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ADMINISTRATIVE CHALLENGES TO ADDRESS FOR IMPROVEMENT OF PAP SMEAR SCREENING IN SELECTED PERIPHERAL SETTING: SRI LANKA

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ABSTRACT

Cervical cancer poses a significant global health threat, necessitating proactive measures for early detection and intervention. In the context of Nuwara Eliya, Sri Lanka, where Pap smear screening coverage stands at a mere 6%, well below the World Health Organization's recommended 80% threshold, this research embarks on a comprehensive exploration of the barriers hindering participation. Through a descriptive cross-sectional study involving 362 women aged 35-50 years, coupled with qualitative interviews with key stakeholders, the study illuminates a myriad of challenges. Furthermore, a striking lack of awareness regarding cervical cancer prevention and the significance of Pap smear screenings comes to the fore. Accessibility issues, particularly in remote areas with scant screening facilities, emerge as critical barriers. Qualitative insights from Public Health Midwives reveal resource constraints and the urgent need for specialized training. In light of these findings, the study advocates for evidence-based policy interventions. Targeted strategies are proposed to address cultural sensitivities, enhance awareness through tailored campaigns, and ensure equitable access to screening services and to development of comprehensive and region-specific policies aimed at boosting Pap smear screening participation in Nuwara Eliya, Sri Lanka.

Keywords: Cervical Cancer, Pap Smear Screening

INTRODUCTION

Cervical cancer, marked by the uncontrolled proliferation of cells on the cervix, emerges as a substantial and pressing global health challenge. Positioned as the second most prevalent cancer among women worldwide, cervical cancer exacts a heavy toll, causing an estimated 270,000 deaths annually, according to the World Health Organization (2002). The repercussions of cervical cancer extend beyond mortality, casting a substantial shadow of morbidity over those affected. Given the significant burden associated with the disease, the imperative of early diagnosis becomes central to mitigating the adverse outcomes linked to cervical cancer. Recognizing the gravity of this health issue underscores the critical need for proactive measures, including widespread awareness campaigns, accessible screening programs, and international collaboration, to address the multifaceted challenges posed by cervical cancer and enhance the prospects of early detection and intervention.

Cervical cancer screening stands as a crucial component in the timely identification of abnormalities, presenting a proactive strategy for addressing this pervasive health threat (Abdullah, Aziz, and Su, 2011). Central to these screening efforts is the utilization of the Papanicolaou smear, more commonly known as the Pap smear. This method, pioneered by George Papanicolaou, has emerged as an indispensable tool in the identification of abnormal cells originating from the cervical epithelium (Matos and Eynde, 2004). The Pap smear not only functions as a diagnostic instrument but also plays a preventive role by enabling early detection and intervention in the progression of cervical abnormalities. Its dual capacity as both a diagnostic and preventive measure underscores its significance in the broader context of women's health, emphasizing the importance of routine screenings in averting the potentially severe consequences associated with cervical cancer. This screening modality serves as a linchpin in public health initiatives, contributing substantially to the global efforts aimed at reducing the burden of cervical cancer through early detection and targeted intervention.

The World Health Organization (WHO) underscores the critical importance of cervical cancer screening programs covering at least 80% of the at-risk population for effective reduction in cervical cancer incidence (WHO, 2002). A notable divergence in health outcomes is observed between developed and developing countries over the past half-century. In developed nations, the decline in cervical cancer incidence and mortality rates is attributed to heightened accessibility and attendance in screening programs (Nanda et al., 2001). In stark contrast, developing countries grapple with the persistent burden of underdiagnosis, leading to an alarming elevation in mortality rates (Forouzanfar et al.,

2011). The primary challenge lies in the low attendance of women for cervical cancer screening in these regions, influenced by a complex interplay of factors. These factors encompass issues such as inadequate knowledge about cervical cancer prevention, limited healthcare access, socioeconomic disparities, cultural beliefs, and various logistical constraints. Bridging this attendance gap requires comprehensive strategies that not only address these multifaceted barriers but also actively involve communities and healthcare providers in promoting the importance of regular cervical cancer screenings. The global health community must prioritize tailored interventions to ensure equitable access and participation, particularly in the context of developing nations, to mitigate the disproportionate impact of cervical cancer in these vulnerable populations.

In Sri Lanka, Pap smear screening emerges as one of the most effective strategies in controlling cervical cancer. However, the Pap smear coverage rate in the country is disconcertingly low, standing at only 6% (Fernando and Wijayanayake, 2013), a figure significantly below the WHO's recommended threshold of over 80% for the at-risk population. Knowledge, attitudes, cultural beliefs, and the availability of services have been identified as contributory factors affecting non-attendance for Pap smear screening in the Sri Lankan context (Fernando and Wijayanayake, 2013). Alarming statistics from the Ministry of Health indicate a cervical cancer incidence rate of 3% in the Vavuniya district, while Pap smear screening coverage is a mere 1.3% (Annual Health Bulletin, 2013). Given this low coverage, it becomes imperative to identify the factors related to poor attendance for Pap smear screening.

Therefore, the purpose of this study is to identify the factors related to poor attendance for Pap smear screening among women aged 35-55 years in the Urban Council area of Vavuniya district. The specific objectives of the study are to assess the knowledge, cultural barriers, psychological factors, and healthcare-related factors contributing to poor attendance for Pap smear screening. Through a comprehensive exploration of these factors, we aim to inform targeted interventions and policy recommendations that can enhance Pap smear screening participation in this specific peripheral setting of Sri Lanka.

Methodology

The research employed a descriptive cross-sectional study design conducted over the course of the year 2018 in the Nuwara Eliya district, Sri Lanka, to investigate factors related to poor attendance for Pap smear screening among women aged 35-50 years. A sample size of 362 participants was determined, and data were collected through an interviewer-administered questionnaire. The study population consisted of women aged more than 35 years, with

inclusion criteria set at ages between 35 and 50 years, while those who had previously undergone Pap smear screening were excluded. Cluster sampling was utilized, with a probability proportionate number of individuals recruited from each Medical Officer of Health (MOH) area. The Eligibility Family Register maintained by Public Health Midwives (PHMs) served as the sampling frame, and a simple random sampling technique was applied to select participants from each cluster. Trained interviewers conducted the data collection, covering various aspects such as knowledge, cultural barriers, psychological factors, and healthcare-related factors influencing attendance for Pap smear screening.

Additionally, qualitative interviews were conducted with key stakeholders, including Medical Officers of Health, Public Health Nursing Sisters, and the Medical Officer (Maternal and Child Health) - MOMCH in Nuwara Eliya District. These qualitative insights were sought to provide a deeper understanding of the contextual factors influencing Pap smear screening attendance in the district.

RESULTS

The study achieved a commendable response rate of 95.6%, reflecting the active engagement of the participants in providing valuable insights into factors influencing Pap smear screening attendance in the Nuwara Eliya district. Notably, all study participants were aware of the existence of Well Women Clinics, indicating a baseline awareness of available healthcare resources. However, a nuanced examination of this awareness reveals that only 72.3% of participants were familiar with the concept of a Pap smear or a similar intervention, even in the context of Well Women Clinics. Furthermore, a more focused exploration revealed that 38.2% of participants demonstrated knowledge of the crucial association between Pap smear screenings and cervical cancer.

The majority of participants fell within the age range of 35 to 40 years (59.6%), with smaller proportions in the subsequent age brackets. In terms of educational status, a substantial percentage had completed education up to O/L (52.2%), followed by those who completed education up to A/L (27.1%). The employment status of participants indicated a balanced representation, with 40.6% employed and 59.4% unemployed. Regarding civil status, the majority of participants were married (91.4%), while smaller percentages were single, widowed, or separated. (Table 1)

Table 1: Sociodemographic characteristics of the study participants

Factor	Category	Frequency (n)	Percentage (%)
Age			
	35 - 40 years	216	59.6
	41 - 45 years	45	12.4
	46 - 50 years	52	14.3
	51 - 55 years	49	13.7
Educational status			
	Grade 5 or below	46	12.6
	Up to O/L	189	52.2
	Up to A/L	98	27.1
	Graduated	29	8.1
Employment			
	Employed	147	40.6
	Unemployed	215	59.4
Civil Status			
	Single	8	2.2
	Married	331	91.4
	Widowed	12	3.3
	Separated	11	3.1
Total		362	100.0

The most prominent factor identified is "Privacy Issues," with a substantial 42.5% of participants expressing concerns in this regard. This underscores the need for initiatives addressing confidentiality and comfort during the screening process. "Afraid of Positive Findings" ranks second, with 32.6%, emphasizing the psychological aspect of fear associated with potential health revelations. "Health Beliefs" follow closely at 28.2%, indicating the impact of personal perspectives on health and illness. "Husband Consent" represents a noteworthy consideration for 17.7% of participants, shedding light on the influence of familial dynamics on healthcare decisions. Finally, "Cultural and Religious Beliefs" contribute to hesitancy for 12.4% of the study population, highlighting the need for culturally sensitive approaches. (figure 1)

Figure 1: Individual-associated factors

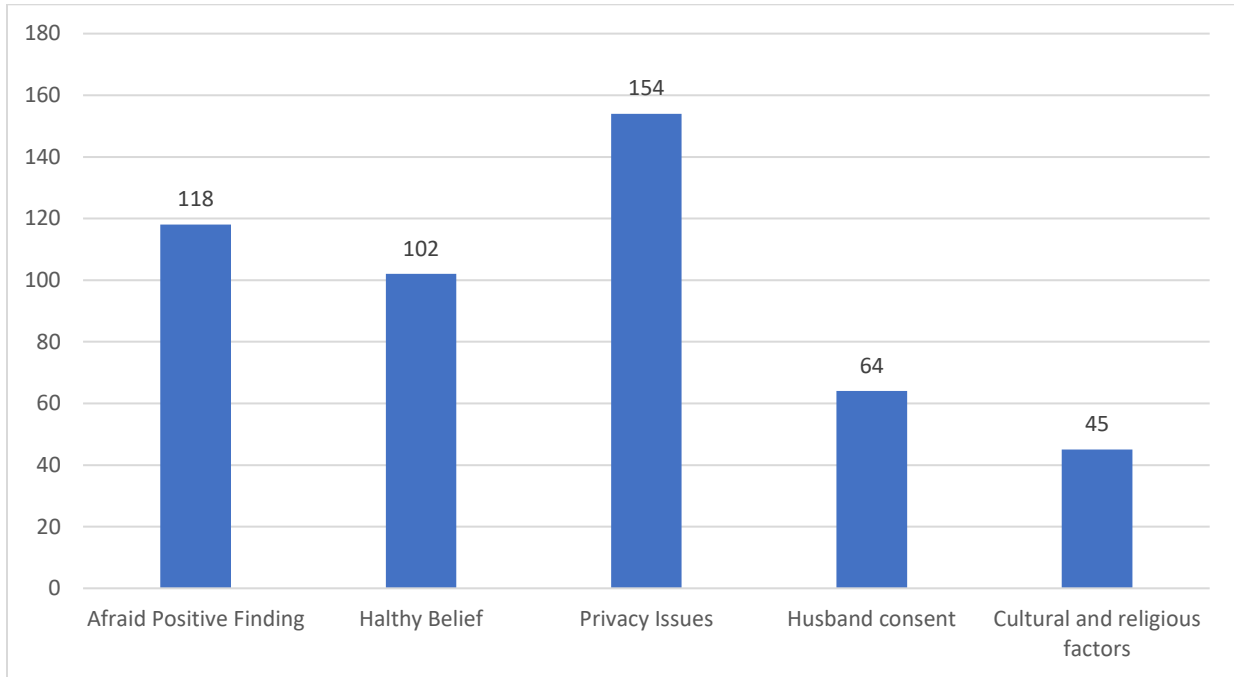
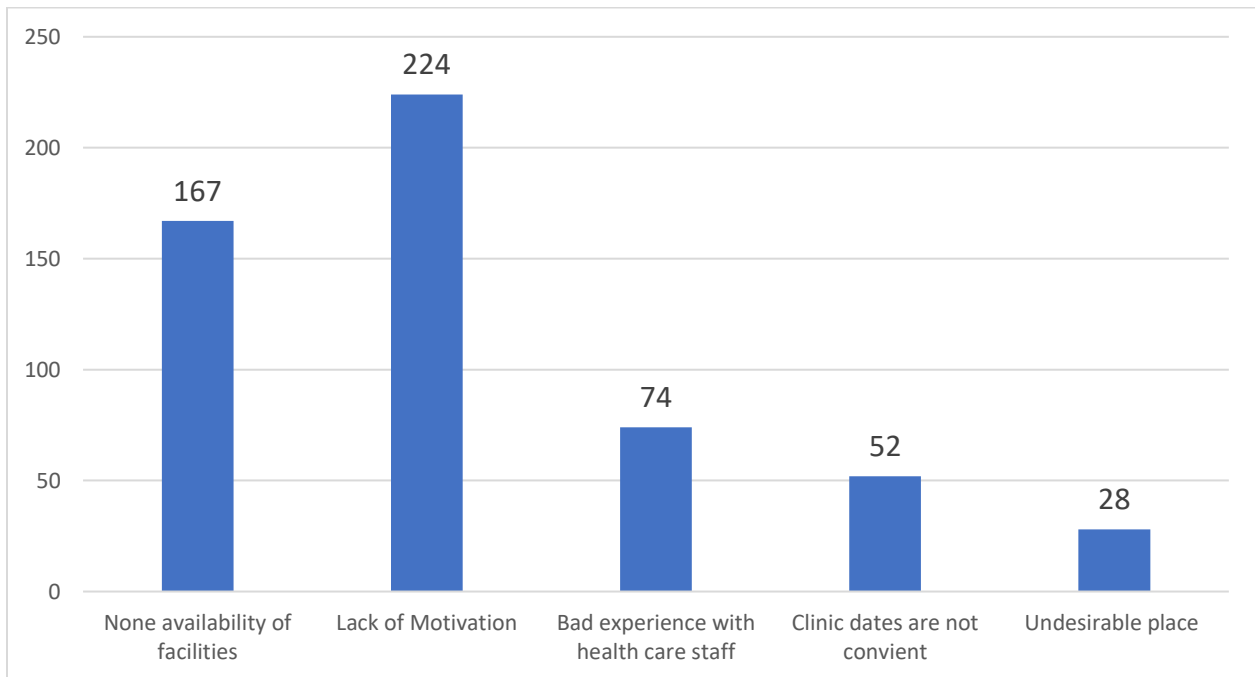
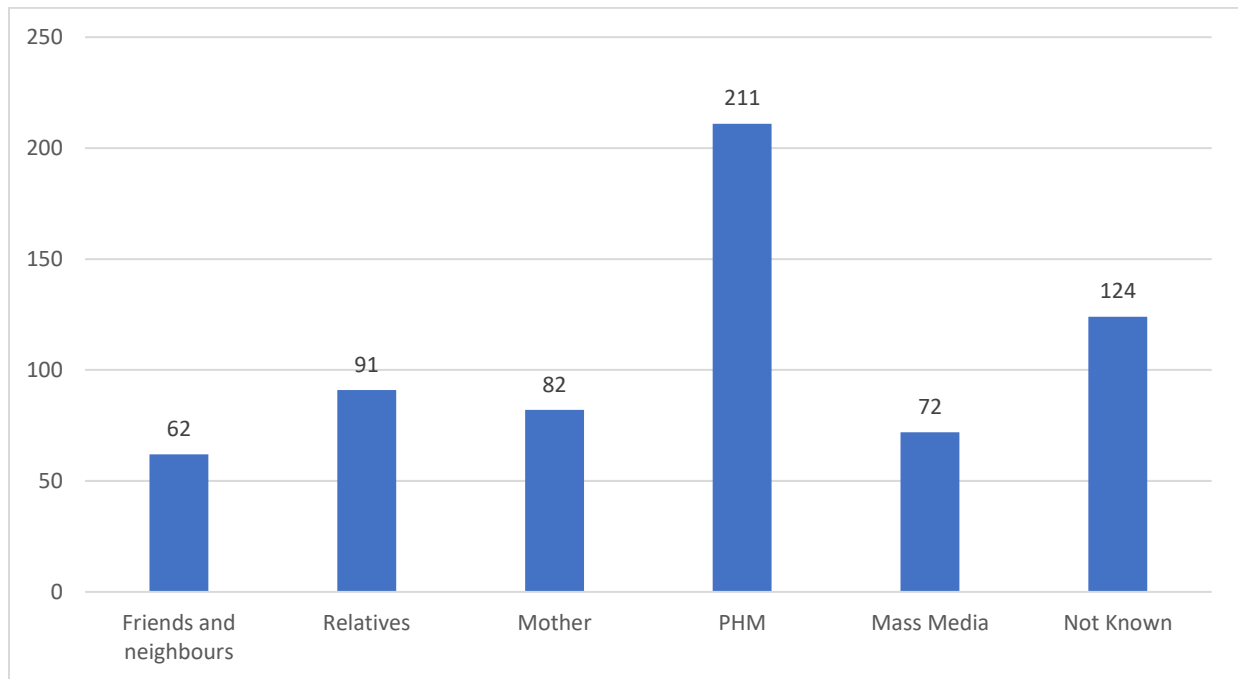


Figure 2: Administrative factors associated with reluctancy of pap smear



The most prevalent administrative factor is the "Lack of Motivation," identified by 61.9% of participants, highlighting the need for initiatives to inspire and encourage women to prioritize their cervical health. "None Availability of Facilities" follows closely, with 46.1% expressing concerns about the inadequacy of screening facilities, emphasizing the urgent need for infrastructure improvements. "Bad Experience with Healthcare Staff" represents a notable consideration for 20.4% of participants, underscoring the importance of fostering positive patient-provider relationships. Additionally, "Clinic Dates Are Non-Convenient" and "Undesirable Place" contribute to reluctance for 14.4% and 7.7% of the study population, respectively, suggesting a need for strategic planning of clinic schedules and the creation of more comfortable screening environments. (figure 2)

Figure 3: Source of awareness regarding pap smear and other WWC activities



Public Health Midwives (PHMs) emerge as the most prominent source of awareness, with 211 participants (58.3%) indicating them as a primary source. Relatives and mothers also significantly contribute to awareness, with 91 (25.1%) and 82 (22.7%) participants respectively. Friends and neighbors, along with mass media, play a moderate role, with 62 (17.1%) and 72 (19.9%) participants respectively relying on these sources. A substantial number of participants, 124 (34.3%), reported not knowing the source of their awareness. (figure 3)

A significant finding is that 80% of participants reported experiencing prolonged waiting times for healthcare services, a factor that, according to them, contributes to the low attendance for Pap smear screenings. The protracted waiting periods not only inconvenience patients but also act as a deterrent to proactive health-seeking behaviors. Additionally, participants identified the absence of an adequate number of trained staff and the perceived lack of helpfulness and care from healthcare professionals as contributing factors to the poor attendance at Pap smear screening programs. This observation aligns with a study by Bessler, Aung, and Jolly (2007), which emphasized that limited access to healthcare services and a shortage of trained staff negatively impact the rate of Pap smear screening. These shared challenges underscore the systemic issues that need to be addressed to improve the overall attendance and effectiveness of Pap smear screening initiatives.

DISCUSSION

The findings of this research underscore several key factors influencing the attendance of women at Pap smear screenings, each of which requires targeted policy considerations for effective resolution. One prominent individual factor identified is the concern over privacy issues. To tackle this, standardizing clinic facilities to ensure privacy is crucial. Additionally, introducing counseling services can alleviate fears associated with potential cancer diagnoses, fostering a supportive environment for women undergoing Pap smear screenings. Recognizing the importance of male participation, policy initiatives should focus on family planning education for male partners within Well Women Clinics, thereby resolving issues related to husband consent.

The study highlights a critical issue concerning the availability of healthcare facilities, especially for Pap smear screenings. A policy intervention should involve decentralizing Pap smear services to domiciliary levels, enhancing accessibility and motivation for women to participate. This decentralization can mitigate reluctance arising from the inconvenience of centralized services and contribute to more effective preventive healthcare.

Sociocultural factors, such as traditional beliefs and a perceived lack of motivation among women aged over 35, present challenges. Addressing these concerns requires culturally sensitive approaches, emphasizing the importance of early detection and framing Pap smear screenings as integral to enhancing the quality of life. Public health campaigns should be tailored to resonate with the cultural nuances prevalent in Sri Lanka, empowering women to prioritize their well-being.

Given the sensitive and private nature of Pap smear screenings, specialized training for healthcare workers emerges as a critical component in ensuring the procedure's effectiveness and fostering a patient-centric approach. Policy initiatives should prioritize comprehensive capacity-building programs, encompassing technical proficiency, communication skills, empathy, professionalism, and cultural competence. Healthcare providers require training not only in the technical aspects of accurate sample collection but also in effective communication to convey the importance of Pap smear screenings and address patient concerns with sensitivity. Emphasizing empathy and professionalism is essential to create an environment where patients feel supported and respected during the screening process. Cultural competence training becomes integral to navigating diverse beliefs and practices related to women's health, promoting inclusivity and understanding.

The role of Public Health Midwives (PHMs) in disseminating information regarding Pap smear screenings is pivotal, given their direct connection to the community. To maximize their impact, policy enhancements should focus on augmenting PHM involvement through specialized training programs. These initiatives aim to equip PHMs with comprehensive knowledge about Pap smear screenings, enabling them to effectively address community concerns and questions. Encouraging active community engagement by PHMs through various channels, such as awareness campaigns and workshops, fosters an open dialogue about the significance of Pap smear screenings. Additionally, policy enhancements should prioritize the utilization of diverse communication channels, including social media and community radio, to ensure broad accessibility. To counteract misconceptions, PHMs should be regularly updated on the latest developments in cervical health. Incorporating cultural sensitivity training further enhances the effectiveness of PHM-led information dissemination, enabling tailored communication strategies that resonate with the community's diverse beliefs and practices. This community-centric approach, facilitated by policy enhancements, establishes PHMs as trusted sources of reliable information and plays a crucial role in fostering increased awareness and participation in Pap smear screening programs.

The qualitative interviews conducted in this research significantly underscore the paramount importance of early detection for cost-effective treatment in the context of Pap smear screenings. These interviews reveal a consensus among participants regarding the potential benefits of timely identification of cervical abnormalities. Beyond the immediate health outcomes, the findings emphasize the imperative for strategic policy development. Policymakers should prioritize initiatives that not only promote regular Pap smear screenings but also institute comprehensive awareness campaigns. These campaigns play a dual role, emphasizing the advantages of early detection not only in improving health

outcomes but also in yielding substantial economic benefits. By fostering a proactive approach to women's health, policymakers can contribute to a paradigm shift where the emphasis on preventive measures, such as Pap smear screenings, becomes integral to the broader healthcare landscape. This strategic alignment between policy, awareness, and early detection forms a crucial foundation for the cost-effective management of cervical health and the broader well-being of the population.

Therefore, addressing these findings through comprehensive policy initiatives is essential for overcoming barriers to Pap smear screening attendance. A multifaceted approach that considers individual, cultural, and healthcare system factors will contribute to more inclusive and effective preventive healthcare measures for women in the studied context.

In conclusion, Pap smear screening, a straightforward procedure, holds significant potential for targeted productivity improvements. By focusing on enhancing the capacity of human resources to a modest degree, we can substantially increase the accessibility and effectiveness of this vital screening process. This targeted approach ensures that Pap smear screenings become more widely available, promoting early detection and contributing to the overall success of preventive healthcare initiatives.

CONCLUSIONS

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