces the risk of delayed diagnosis.

Personalized Approaches to BSE

The study highlighted the influence of situational aspects such as location and clothing preferences on BSE practices. Participants preferred conducting BSE in private, comfortable settings such as the bathroom and bedroom, without restrictive clothing. Recognizing the impact of comfort and privacy on BSE motivation underscores the importance of creating conducive environments for self-examination. Health education should provide practical tips on choosing the right setting and attire for BSE to encourage regular and thorough examinations.

Section 2: Reason for Performing BSE

Social Influence

The study revealed that social influence played a significant role in motivating women to engage in Breast Self-Examination (BSE). This influence stemmed from various sources such as family members, friends, healthcare providers, and community awareness campaigns. This influence encompassed educational messages from BSE advocates, the impact of social media on raising awareness, and the influence of community discussions. The study highlighted that social influence, including education and community dynamics, significantly shaped women's engagement in BSE practices, with platforms such as social media contributing to increased awareness and knowledge of breast health issues.

This social influence as a key motivator for BSE emphasizes the interconnected nature of individual behaviors and community dynamics in shaping breast health practices. Social media was found to account for about 65% of women's knowledge of breast cancer risk factors and screening, which, in turn, influenced preventive behaviors such as BSE (Sinha & Sharman, 2021). Also, the study by Anggraini et al. (2022) showed that social media's positive effects on breast cancer knowledge, self-efficacy, and BSE practice among women of childbearing age reinforce the role of digital platforms in raising awareness. Thus, these provide strong evidence that social influence through education, social media, and community dynamics is a primary driver for women's engagement in breast self-examination.

Pain

Physical sensations such as pain, heaviness, or discomfort in the breast often serve as key motivators for women to engage in breast self-examination (BSE). In the present study, more than half of the participants reported performing BSE primarily in response to these sensations, indicating that bodily discomfort prompts heightened body awareness and self-assessment. This pattern aligns with findings by Naz et al. (2024), who emphasized that familiarization with one's body facilitates the recognition of abnormalities and that experiences of pain or discomfort often encourage self-examination. Similarly, research conducted in South Africa revealed that women who experienced breast pain were more likely to perform BSE and seek medical attention, underscoring the role of physical sensations in fostering proactive health behaviors (Sarmah, 2024). While pain can act as an initial signal for self-awareness, health education initiatives should guide women in distinguishing between normal sensations and symptoms requiring medical evaluation. Promoting regular, pain-free BSE practices can reduce anxiety and enhance early detection of significant breast changes.

Section 3: Health Teaching on Breast Self-Examination

The health teaching plan on Breast Self-examination is based on the results gathered and on the framework of Bastable (2007). It includes the following aspects: targeted learners, setting, purpose, goal, objective/s, content outline, method of instruction, time allotment,

resources, and method of evaluation. The plan's content was based on the study's results.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study investigated breast self-examination (BSE) practices among women in selected barangays of Bambang, Nueva Vizcaya, revealing a complex interplay of factors influencing adherence to recommended guidelines. The findings highlight a significant gap between awareness and consistent, correct practice. While many participants demonstrated some familiarity with BSE, inconsistencies in technique, timing, and motivation emerged as major themes. Incorrect palpation methods, irregular scheduling (often reactive to pain rather than proactive), and a reliance on social influence rather than established health recommendations were prevalent. The preference for performing BSE in private settings, often without restrictive clothing, underscores the importance of considering individual preferences in designing effective health interventions.

These findings underscore the need for a multi-pronged approach to improving BSE uptake and adherence. Future interventions should not only focus on teaching correct techniques but also address the underlying behavioral, social, and cultural factors influencing practice. A comprehensive strategy that integrates targeted education, community-based support, and integration with existing healthcare services is crucial to bridging the gap between knowledge and action, ultimately promoting early detection and improved breast health outcomes. The development and evaluation of culturally sensitive educational materials and delivery methods are the next essential steps.

Recommendations

1. Integrate BSE education into local health initiatives, train Barangay Health Workers (BHWs), and foster collaboration among LGUs. Allocate resources to support these programs.
2. Conduct seminars, utilize social media campaigns, and train healthcare professionals on effective BSE education. Establish support groups and conduct regular program evaluations. Integrate BSE into primary care services.
3. Incorporate BSE into health curricula at high school and college levels and encourage student participation in community outreach programs and research. Conduct studies across diverse populations to explore behavioral and cultural factors influencing BSE practices. Evaluate the impact of various educational strategies to optimize BSE promotion. Further research should also evaluate the effectiveness of the developed teaching plan.

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