



Study Report: Factors for poor acceptance of screening for cancer cervix and cancer breast

Operational Research Programme of the Tamil Nadu Health System Reform Programme (TNHSRP)

March, 2022

Submitted by:

LEAD at Krea University, Chennai

Funding: Government of Tamil Nadu directed to IFMR Chennai under the Operational Research Programme of The Tamil Nadu Health System Reform Program (TNHSRP). The TNHSRP initiated an Operational Research Programme (ORP) to carry out empirical research that will contribute to strengthening the healthcare delivery system in Tamil Nadu. IFMR is empanelled with the Government of Tamil Nadu as a research/evaluation partner.

Study under ORP: Factors for poor acceptance of screening for cancer cervix and cancer breast

Co-Investigators:

Dr Sapna Nair
Research Fellow,
LEAD at Krea University
No: 196, T.T.K. Road, Alwarpet,
Chennai – 600 018
Tamil Nadu, India
www.ifmrlead.org
Email: sapna.nair@ifmr.ac.in

Jithin Jose
Research Manager
LEAD at Krea University
No: 196, T.T.K. Road, Alwarpet,
Chennai – 600 018
Tamil Nadu, India
www.ifmrlead.org
Email: jithin.jose@ifmr.ac.in

Vijaya Subramanian
Associate Professor
IFMR Graduate School of Business,
KREA University Sri City, India
Email: Vijaya.subramanian@krea.edu.in

Report contributors:

Sapna Nair, Vijaya Subramanian, Jithin Jose, Anjali Bansal,
Preethi K, Pia Mahajan

Sponsor:

LEAD at Krea University
C/O Krea University,
No: 196, T.T.K. Road, Alwarpet,
Chennai – 600 018
Tamil Nadu, India
www.ifmrlead.org

Contents

Executive Summary.....	7
Chapter 1: Introduction	10
Background	10
Literature Review	12
Objectives	14
Chapter 2: Methods.....	14
Qualitative Methods.....	17
Quantitative Methods.....	17
Sampling	19
Data collection.....	20
Measurements and analysis.....	21
Ethics	23
Fieldwork and quality control	23
Description of sample	24
Chapter 3: Results	27
Section 1: Findings from secondary data.....	27
Section 2: Findings from survey.....	30
2.1 Habit.....	30
2.2. Affect.....	38
2.3. Belief	41
2.4. Social and personal norms.....	44
2.5. External factors.....	47
2.6. Factors associated with screening behaviour and willingness to screen	53
Section 3. Qualitative Methods.....	57
3.1. Architecture	57
3.2. Access.....	66
3.3. Adoption.....	67
3.4. Affordability	70
Chapter 4: Discussion	72
Recommendations.....	79
Limitations	81
Conclusion	82
Acknowledgements.....	82
References	82
Annexure	87
Institutional Ethical Review Certificate: IFMR	87
Descriptive tables.....	88
Survey Tools	101

List of Tables

Table 1: Description of Constructs and variables	16
Table 2: Methods and the areas of enquiry	18
Table 3: Procedure of listing of participants	20
Table 4: Description of the semi-structured survey tool for screened Vs non-screened women	22
Table 5: Sample socio-demographic characteristics	25
Table 6: Factors associated with adoption of screening among screened and non-screened women (N = 240).	54
Table 7: Factors associated with willingness to screen among screened and non-screened women (N = 240).	56
Table 8: Description of indexes generated	88
Table 9: Basic awareness of Breast and Cervical cancer and their screening	91
Table 10: General health-seeking behaviour	92
Table 11: Women's autonomy in healthcare decisions	92
Table 12: Perception and understanding of the respondents on breast cancer	93
Table 13: Perception and understanding of the respondents on cervical cancer	94
Table 14: Sources of Information about Cancer, Screening Access & Quality of Care ...	95
Table 15: Reasons for not being screened for breast, or cervical cancer among non-screened women	98
Table 16: Perceived Susceptibility and Perceived Severity among participants	99
Table 17: Perceived susceptibility	100
Table 18: Social and personal norms about cancer among participants	100

List of Figures

Figure 1: Conceptual diagram of individual-level and service level factors for acceptance and access to Ca Br and Ca Cx screening services	14
Figure 2: Geographical location of the study area and the location of PHCs and CHCs ..	19
Figure 3: Number of women screened in Pogalur PHC (PHC 1), Mookanur PHC (PHC 2), SMC Palayam PHC (PHC 3) and General Hospital from 2015-2021	28
Figure 5: Distribution of individuals screened at PHC for CaBr from 2016-19	28
Figure 6: Distribution of individuals screened at PHC for CaCx from 2015-19	29
Figure 7: Distribution of individuals screened at GH for CaBr from 2017-21(until September)	29
Figure 8: Distribution of individuals screened at GH for CaCx from 2017-21(until September) at GH	29
Figure 9: Basic Awareness of breast cancer	30
Figure 10: Basic Awareness of cervical cancer.....	31
Figure 11: Women's autonomy in health care decisions and large household purchase decisions.....	32
Figure 12: General health-seeking behaviour among the respondents.....	33
Figure 13: The number of times respondents screened for breast and cervical cancer ..	34
Figure 14: The place where respondents were screened each time for cervical and breast cancer	35
Figure 15: Reason for which respondents underwent screening for breast and cervical cancer	36
Figure 16: Willingness to screen at local PHC if approached by health worker	36
Figure 17: Centre preferred for screening.....	37
Figure 18: Openness in asking for a referral and family.....	37
Figure 19: Respondents' perception of preventability and curability of cervical and breast cancer	38
Figure 20: Respondents' understanding of the ways through which cancer can be prevented	38
Figure 21: Perceived risk and eligible women for screening for both cancers.....	39
Figure 22: how women perceive their susceptibility to cancer and that of others	41
Figure 23: Reasons why non-screened women have not undergone screening	42
Figure 24: Respondents' perception of the cost of screening	43
Figure 25: Actual screening cost incurred by the patient	43
Figure 26: Barriers to screening on a mean score between 0-10	44
Figure 27: Who accompanied the respondent to the screening site (%)	45
Figure 28: Perceived screening uptake of breast cancer	45
Figure 29: Perceived screening uptake of cervical cancer	46
Figure 30: Perceived personal and social norms on the utility of breast cancer screening among screened and non-screened women	46
Figure 31: Perceived personal and social norms on the utility of cervical cancer screening among screened and non-screened women	47
Figure 32: Whether respondents received information on cancer.....	48
Figure 33: Source of information received on cancer.....	48
Figure 34: Whether respondents searched for information on cancer	49
Figure 35: Of those seeking information, the source used to get information	49
Figure 36: The distance of the nearest screening centre from the respondents' houses	50
Figure 37: Preference of the distance to the screening centre	50
Figure 38: Threshold screening cost and time among screened and non-screened women	51
Figure 39: Respondents' opinions on the screening experience	52
Figure 40: Mean rating of services on a scale of 1 to 10	53
Figure 41: Departments that provide health services and their broad functions	58
Figure 42: Mapping and analysis of the layout of PHC and patient flow pattern	61
Figure 43: Mapping and analysis of the layout of GH and patient flow pattern	62
Figure 44: The NCD card with the details at each visit; the OP ticket	63

List of Acronyms

ANM: Auxiliary Nurse Midwife
Ca Br: Breast Cancer
Ca Cx: Cervical Cancer
CHC: Community Health Centres
DPO: District Programme Officer
GH/DH: General/District Hospital
BMO: Block Medical Officer
FGD: Focussed Group Discussion
HIV: Human Immuno Virus infection
IDI: In-depth Interviews
IEC: Information, education and communication
IPHS: Indian Public Health Standards
KII: Key Informant Interviews
MIS: Management Information System
MO: Medical Officer
MOHFW: Ministry of Health & Family Welfare (GOI)
NCRP: National Cancer Registry Programme
NFHS: National Family Health Survey
NHM: National Health Mission
PAP: Papanicolaou smears test
PHC: Primary Health Centres
RTI: Reproductive Tract Infections
SC: Sub-centres
SSI: Semi-Structured Interviews
STI: Sexually transmitted infections
TNHSRP: The Tamil Nadu Health System Reform Program
VHN: Village Health Nurse
VIA: Visual inspection with acetic acid
VILI: Visual inspection with Lugol's iodine (VILI)

Executive Summary

Introduction

The Tamil Nadu Health System Reform Program (TNHSRP) is the flagship program of Department of Health and Family Welfare (DoH&FW), Tamil Nadu Government, which is supported by the World Bank and aims to strengthen the healthcare delivery system of the state. The TNHSRP-initiated Operational Research Programme (ORP) aims to encourage researchers from across the country working in public or private institutions who are interested in carrying out empirical research that will contribute to strengthening the healthcare delivery system in Tamil Nadu. IIT (Madras) is the nodal agency assigned to coordinate the programme. The 2021 programme listed one of the areas of interest to be: Acceptability of cervical and breast cancer screening and identification of different factors that result in the low acceptance of screening. Given that acceptance and early detection play a major role in bringing down mortality rates, it is especially important to understand the level of general awareness, perceptions of women in regards to cancer and the barriers to screening. This study delves into both the demand-side and supply-side factors, thereby building a comprehensive understanding and generating evidence-backed insights. .

Methods

The study followed a multi-methodology operations research approach, in which the focus is on generating evidence that can be relevant and used for programmatic changes. The study initially focussed on generating evidence through a comprehensive understanding of the factors affecting demand of screening services at the level of the individual as well as at the operations end at the delivery level. Quantitative and qualitative methods were sequentially deployed in one purposively selected taluka. Key Informant Interviews (KII) were conducted with the officials at the district level (eight) and one Group Discussion was done with 24 community-level service providers in order to gain an understanding of the operational factors. In quantitative methods, secondary data from the screening centres were analysed, and primary data from surveys with purposive sampling of 240 women, consisting of screened (n=85) and non-screened women (n=155) was used to describe various factors of acceptance. In-depth qualitative interviews (IDI) were conducted with a subsample of 20 women selected from the surveyed women to gather an in-depth understanding of individual experiences and perceptions.

Findings

The age of the respondents was more than 40 years and a majority of them were married and had at least two children. Results were better for screened women as compared to not-screened, with almost all of the screened women having heard about these cancers as compared to a lower majority (83% for breast cancer and 77% for cervical cancer) of the non-screened women. Among the screened

women, the awareness about the tests was limited, for example 87% knew that there were tests to screen for cervical cancer, yet 54% didn't know what these tests were. Among the non-screened women, 77% didn't know about any test for breast cancer and 86% hadn't heard about any test for cervical cancer. Regarding their eligibility for screening, higher (84%) proportions of screened women seemed to have better knowledge compared to only 52% of non-screened women. It would be prudent to consider the source of the high knowledge about screening eligibility being their own experience of screening, given the evidence that a majority of these screenings were opportunistic screenings. Given that 16 % of the screened women got screened without knowing if they were eligible may be indicative of this involuntary decision making.

Overall, there was a widespread acceptance of the preventability of both cancers with 86 % of the women agreeing that breast cancer could be preventable and 83% agreeing that cervical cancer could be preventable. A lesser proportion than that, about 3/4th of them thought both cancers are curable. More than 70% reported that breast cancer can be prevented with the help of early detection and treatment, and in the case of cervical cancer, about 74% reported so. The women in their IDI also were confident that prevention, early detection and cure are possible for these cancers. About their chance out of 100 of getting cancer, they rated a mean score of 39 (2.42) for any women of their age to develop breast cancer and 35(2.40) to develop cervical cancer in the next ten years. These figures are indicative of optimism bias as women perceive the risk to be lower with regards to themselves as compared to their perception of the risk with regards to a third person.

Among the women who were screened, a majority were screened at a PHC or a Private Hospital, and preferred the Government PHC for screening. Almost half of the respondents said they were instructed at the health centre to get screened. When asked who has recommended cervical cancer testing, around 45% reported that ASHA/Health workers motivated them to get tested, followed by the spouse (33%). Of the screened women more than 70% were willing to repeat the breast cancer screening and only around half agreed to repeating cervical cancer screening. Among non-screened women, 65% were willing to a breast cancer screening in the future and 60% a cervical cancer screening in future. Women were also asked to rate their screening experience at PHC. A comparison of proportion shows high levels of agreement with the positive statements and rated their screening experience as 8 out of 10. Around 54% of screened women reported that they would be screened again at PHC.

The screened women reported that permission from husband is the primary barrier to screening, followed by care for children in her absence (7.35 (0.28)). Around 67% of screened women reported that their families were positive about the screening, and approximately 58% said that family would allow the screening. Those who were not screened were asked to report the reason for not screening

for cancer; more than 75% said that they were not screened for both breast or cervical cancer as they were not at risk.

The ideal distance preference from the screening centre was 1-5km, the preference for the screening cost was 0-500 INR and most women preferred that the screening time should take less than 1 hour. Additionally, about 66% of the screened and 42% of the non-screened women did not receive any information on cancer. Out of those who received information, the majority received it from an Asha worker/VHN/Anganwadi worker.

The 4A framework was used to categorise the themes that emerged from the analysis of qualitative data. Architecture themes reveal that the patients can get screened at the PHC or through camps and the latest addition to this is the use of Makkali Thedi Maruthuvam (MTM) scheme. At the PHC, a more opportunistic screening is done of women who belong to the eligible age but have approached the centre for a different purpose. Active demand generation may be useful to improve coverage, yet with the current level of resources available, the capacity at the PHCs may need to be augmented to absorb extra demand.

The awareness programmes do not seem to be effective in conversion of demand i.e adoption. Direct communication from the PHC staff or through community influencers seems more promising for motivating action. There is a broad belief that only those with symptoms need to get themselves screened. Major motivators for screening include hearing real stories of people getting cured/dying due to their screening behaviour, presence of symptoms and fear. Major inhibitors include the belief of not having symptoms, lack of support, loss of wage, fear of bad news and negative opinion of government facilities. Leveraging community influencers and active public spaces is recommended for better awareness. Better coordination among government departments, data sharing and data management strategies are needed for closing the loop on screening, diagnosis and treatment. Rebranding Government facilities with positive testimonials could change the perception of the hesitant population.

Conclusion

The study has explored the factors of acceptance and use of the breast and cervical cancer screening programme in Tamil Nadu. The demand and supply-side factors associated with the usage and non-usage of free screening programmes for cancer provided by the state-run public health system are described. The study generated many learnings that will be useful not only for insights to strengthen programmatic response and action, but also to expand the existing knowledge of the uptake of cervical and breast cancer screening programmes in India.

Chapter 1: Introduction

Background

Cancer is the major cause of concern as a non-communicable disease because of the number of people infected, and deaths caused despite ever-increasing treatment options. Of the projected 45% increase in global mortality due to cancer between 2008 and 2030, 80% is from LMICs (World Health Organization Key Facts, 2021). The increasing cancer burden, with breast cancer accounting for 25.4% of the global cases and cervical cancer for 6.9%, is a cause of worry globally but more so in the Lower Middle-Income Countries. Historically the first efforts towards cancer control in India started with the National Cancer Control Programme¹ in 1975. There has been an increased focus on early detection and population-based screening in the past decade in response to cancer with an integration into the National programme for Non-Communicable Diseases in 2011 (Senthil Kumar et al., 2015).

In India, cervical cancer and breast cancer is much higher and constitute 26.3% and 18.3% of the new cases respectively (Ferlay, J. et al., 2020; GLOBOCAN 2020). The trend for cancer overall, as per the Population-Based Cancer Registry maintained by the National Cancer Registry Programme (NCRP) at Chennai (the only one in Tamil Nadu), indicates that the incidence of breast cancer has more than doubled from 1983 until 2014, whereas the same for cervical cancer is reducing, even though the absolute numbers are constantly on the rise (Labani et al., 2014). With NCRP projections estimating growth in overall cancer rates, and increase in the breast cancer and cervical cancer burden by 13% in 5 years from 2020 (NCRP Fact Sheet, 2020), it is critical to adopt immediate public health interventions and enhance existing measures in place to fight against the ever-increasing growth of these two cancers. The disparities have widened among different sections of society, as the burden of disease has direct correlation with the socio-economic status, region (rural/urban) and age among other factors (Bobdey et al., 2016; Rangarajan et al., 2016), which calls for targeted intervention for the underprivileged.

The National Family Health Survey-4 reports a national level screening prevalence of 22% for cervical screening and 10% for breast cancer screening. A spatial analysis of the self-reported screening data showed that some states like Kerala and Maharashtra had full coverage in most of the districts, and Tamil Nadu seems to be somewhere around the national average (Monica & Mishra, 2020). The screening levels further depended on marriage/socio-economic status/region/caste of the women, another strong correlation was found between being insured and getting screened for cervical cancer (Monica & Mishra, 2020).

The state of Tamil Nadu has been a pioneer in piloting screening for cervical and breast cancer screening through the Tamil Nadu Health Systems Project which started screening in 2007 in three districts and later rolled out multiple districts from 2011. Although the programme has keenly adopted the WHO and national guidelines, the screening rates as per NFHS-4 are not among the highest in India, and are comparatively lower compared to developed nations. The TNHSP had commissioned a private company to undertake the responsibilities for the database management, and analysis but there is no publicly available study on the process and outcomes (Sivaram et al., 2018).

In India, breast and cervical cancer screening guidelines became a part of the national programme in 2005 with a recommendation for screening all women between the ages of 30 and 59. The 2005 national screening guidelines recommend a two-level structure be set up with PHCs being the initial center, and next level of screening carried out at district hospitals for various state governments to carry forward the implementation (MoHFW, 2005). In 2016, a framework and plan for a national scheme was laid through the release of operational guidelines for cancer screening (MoHFW, 2016). In terms of implementation, India does not yet have a national level screening programme for cancer and there is a need for a centrally administered programme that is guided by the best practices. The screening and early detection of major cancers have been a public health priority and the current study will embark on the betterment of existing procedures (National Cancer Grid, 2019).

The National Family Health Survey round 5, NFHS-5 (2019-21) has covered indicators for cancer screening uptake among adult women (age 30-49 years) across urban and rural areas. The Tamil Nadu state statistics show that the percentage of women who have ever undergone a screening test for cervical cancer in the state is 9.8% with a slight variation among the urban and rural women– 10% among urban women and 9.6% among rural women. This is much higher than the proportions of women who have been screened for cervical cancer in 22 states and UTs completed in the NFHS 5 phase 1, which is around 7% in most states (Subba, 2021). Similarly, for breast cancer screening uptake, the proportion of women who have undergone a breast examination for breast cancer is 5.9% in urban areas, 5.3 % in rural areas and 5.6 % in total in the state. This is higher than the less than 3% reported in all other states. This statistic may have presumably been affected by the COVID pandemic in the phase 1 conducted in other states because the pre-pandemic data from NFHS-4 shows 22% coverage of cervical cancer screening and 10% for breast cancer screening. Yet, the numbers may be pointing towards better performance of the state in comparison to others in cervical and breast cancer screening. However, the rates continue to be lower than expected in comparison to the objectives of comprehensive screening as envisaged by NPCCD.

Literature Review

One of the crucial reasons for the disparities in burden for these cancers is the adoption of effective early detection and screening at population level. Evidence points to prevention and early detection being the most significant component in cancer management (World Health Organization, 2007). Early detection has been the best available means to reduce mortality, particularly, in developed countries which have significant compliance with effective screening. Modeling based on observed data on screening for cervical cancer show that periodic screening can bring down mortality by up to 90% (Kim et al., 2018; Kulasingam et al., 2011). Up to 40% reduction in mortality rate due to breast cancer can be achieved through periodic screening (Monticciolo et al., 2017; Schopper et al., 2009). Hence, effective screening is a crucial factor in cancer control, often determining the success of such programs across nations.

Global evidence from operational research has identified acceptance as a major factor in the effectiveness of a population-based screening programme. There is a wide variation in the acceptance of screening for cervical and breast cancers ranging from 24-80% across both cancers, with higher rates in developed countries (Dowling et al., 2010), reaching up to a disparity of 21% difference in effective coverage for cervical cancer screening between the developed and developing nations (Gakidou et al., 2008). A study among women of childbearing age in rural areas of Peru on pap-smear screening for cervical cancer revealed a 47.5% acceptance rate (Olaza-Maguiña & De la Cruz-Ramirez, 2019). Yet, it may be suspected that acceptance rates do not indicate actual screening rates. A Tanzania-based assessment of cervical cancer screening's acceptance showed that non-acceptance varied across age groups and ranged from 18%-49%. It also had a positive shift if there were home visits on raising awareness, especially among women in older age groups (Kahesa et al., 2012). Therefore, the study design would need to incorporate any awareness modules that were undertaken on the target population before we begin the assessment. In a study among women in a hospital in Southeast Nigeria, with 360 respondents, 62.5% indicated willingness for cancer screening, while only 0.6% had actually undergone any screening (Sharma et al., 2017). Similarly, a Uganda based study revealed that while 7% had undergone screening, 63% expressed willingness to be screened.

Most studies from India on acceptance have been able to gather evidence on acceptance rates across geographies. Understanding the situation locally, studies in Tamil Nadu have reported a low acceptance. There are two studies (one at district and another at village level) that looked at the Breast and Cervical cancer screening acceptance levels. One study, which was undertaken to identify the efficacy of cervical cancer screening in a cluster randomised trial in rural parts of Dindigul dist, Tamil Nadu, reported that 63.4% agreed to participate in the trial (Sankaranarayanan et al., 2003). However, a more recent cross-sectional study in Villupuram found only 35% and 29% willing to take the screening for breast

and cervical cancers, respectively. The study recruited people through PHCs, typically the women who came for treatment and were above 30 years, and was not a representative sample of the population (Senthil Kumar et al., 2015). In neighbouring Pondicherry, there were similar numbers as they identified a 32% willingness to undergo cervical cancer screening even though 60% of them were aware of cervical cancer-related symptoms (Chandrika et al., 2020). These locally identified studies that quantitatively estimated the low acceptance present a strong case to identify the reasons for an effective implementation of cancer control programmes focused on screening of the cervix and breast.

The construct of acceptability is influenced by a variety of social, behavioural and economic factors. General cancer awareness is a central factor to greater acceptance of screening, yet screening practices must also consider social and cultural conventions that can influence the acceptability of tests, or methods followed to implement the tests. Moreover, the type of screening site can also impact acceptance. A study carried out in the urban slums of Mumbai found that 90% women found mobile screening facility to be better in terms of convenience and accessibility (Kumar et al., n.d.). Similar studies among women with HIV shows a higher rate of acceptance indicating that a higher awareness of cancer and recognition of higher risk can increase acceptance and actual testing rates (Belete et al., 2015; Sawadogo et al., 2014). A systematic review of 51 studies finds that South Asian origin emigrants in other countries generally have a lower acceptance of screening for breast cancer and cervical cancer (Anderson de Cuevas et al., 2018). As they note, major reasons despite the improvised infrastructure and facilities in many developed countries, include lack of awareness of the need for asymptomatic screening, emotional beliefs and faiths. Some studies have also found that women have misperceptions about breast cancer that childbirth and breast-feeding can increase the risk of the same (Puri et al, 2008). There are perceptions that using deodorants or artificial substances near the breast can also increase the risk of breast cancer but no scientific evidence supports this hypothesis (Mirick, Davis, Thomas, 2002). Similarly, misperceptions around cervical cancer also exist, as it is incorrectly believed that oral contraceptives can increase the risk of cervical cancer (Chandrika et al, 2020).

Additionally, factors like equitable and sustainable access, economic efficiency, availability of affordable follow-up infrastructure, social outlook on the diagnosis, and effectiveness of treatment can contribute to acceptance (Islam et al., 2017; Sankaranarayanan et al., 2003; Shah et al., 2019; World Health Organization, 2007). The barriers to screening, especially in LMICs can be mostly related to the readiness of women, depending on the cognitive, emotional or cultural factors based on myths, beliefs, social influences, attitudes and traditions. While a few population-based studies have tried ascertaining the reasons and causes behind the low screening and associated barriers, they are limited to a select few districts or localised areas. (Chandrika et al., 2020; Dsouza et al., 2020; Islam et al., 2017). There are few studies in Indian context for validating the low acceptance,

but there is a need for systematic studies that try to understand the reasons for low acceptance of screening through operational research.

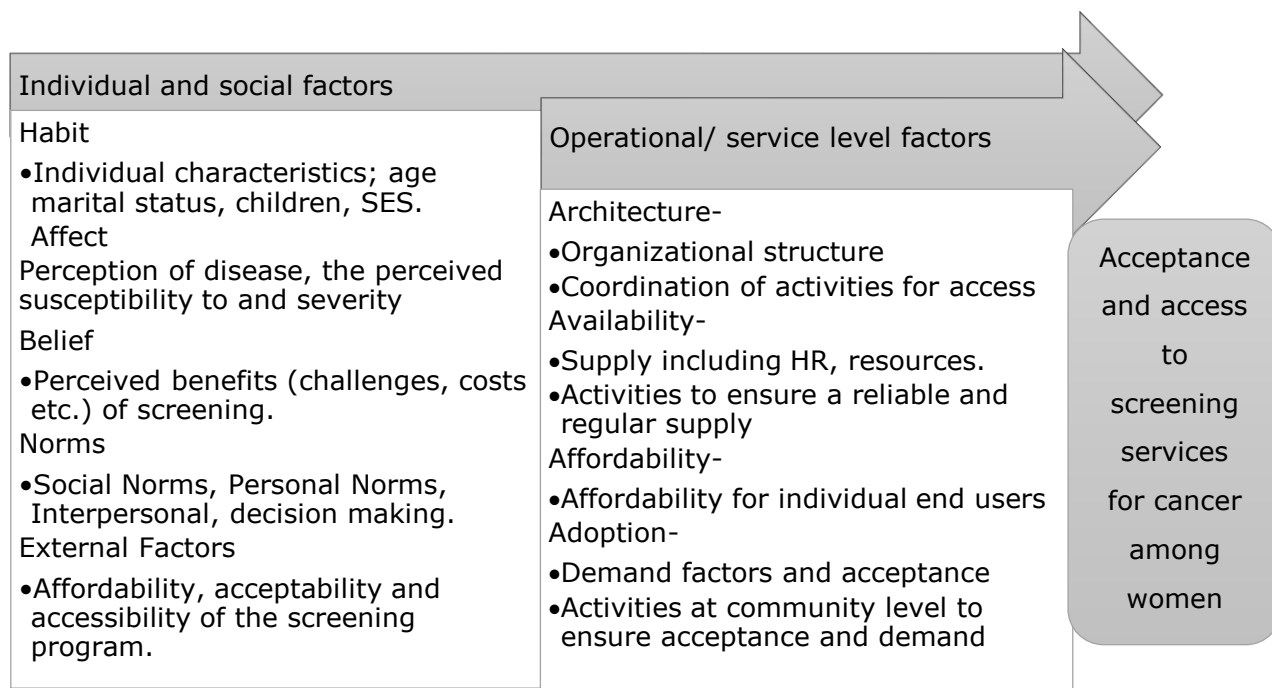


Figure 1: Conceptual diagram of individual-level and service level factors for acceptance and access to Ca Br and Ca Cx screening services

Objectives

This study aims to fill this critical gap in basing health care interventions upon scientific evidence, consistently identified in literature on implementation science (Sivaram et al., 2014), and based on these we look at an operational research methodology for assessing screening and acceptance for preventing and reducing the cancer burden. Therefore, the study’s objective is to identify factors for the acceptance and do so in an operational research framework in order to inform the TNHSRP initiative.

The specific objectives of the study are to:

- Understand the operational aspects of supply-side factors behind the poor acceptance of screening.
- Identify the demand-side factors that operate at the women’s individual, social, behavioural and economic levels.

Chapter 2: Methods

In order to build a comprehensive understanding of the factors at play behind the poor acceptance of screening mechanisms for cervical and breast cancer amongst women within the context we first sought to understand the operations and the service provision at the unit level of a taluk. Within the operation research framework, quantitative and qualitative methods were sequentially deployed. Initial qualitative exploratory methods were used to expand the understanding of the system issues and to design and nuance the quantitative data collection and interpretation. The results from the analysis of the quantitative data were deepened by a further qualitative exploration for meaning-making and for generating relevant evidence.

The study followed a multi-methodology operations research approach, in which the focus was on generating evidence that can be relevant and used for programmatic changes. We broadly used the Consolidated Framework for Implementation Research (CFIR) (Damschroder et al., 2009) as the framework to capture all aspects of operations that affect the acceptance of screening services. This has five major domains: intervention characteristics, outer setting, inner setting, individual characteristics, and the process of implementation. These include aspects of the intervention, wherein outer setting refers to the ability to meet patient needs, the inner setting means internal management aspects, client characteristics, and process domains including planning, implementation, and monitoring.

The main objective of the study is to understand various factors that affect acceptance at an individual level in greater depth. Various behaviour models have been used to empirically understand the construct of acceptance and predict the reasons behind women's behaviour in the context of health promotion programmes (Jackson, 1997). There is a considerable body of research literature around behavioral models which explains patterns in the uptake of screening programmes for cervical and breast cancers. These studies explore various notions associated with decision making at an individual level, especially those revolving around the underlying process adopted while planning for preventive measures associated with any health-related event (Paraska, 2012; Wang, Hsu et al 2014; Noroozi et al 2011). These models rely on certain "constructs" which have been generated to explain patterns behind a certain behavior. These constructs aided us in individually identifying the primary factors behind the poor acceptance of screening for cervical and breast cancers.

Two primary health behavior models have been used to explore acceptance of population-level screenings: the Health Belief Model and The Theory of Planned Behaviour. A newer model referred to as the "Theory of Care seeking behaviour" was developed by Lauver in 1992 to potentially explain people's participation in health promotional programmes. The model, especially referring to its constructs, was adapted to suit and study cancer-screening behaviour (Lawal et al 2017). These constructs largely explain how clinical and socio-economic factors affect care-seeking behaviour through impacts on psychosocial constructs such as

Affect, Belief, Habit, Norms and External Factors (Lauver, 1992). Similar constructs have been used to study women’s care-seeking behaviour in various settings (Lor et al, 2013; Lauver & Nahbolz et al 1997; Lauver & Henriques, et al 2003; Lauver & Settersten, et al, 2003).

The variables observed to understand the socio-economic status have been based on the modified Kuppuswamy socio-economic scale (updated for the year 2020). Variables like demographic factors and health care history have been based on the study undertaken to understand beliefs and predictors of cervical cancer screening in Kolkata (Roy & Tang, 2008). The tool also includes variables on awareness of cervical and breast cancer (Mbamara et al, 2011). The perception of the seriousness of cancer seeks to capture the respondents' belief of how serious the condition is and what could be the consequences (Ackerson & Gretebeck,2007). The perceived barriers of screening are based on the study of So et al (2019).

The Theory of Care Seeking Behaviour was adopted to inform the the framework for understanding a woman’s acceptance of screening for cervical and breast cancer. Based on the literature above, these constructs were qualitatively and quantitatively explored. Below, we summarize each of the constructs that we worked with to inform our objectives:

Table 1: Description of Constructs and variables

Construct	Definition	Indicative Variables
Affect	The perception about how the disease would affect the individual. In other words, the perceived susceptibility to and severity of the disease	Perception about their susceptibility to the disease.
Belief	An individual’s evaluation of the benefits accrued to them as compared to the costs (affect, costs etc.) on following a certain behavior.	Perception about the benefits from getting the screening done as compared to the costs of the same. The costs, in this case, may include opportunity cost, social costs, travel costs etc.
Habit	Individual characteristics that could predict an individual’s aversion to screening.	Age (in years), educational level, employment status, income marital status, age during first pregnancy, No. of children, social security, family history, access to influencers.
Norms	The impact of Social Norms, Personal Norms, Interpersonal Agreements on screening uptake.	Indicators measuring perceptions regarding beliefs stigma, trust, previous history, emotional beliefs of fear and biased perceptions, sociopolitical settings, cultural and traditional faiths etc
External Factors	The affordability, acceptability and accessibility of the screening program.	Indicators assessing respondent’s knowledge and confidence (self-efficacy), mode of screening, awareness initiatives, site of screening, people deployed for screening

We expect that the results from this approach will enable us to identify solutions to address the issues on the demand side. We posit that it will also bring to light the operational challenges and limitations associated with the screening programme and would enable us to provide the requisite recommendation to address the same. The study aims to achieve this by adopting a mixed methods approach within a larger operational framework; comprising both qualitative and quantitative analysis.

Qualitative Methods

Given that the assessments are framed on the M&E framework, there was an emphasis on the qualitative methods of data capture, and on particularly employing participatory research methods for data capture and meaning-making. These methods were also useful to understand the preferences and attitudes of the beneficiaries to assess if they match the intended outcomes. The sampling of beneficiaries, sub groups, stakeholders, etc. were done using a balance of theoretical and purposive underpinnings.

- **Key Informant Interviews (KII):** Vital understandings and insights from people who are an integral part of the project implementation or stakeholders who may have insights on the implementation of the screening programme in the state.
- **Semi-structured interviews (SSI):** Phone-based interviews were used to interact with beneficiaries, especially given the pandemic situation where meeting in-person was not feasible. This was done in one or two calls and was done in a manner that ensured that sufficient rapport was created to gather quality data.
- **In-depth qualitative interviews (IDI):** Using a purposive sampling strategy, we conducted in-depth interviews with a sub-sample of survey participants to comprehensively understand the experiences, perceptions and behavioural aspects of acceptability of the screening programme.

Quantitative Methods

The quantitative methods were broadly based on analysis of primary data from surveys with beneficiaries or stakeholders. Secondary data was also explored from the form of outputs of MIS, case records, and official data maintained by the project team. It was collected and analysed mainly to explore the achievement outcome targets and quality parameters. The SSI surveys done with a purposively selected sample of beneficiaries were explored for the behavioural operations aspect of acceptability among the beneficiaries. We attempted to sample all sub-groups' geographies of the population served and/or area covered for representation purpose.

Table 2: Methods and the areas of enquiry

Method	Groups	Subgroups	Estimated sample	Areas of enquiry
<i>Key Informant Interviews (KII)</i>	Policymakers/ programme officials	State/ Directorate	2-3 officials	Extent of operationalization of screening programmes
	Programme managers/ Service providers	District level: PMU, Counselor, District coordinator	Around 8	Perceptions of the managers/providers about the acceptability factors in the community Challenges to achieve the key expected outcomes on ground
<i>Semi-structured surveys</i>	2 categories: beneficiaries and potential beneficiaries	Phone-based semi-structured interviews	Total 200	Factors for acceptance to undergo screening for cancer cervix and cancer breast
<i>In-depth interviews</i>	Beneficiaries	Phone-based in-depth interviews	Total of 20	Lived experiences including personal life situations, stigma, behavioural factors, family factors
<i>Secondary data analysis</i>	Directorate of HFW/ NRHM	Programmatic/ Monitoring data	Depending on availability of data	Extent of operationalization of screening, acceptability and quality parameters

Sampling

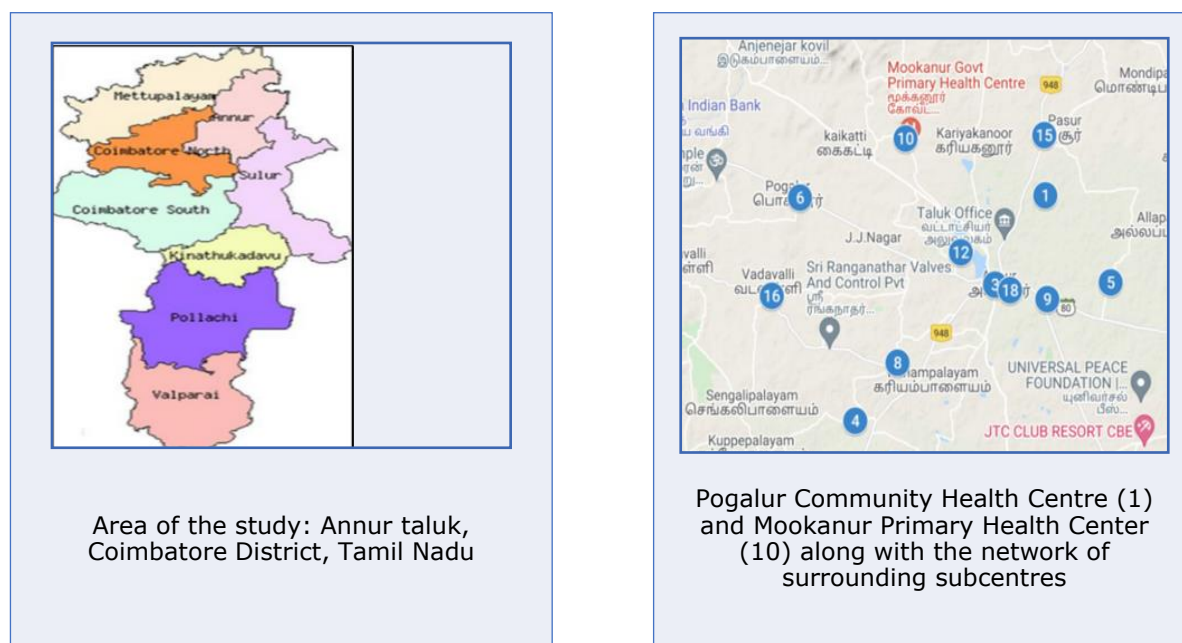


Figure 2: Geographical location of the study area and the location of PHCs and CHCs

The sample of women was generated in close coordination with the doctors and VHN at the Annur PHC. The PHC shared the list of women who were screened from their Monthly Information System (MIS), from the month of April 2021 when the PHC had started fully functioning after the pandemic till the end of December 2021 when the data collection was wound up. The total sample reached in this process was 85. The VHN were engaged in virtual training and a meeting in -person to get their support and to generate an understanding of the objectives of the project. Each VHN had a list of households that she serves and was in contact with many of them by phone, especially during the pandemic. A list of households with women in the eligible age category was manually listed by them from their phone book, phones and WhatsApp groups, through which they have been communicating. These were then digitised to generate the sampling frame for the non-users. Samples were drawn from the frame in a random manner until the sample reached 145, in an attempt to get any more participants in the screened sample.

The field team contacted the households from the list for in-person verification of the details to verify the contact details obtained from the PHC/VHN and confirm their user or non-user status. Some of these households also turned out to be users although they were not on the lists. For the women listed in the PHC, the tool for users was administered and the on-user tool captured information from non-users.

Table 3: Procedure of listing of participants

Listing strategy	
Listing the women in the user of services category	<ul style="list-style-type: none"> • Identification of women who had been listed to have utilised the screening services provided at PHC from April to December 2021 • Contact and correspondence details of the household for survey implementation was collected from the MIS
Identification and listing of women from non-user category	<ul style="list-style-type: none"> • List of 20-25 women in the eligible age category who had not availed screening services as per the knowledge of the all the VHN was the sampling frame. Random samples were generated from this list using a consent phone call and verification process till the sample was generated.
Verification of Phone number	Informing the household survey by phone and verifying available contact number and obtaining alternate contact
Sub-sample generation for IDI	<ul style="list-style-type: none"> • Random sample was generated from within both groups of those who are screened and not-screened

Data collection

The data was collected in three phases. In the first phase, formative research and an exploration of the context of the operations was done by using two methods. The KII with selected officials was done at multiple levels of the hierarchy right from the state level to the district level and this was inclusive of policymakers and programme managers at the district level including the councillors and the programme managers. At the level of the service providers, across the multiple levels of service health workers, it included doctors, nurses and technicians who are directly in contact with the community and provide screening services to the women. We also analysed programmatic data that was available from the state regarding the achievements in terms of numbers for screening and achievements in terms of acceptability and quality.

In the second phase of data collection, we reached out to the community through a semi-structured survey. The listing of the potential participants and sampling strategy was planned during phase 1 by understanding programmatic data availability and the current outreach situation across the districts. Stratified sampling was done to reach the beneficiaries across the state. Purposive sampling methods were followed to identify the blocks and the areas where the cervical cancer screening is currently taking place. From the listing, participants were selected in a combination of convenience and purposive sampling of around 200 women. This included two different sub-categories of women: those who have already completed the screening and those who have been identified as eligible for the screening but have not yet been screened. The proportion under each category was determined based on output proportions in each category. For the women who are currently listed as potential beneficiaries, the areas of enquiry were perceptions and expectations about screening. For those who have been

previously reached out for screening and have completed the screening process, the areas of enquiry were their own experiences during screening and the factors for acceptability as has been discussed in the theoretical framework. In the next phase, a smaller purposively defined sub-sample of women was sampled from the SSI sample to be followed in an in-depth interview to get nuances into perceptions and experiences of the women as they were approached for the screening, given the information, taken through consenting process, to the completion of screening, and post-screening workup.

Measurements and analysis

The study initially focussed on generating understanding through a comprehensive understanding of the factors affecting at the individual level followed by describing the factors in acceptance in the community as well as in the operations end at the delivery level. Quantitative and qualitative methods were sequentially deployed in one district and taluka selected purposively. Key Informant Interviews (KII) were conducted with the officials at the district level (eight) and one Group Discussion was done with 24 community-level service providers in order to gain an understanding of the operational factors. In quantitative methods, secondary data analysis was done with the monitoring data and by primary data from surveys with a purposive sampling of 240 women and in-depth qualitative interviews (IDI) were conducted with a subsample of 20 women.

The analysis followed the operational research qualitative enquiry paradigm with the primary objective to explore acceptability factors across the hierarchies. All data from various sources was transcribed and if required translated. The analysis was done by the primary level of theme and sub-theme-based a-priori coding which was generated during phase 1 and based on literature, as well as emergent coding from primary data interpretations (more details are presented in data quality). The analysis happened in three rounds mirroring the phases described above. The first round of meaning-making from KII was also used to inform phase 2 objectives, strategy and sampling. The second round of SSI was quantitatively described in cross-sectional analysis of variables of interest and useful tests of association of independent variables of the behavioural model and dependant acceptability of screening. The detailed survey tool has been enclosed in the annexure. The open data was coded and described descriptively. The learnings were used to purposively sample the IDI. The final interpretative analysis was generated with a triangulation of the data from all 3 phases. The survey tool used in the second round comprised two tools, i.e., tool A and tool B, for screened and non-screened women respectively.

Both the tools had 10 sections as described below-

Table 4: Description of the semi-structured survey tool for screened Vs non-screened women

	Tool A	Tool B
Section 0	Identifiers of the respondents	Identifiers of the respondents
Section 1	Socio-demographic characteristics	Socio-demographic characteristics
Section 2	General awareness questions on breast and cervical cancer, eligibility of screening	General awareness questions on breast and cervical cancer, eligibility for screening
Section 3	General health-seeking attitudes and behaviour	General health seeking attitudes and behaviour
Section 4	Women's autonomy in healthcare and large household purchase decisions	Women's autonomy in healthcare and large household purchase decisions
Section 5	Perception of benefits of breast cancer screening, expenses incurred for screening	Perception of benefits of breast cancer screening, perceived cost
Section 6	Perception of benefits of cervical cancer screening, expenses incurred for screening	Perception of benefits of cervical cancer screening, perceived cost
Section 7	Sources of information on cervical and breast cancer, Likelihood of getting examined for breast cancer or taking a swab test for cervical cancer at a local PHC, Likelihood of getting screened again in relation to distance, time taken and cost of screening. Breast and cervical cancer screening experience	Sources of information on cervical and breast cancer, Likelihood of getting examined for breast cancer or taking a swab test for cervical cancer at a local PHC, Likelihood of getting screened in relation to distance, time taken and cost of screening, Questions to understand the reasons for not being screened
Section 8	Perceived susceptibility and severity	Perceived susceptibility and severity
Section 9	Social and personal norms	Social and personal norms

Independent variables indicating the socio-demographics of the sample- religion, caste, socioeconomic status were household-level variables. Individual-level independent variables included age, educational status, and the number of children for screened and non-screened women. Given the study was done in the backdrop of the COVID-19 pandemic, additional questions on vaccination were also included. Other important independent variables included Knowledge, awareness, and Practice (KAP) about cancer (breast and cervical) screening, perceived susceptibility and severity among participants, and social and personal norms about cancer among participants and the behaviour towards them in society and family. The instrument also captures the essence of the cancer screening barrier among participants and how they overcome it. The tool also highlighted the women's autonomy in their healthcare decisions and household decisions.

Indices were generated where every variable was given a score of 0 or 1. A score was generated using nine items about general self-rated awareness. Out of the nine items, 5 were the variables for breast cancer and 4 for cervical cancer. These included "have you heard of the term breast (cervical) cancer?", "Are you aware of the tests for breast (cervical) cancer?", followed by a multiple-choice question that tested the knowledge of the tests of the respective cancers. A total score of 0-4 on 9 was considered to be an indication of "Poor knowledge", whereas a score of 5 and above meant "Improved knowledge". These scores were again coded to 0 or 1.

Indices capturing the perception of women about the factors that can increase the risk of cancer were created using four items for breast cancer and 10 items for cervical cancer. Indices were also created to understand which group of women is perceived as the group that should be screened for cancer, using 4 items from breast cancer and 6 for cervical cancer. The knowledge of signs and symptoms was observed through indices that had 5 and 4 items for breast and cervical cancer, respectively. The participants were also asked to report social and personal norms about cancer, which were computed using eight-item scores. Separate indices were also created for variables like source of information, willingness to get screened and perceived severity and susceptibility of cancer. The details of the items and total scores are enclosed in Table 6 of the annexure.

Tests for association was done in two ways. One to compare the associations of factors with the outcome of having been screened or not been screened. In the second comparison, the dependent variable was willingness to get tested (breast and cervical). Logistic regression tests were run for association of various socio-demographic-behavioural factors.

Ethics

All guidelines for conducting phone-based surveys ethically, during the COVID pandemic, were followed. The surveys were of 40 minutes in duration and due process of seeking consent were followed. Because these were phone interviews, the consent was read out and a verbal consent was sought. The questions asked of the women are based on screening services and consent states that they are free to discontinue at any point, should they feel any discomfort. Participants were informed of their freedom to skip or not answer any survey or interview questions, or choose not to participate in the surveys, and that they may withdraw from the study at any time. The participants were assured that their participation would not affect their access to government health services and that their confidentiality was maintained.

The study protocol and tools, including consent processes, were reviewed and approved by IFMR Human Subjects Committee (IRB00007107; FWA00014616; IORG0005894 dated September 13 2021).

Fieldwork and quality control

The questionnaire was finalized in multiple iterations. The following tasks were completed before finalizing tools for administration:

- Field scoping visits were conducted to develop the survey instruments including interview guides and questionnaires.
- Once the survey instruments were developed, they were translated into Tamil and pilot tested.

- Based on the insights from the pilot test and inputs from the field, the instrument was revised.

The survey instrument was primarily closed-ended and there were only a few open-ended questions. The tool was designed to be used in phone surveys with short and easy response options. It was translated from English to Tamil. Given the paucity of time, the tool was not back-translated and instead was reviewed independently by two teams with proficiency in both languages for validity and cultural appropriateness. The inputs were cross-checked and corrections were verified. The tool was deployed on the survey CTO software and pretested in the field. The data from pretesting was reviewed and found to be of good quality in keeping with the logical flow and validity. Minor adjustments were made to a few software kinks which were producing errors.

For the quantitative survey, the core study team members and field executives trained the investigators and the supervisors. The training comprised of four days of in-class training, one-day of field practice and one day of de-briefing. The training agenda was prepared in advance. The data was collected and entered digitally by the surveyors using Survey CTO. Data was monitored and checked by supervisors and a field executive before submission. The data is stored on the shared server of IFMR LEAD. We completed a manual back-check, by independent back-checkers on a randomly selected 10% of the sample for selected variables. The phone-based surveys were administered by a team of entirely female surveyors to suit the largely rural background of the exclusively female respondents.

For the qualitative data, the research team consisted of two senior qualitative researchers who were already trained in conducting qualitative studies, supported by note takers who were trained for a day on the different aspects of the study. Each IDI lasted for half an hour to a maximum of one hour and was conducted in Tamil (the local language) over the telephone, after obtaining oral consent. All interviews were recorded, transcribed and coded by a single researcher and was verified by another researcher. The data was categorised and analysed using the software QDA miner. The analysis was thematic, based on the research questions and the broad set of expected sub-themes of importance based on the 4-A conceptual framework. Additional themes emerged during the data collection and coding which led to the finalised code-book consisting of additional codes which could be accommodated within the existing broad themes. Data from the open-ended questions from the semi-structured surveys with women, the analysis of the mapping was used to gain additional insights and aid reflexivity.

Description of sample

Key informant interviews were conducted with key officials including the District Programme Officer (DPO) NCD Coimbatore, Block Medical Officer BMO(from DPH side) with all the PHC Medical officers-in-charge of NCD, Senior Nurse in-charge of NCD within the block Annur, Chief Medical Officer (CMO, DMS side) with Nursing Superintendent, SNs in-charge for NCD in Govt. Hospital – Annur. The objective was to understand their perceptions specifically on cancer screening acceptance factors and more generally on the use of services. Data collection was done from November 2021 to February 2022. The KII with some of the senior district officers were done on phone initially and this was followed up by face-to-face meetings with whoever was available during the site visit.

Table 5: Sample socio-demographic characteristics

Demographic Characteristics	Screened women (N=85)	Non-screened women (N=155)
Age (Mean (Standard Error (SE)))	48.9 (1.36)	43.2 (0.79)
Religion		
Hindu	96.5	96.1
Muslim	1.2	1.3
Christian	2.4	2.6
Marital Status		
Married	95.3	96.1
Single	1.2	0.7
Widowed	3.5	2.6
Caste		
Scheduled Caste	23.5	20.7
Scheduled Tribe	18.8	8.4
Other Backward Class	25.9	41.9
General	22.4	25.2
No caste	1.2	1.3
Other	8.2	2.6
Educational Status		
No formal Education	25.9	30.3
Primary	23.5	14.8
Secondary	22.4	32.3
Higher	28.2	22.6
Occupation Status		
Do not work to earn any income/Housewife	49.4	52.9
Cultivation	18.8	5.8
Farm Labour	11.8	21.9
Non-farm labour	3.5	5.2
Household industry	3.5	1.3
Self-employment (auto-rickshaw driver, Government / Private salaried job	3.5	2.6
Professional Business (Engineer, lawyer, etc.)	9.4	9.7
	0.0	0.7
Family Income		
0 to 2,50,000	89.4	98.7
2,50,000 to 5,00,000	9.4	1.3
7,50,000 to 10,00,000	1.2	
Ever given Birth to a child	96.5	96.8
Mean Number of children (Mean (SE))	1.9(0.09)	1.9(0.05)
Mean age at first pregnancy (Mean (SE))	22.2 (0.57)	22.1 (0.30)

Of the total sample of 240 women, 85 were screened, and 155 were not screened (Table 5). The mean age among screened women was 49 years, and among non-screened, it was 43 years. 96% of the women belonged to the Hindu religion, followed by the Christian religion. Around 96% of the screened women were married, and 26% belonged to the OBC caste. Among the screened women, 28% were educated till higher level (more than 12th standard) and 50% were not currently employed. Among non-screened women, the majority were educated till secondary level (32%), and 53% were not engaged in any formal/informal sectors. Among the women, 89% of screened women and 99% of non-screened women had a family income of less than 2,50,000 INR. 96% of the women were currently married and had at least two children, with a mean pregnancy age of 22 years.

To cover the community service provider perspective one group interview/discussion was conducted which was attended by VHN from Annur PHC, BMO, Medical officer-in-charge for NCD, Senior Nurse in-charge for NCD (20 participants). One mapping exercise was conducted both in the Annur PHC and the GH which was done in participation and discussion with the Medical officer-in-charge of NCD and Senior Nurse-in-charge of NCD. In-depth interviews were conducted with 20 participants who were chosen in a convenient sample from the semi-structured interview listing based on who consent and availability for phone-based interviewing.

Chapter 3: Results

Section 1: Findings from secondary data

The data was collected from the District GH which is the secondary level health care centre and the PHC. The consolidated data for the Annur block from the year 2018 onwards shows that a total of 5749 women were screened for CaCx between 2018 and 2021 and 18 cases were screened positive, yielding a test positivity rate of 0.3% among the population of women screened. For CaBr there was a higher total number of screenings with a total of 10269 women screened out of which 39 were detected positive yielding a test positivity rate of 0.37%. At the GH the test positivity rates were higher (2017-Aug 21) at 0.78% for CaBr and 0.65% for CaCx than the PHCs. At Mookanur PHC this was 0.47% and 0.54%, and at SMC Palayam 0.31% and 0.58% respectively. Pogalur PHC has a zero TPR because no cases have been detected here till 2021.

With an estimated 40,000 eligible female population in Annur, around 14% of the eligible female population has been covered for CaCx screening and 25% for CaBr screening. It will take approximately 4-5 years to complete a single round of CaBr screenings and 6-7 years to complete a single round of CaCx screenings. Analysis of the number of women screened across all 3 PHCs and the GH shows that the number of screenings dropped in the year 2020 due to the Covid pandemic and picked up again in 2021. The number of screenings at the GH had dropped in the year 2018 because there was no dedicated MO (Ob/Gyn) and nurse appointed for screening. There has been a steep increase in the number of CaBr screenings at SMC Palayam post the pandemic due to a number of camps being held for screening. In total 12 monthly camps were held at SMC Palayam for the MTM programme. Most women (82%) who came to the camps were willing to get screened for CaBr but declined the CaCx screening hence the increase was modest for CaCx screenings. This higher non-willingness for CaCx screening as compared to CaBr screening particularly at campsites is explored in qualitative studies.

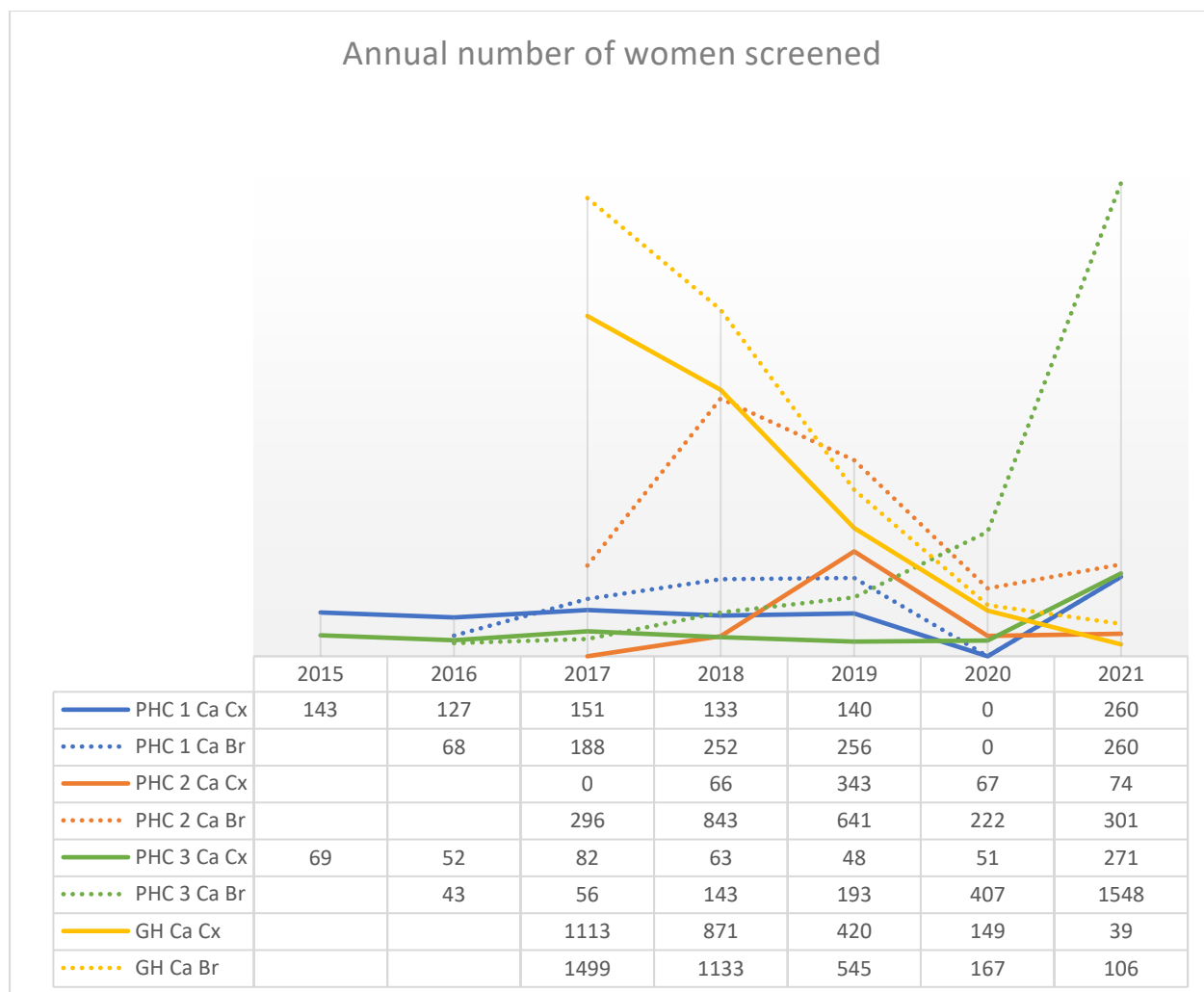


Figure 3: Number of women screened in Pogalur PHC (PHC 1), Mookanur PHC (PHC 2), SMC Palayam PHC (PHC 3) and General Hospital from 2015-2021

Analysis of NCD OP data for one month (Source: NCD Blue monthly report Aug 2021) shows that out of 63 new women patients 10 women were recruited after consent for screening which is a conversion rate of 16%.

We also analysed the data for age composition and this was done separately for PHC and GH. The results are presented below.

PHC Data

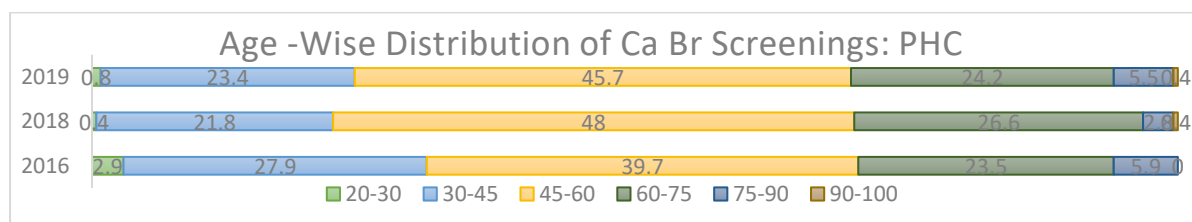


Figure 4: Distribution of individuals screened at PHC for CaBr from 2016-19

PHC data on breast cancer screenings shows that women belonging to the 45-60 years age group, make up the largest proportion of those who underwent the screenings in the years 2016, 2018 and 2019. In 2016, the second largest proportion of women belonged to the 30-34 age group while in 2018 and 2019, the 60-75 age group made up the second-largest group.

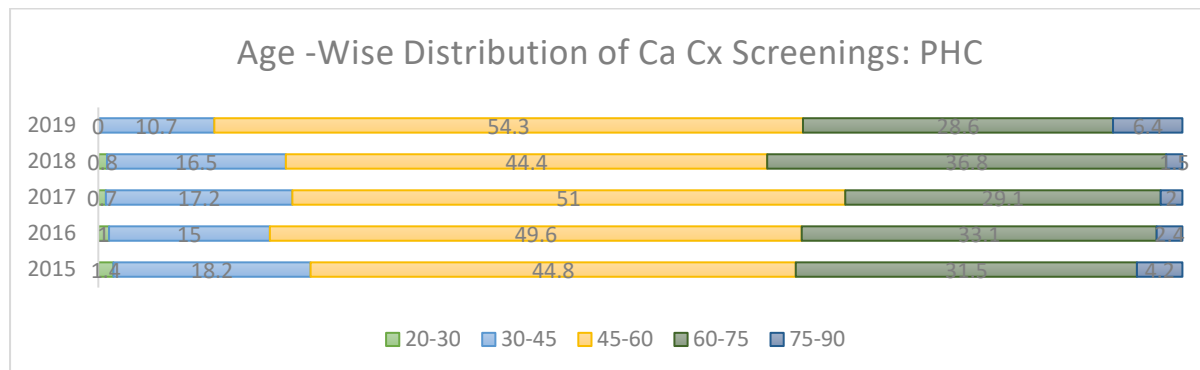


Figure 5: Distribution of individuals screened at PHC for CaCx from 2015-19

PHC data on cervical cancer screening for the years 2015-2019 shows that women who fall in the age distribution of 45-60, constitute the largest share of those who underwent the screenings, followed by those who fall in the age distribution of 60-75, across the 5- year period.

GH Data

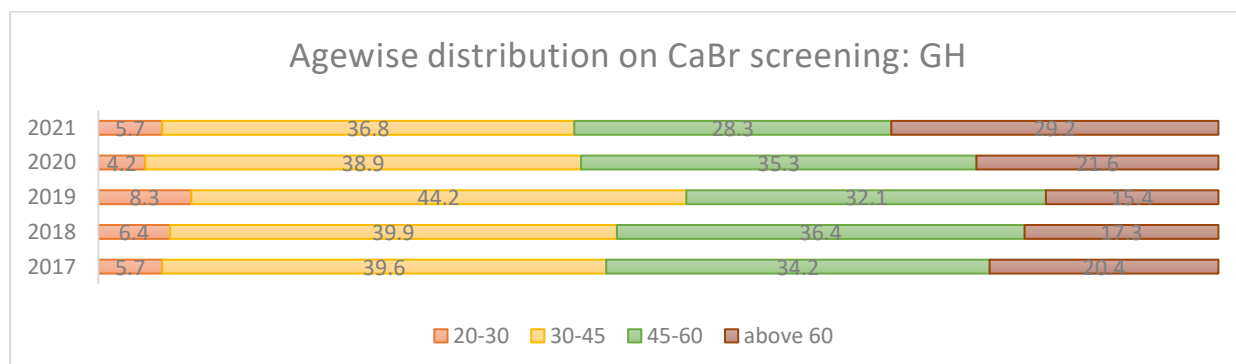


Figure 6: Distribution of individuals screened at GH for CaBr from 2017-21(until September)

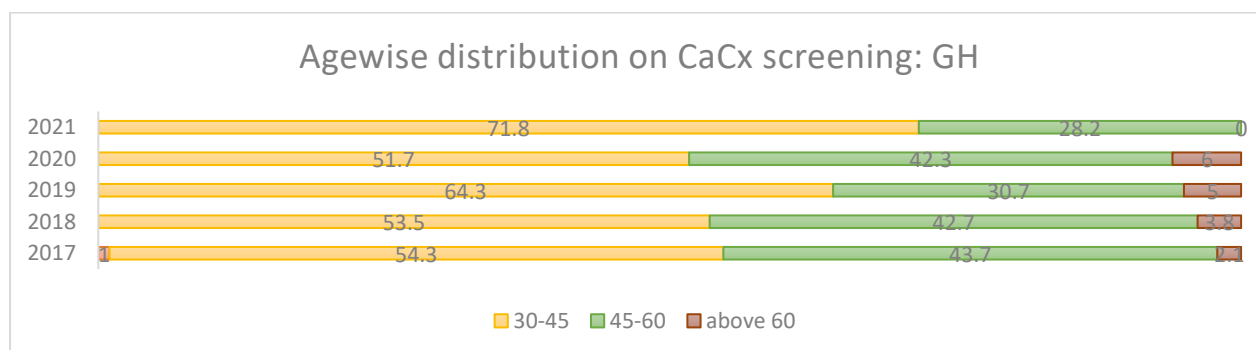


Figure 7: Distribution of individuals screened at GH for CaCx from 2017-21(until September) at GH

Government Hospital data shows that the age group 30-45 accounts for the largest proportion of CBE and Via Villi screenings conducted across the 5-year period from 2017-2021, followed by the 45-60 age group. Clearly, a large number of younger women are being screened as these women may be accessing services for MCH.

Section 2: Findings from survey

This section is organised based on the health care-seeking behaviour framework into 5 areas habit, affect, belief, norms and external factors.

2.1 Habit

The individual characteristics of the respondents have been discussed in the section-Description of the sample. Additionally, the respondents were asked questions to understand their awareness about cancer, autonomy among women, general health-seeking behaviour and the number of times they had been screened along with the place of screening and reason for screening.

Basic awareness about Cancer

Participants who came to the health facility were asked about their awareness about cancer breast and cervical cancer. Figure 9 presents the percentage distribution of basic awareness of Breast and Cervical cancer screening among screened and non-screened participants.

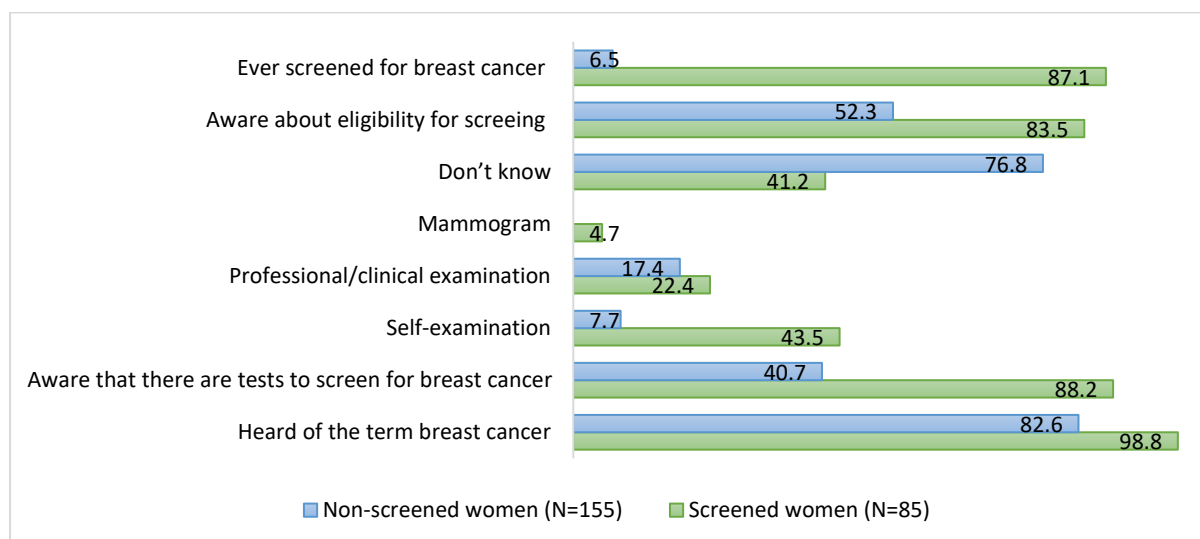


Figure 8: Basic Awareness of breast cancer

Among the women, 99% of the screened women and 83% of the non-screened women had heard the term breast cancer. Among them, 88% of screened women were aware of the tests that should be performed to screen for breast cancer. Among screened women, 43% know that self-examination can be used to screen for breast cancer, 22% reported that breast cancer could be screened using clinical

examination, and 41% didn't know about breast cancer tests. Among the non-screened women, 77% didn't know about any tests for breast cancer, while 17% reported that breast cancer could be screened using a clinical examination. The participants were also asked if they were eligible for the tests. Among them, 84% of screened women and 52% of non-screened women reported that they were eligible for the test. Further, 87% of the screened women and only 7% of the non-screened women were ever tested for breast cancer.

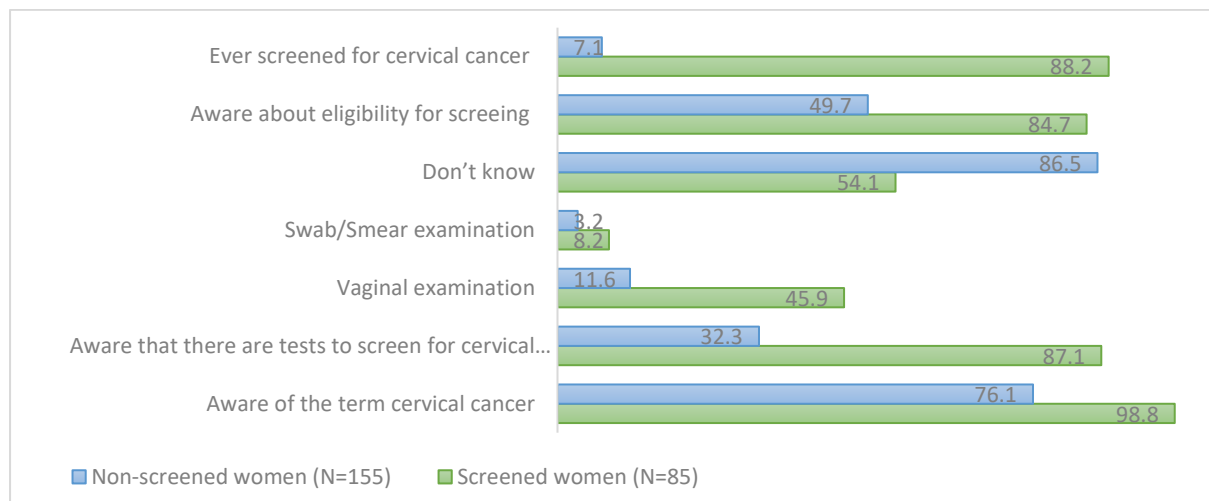


Figure 9: Basic Awareness of cervical cancer

99% of the screened women and 77% of the non-screened women had heard the term cervical cancer. Among them, 87% of the screened women were aware of the tests that should be performed to screen for cervical cancer. Among screened women, 46% know that vaginal examination can be used to screen for cervical cancer, and eight per cent reported that cervical cancer could be screened using a swab/smear examination. In comparison, 54% didn't know about cervical cancer tests. Among the non-screened women, 86% didn't know about any tests for cervical cancer, while 12% reported that cervical cancer could be screened using a vaginal examination. The participants were also asked if they were eligible for the tests. Among them, 85% of screened women and half of the non-screened women reported that they were eligible for the test, and 88% of screened women and only seven per cent of non-screened women were ever tested for cervical cancer.

Women's autonomy in healthcare decisions

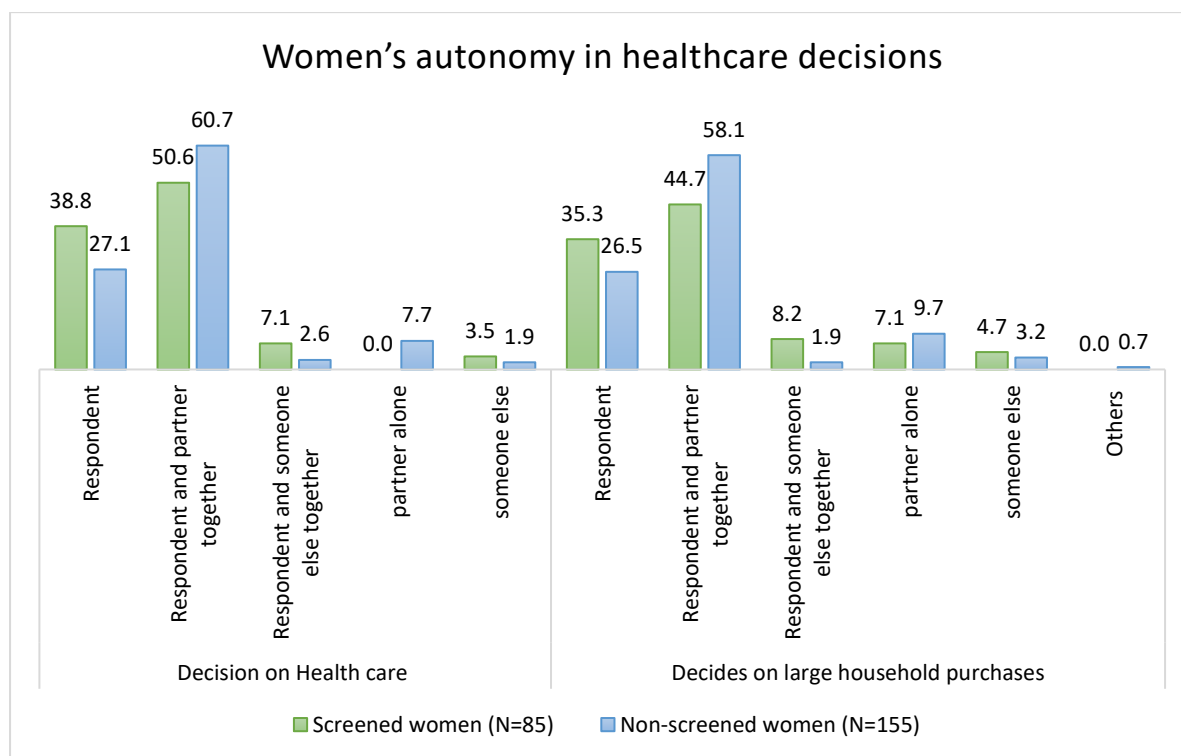


Figure 10: Women's autonomy in health care decisions and large household purchase decisions

Participants were also asked about their autonomy in health care and decisions on large household purchases (Table 11, annexure). Among the screened and non-screened women, the majority of the decision on health care was taken by the respondent or jointly with a partner. If we take categories 1 (respondent) and 2 (respondent and partner together) for higher decision-making authority then both are comparable, though it was seen that a greater percentage of the non-screened women took health care decisions with their partners. A similar trend was observed in the case of decision-making with respect to large household decisions, where 45% of screened women and 58% of non-screened women reported the decision was made jointly by her and her partner.

General Health Seeking Behaviour

The respondents were asked about their general health-seeking behaviour and trust in the health facility (Table 10, annexure). They were asked to report the number of times they visited health facilities for health concerns and their perceptions of health professionals. Around three times a year, screened women visit a doctor, while non-screened women visit four times in a year to a doctor.

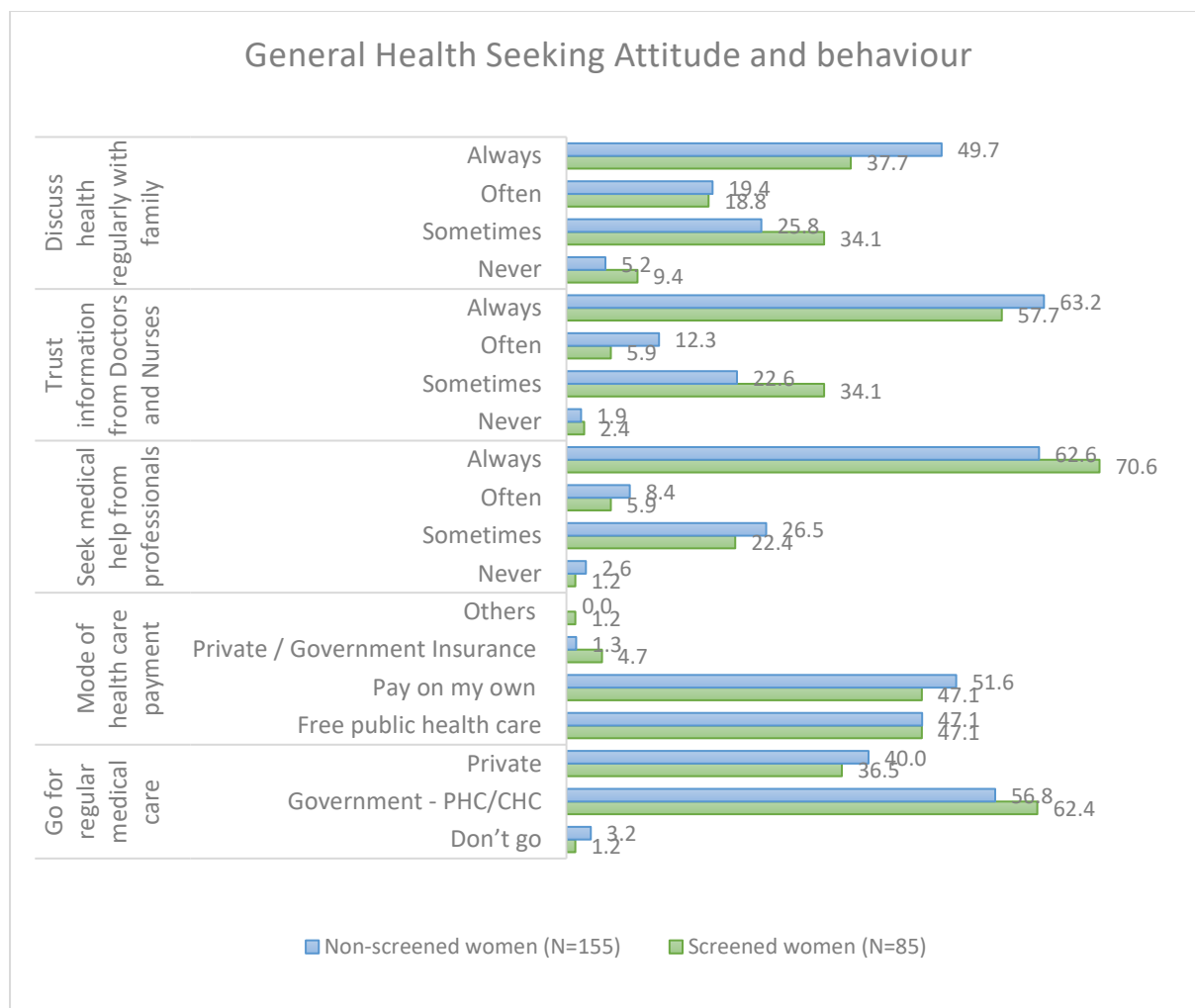


Figure 11: General health-seeking behaviour among the respondents

More than half of the participants visited the government facility and always sought help from licensed professionals. The participants were also asked to rate their trust in the health system in providing the correct information, and 58% of screened women and 63% of the non-screened women reported that they always trust the information provided by doctors and nurses. They were also asked whether they discuss their health issues with family members, and almost all were found to be discussing their health regularly with their family.

General health-seeking behaviour was also explored in questions related to vaccination, COVID-19 and Polio showing high proportions of service uptake. More than 95% of the respondents got vaccinated for COVID-19 (at least one dose, Nov Dec 2021), and 99% of screened women and 96% of non-screened women said their child was vaccinated for polio.

Access of screening

Those who were screened for breast or cervical cancer were asked about the number of times they were screened, where they were screened, and why they were screened for cancer.

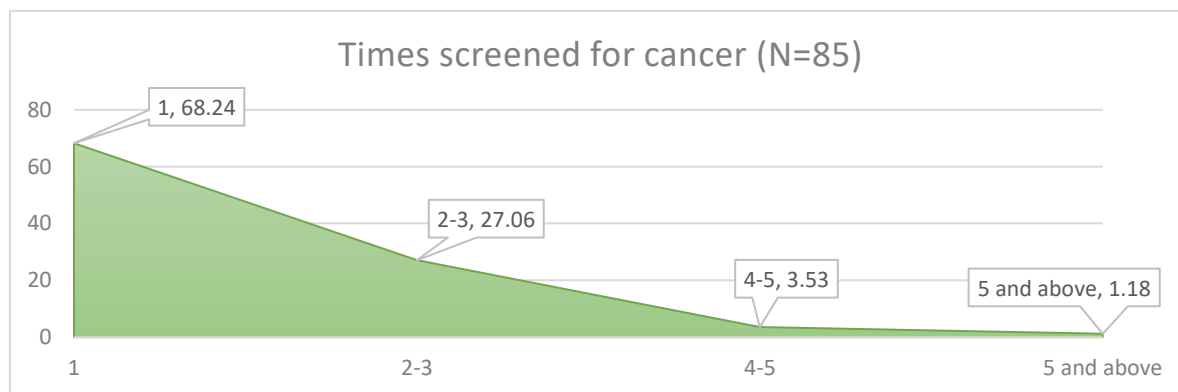


Figure 12: The number of times respondents 34 screened for breast and cervical cancer

Around 68% of the screened women were screened at least once for cancer. The percentages are the same for breast and cervical cancer screenings as both screenings are done together.

Place of Screening

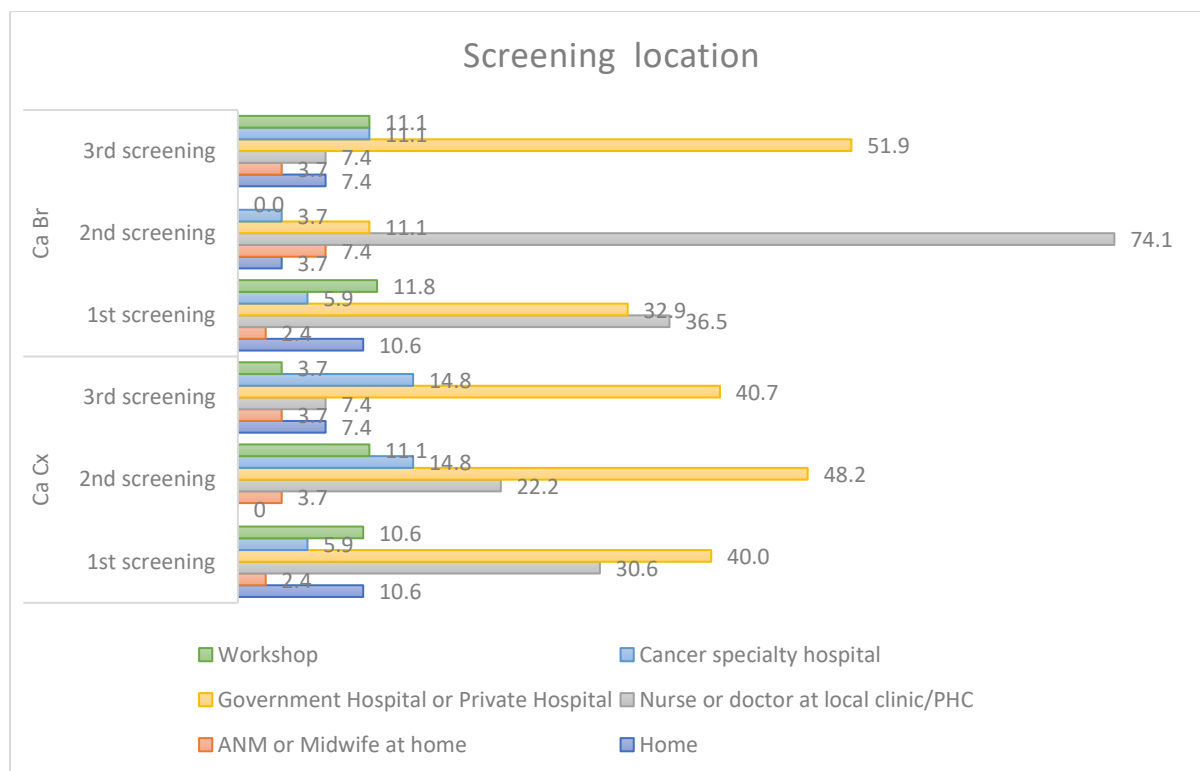


Figure 13: The place where respondents were screened each time for cervical and breast cancer

Majority of the women were screened at a government or Private Hospital. Although the majority of the first-time screenings for breast cancer were held at the local clinic/PHC and 74% of second-time screenings were held at the government hospital. These figures are indicative of the trend of referring suspicious cases to the hospitals after the first screening. However, it is not surprising that majority of the first time, second time and third time screenings for cervical cancer were held at hospitals, given that via villi requires a hospital level setup.

Reason for Screening

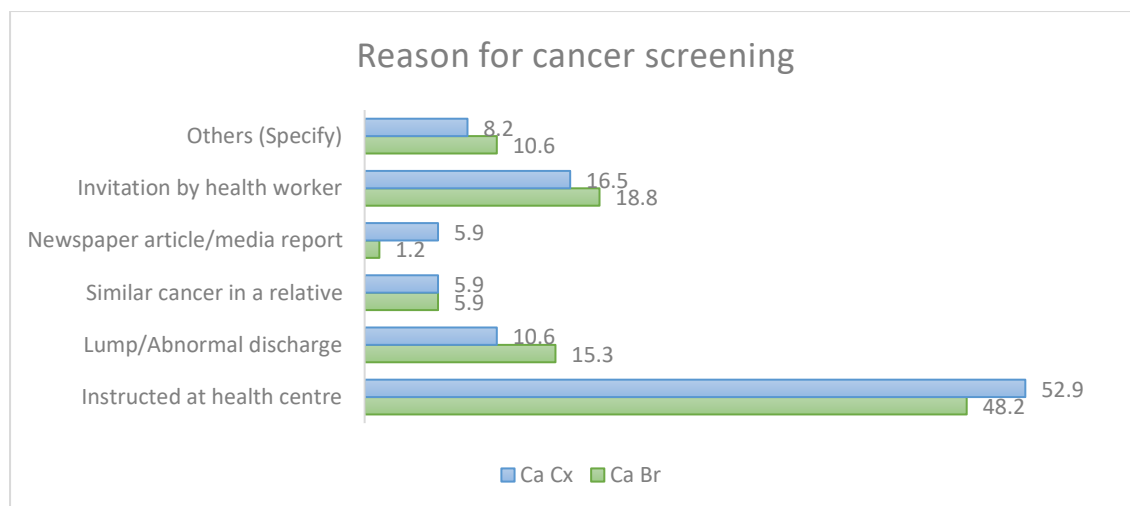


Figure 14: Reason for which respondents underwent screening for breast and cervical cancer

While asking for the reason for breast and cervical screening, almost half of the respondents said they were instructed at the health centre to get screened. When asked about who has recommended cervical cancer testing, around 45% reported that ASHA/Health workers motivated them to get tested, followed by the spouse (33%).

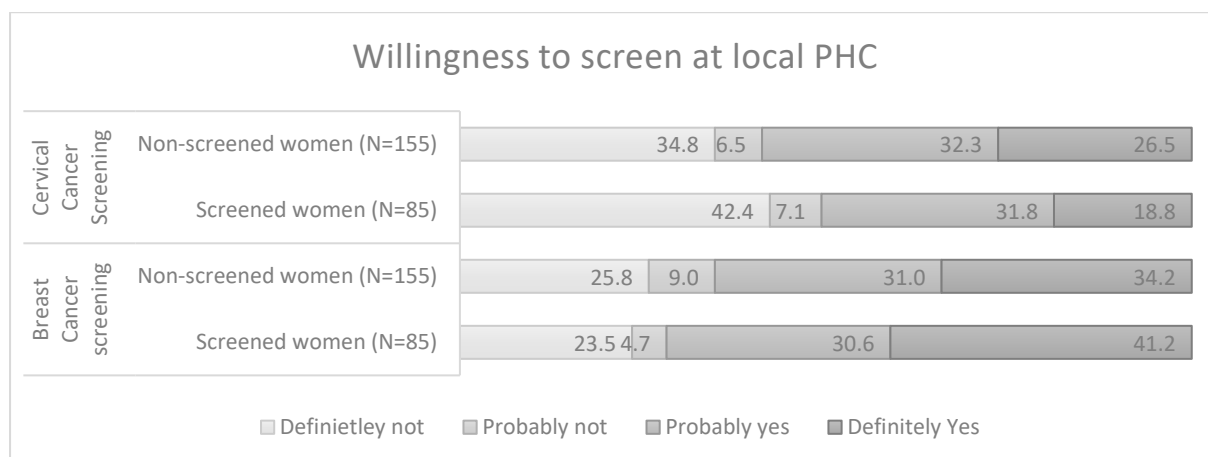


Figure 15: Willingness to screen at local PHC if approached by health worker

Also, all the participants were asked whether they would get screened if approached by a health worker, to which more than 70% of screened women said yes to breast cancer screening and around half of the screened women said yes to cervical cancer screening. While among non-screened women, 65% said yes to breast screening at local PHC and 60% said yes to cervical cancer screening in future. The refusal rates for wanting to get screened was much lesser in breast cancer as compared to Cervical cancer. To note is that once a woman has been screened for Cervical cancer nearly half of them do not want to be screened again.

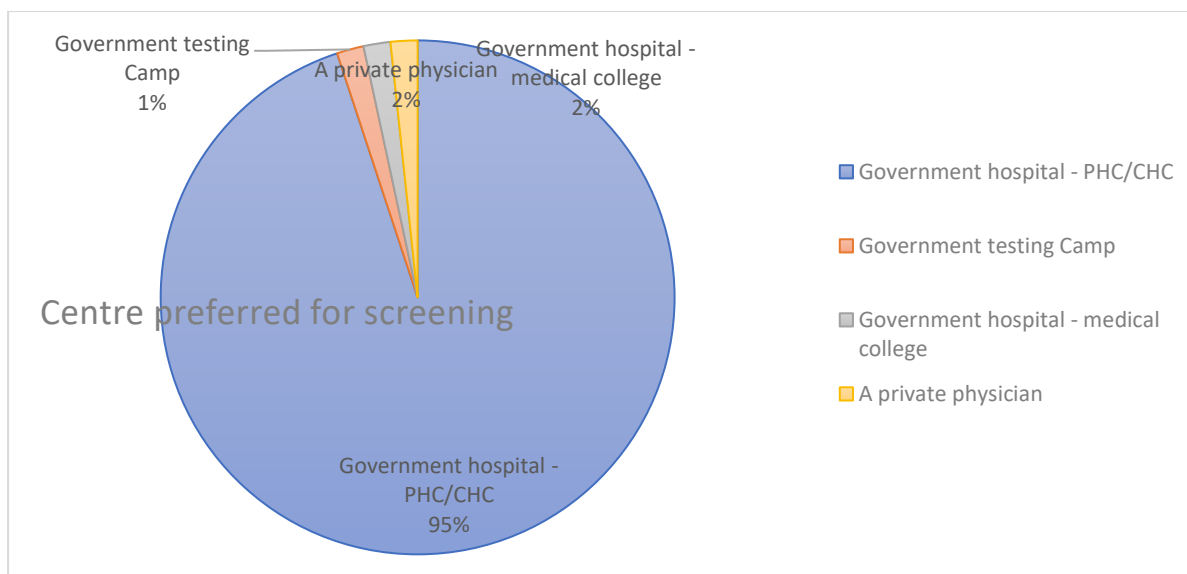


Figure 16: Centre preferred for screening

A huge majority of the women (95%) prefer to screen at the Government centres, including both who have already screened for the next screening and those who have never screened for their first screening.

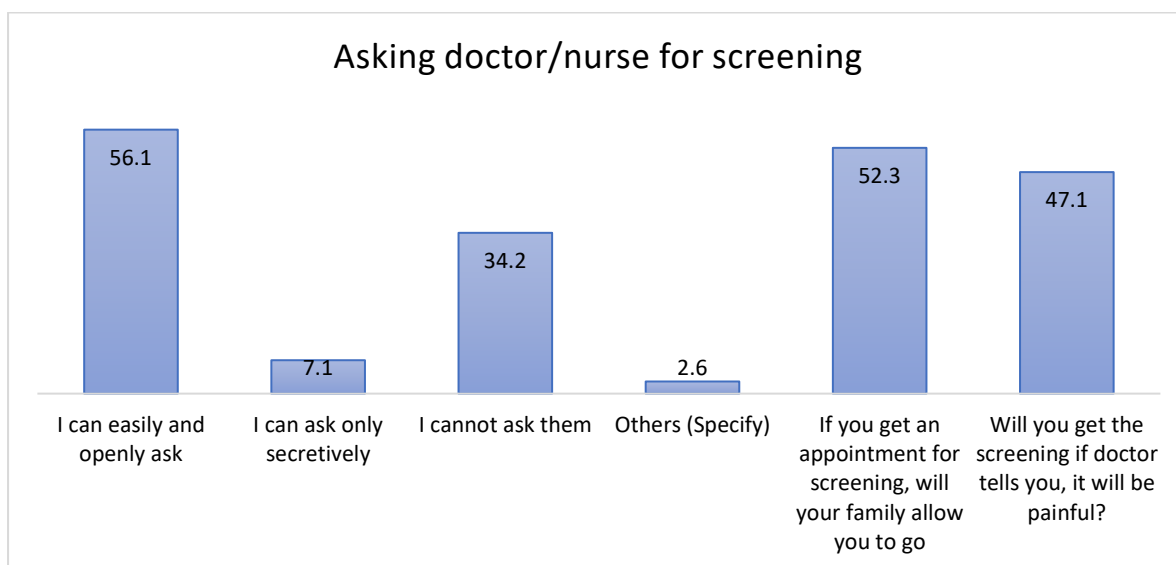


Figure 17: Openness in asking for a referral and family

When asked for a referral for screening from doctors, 56% reported that they could easily and openly ask doctors for a referral. The non-screened women were asked about their perceptions of cancer screening with doctors and families. Around 54% of women said they could discuss being screened with their doctors, and 52% reported that their family would allow them to get screened,

2.2. Affect

Perception of Preventability and Curability

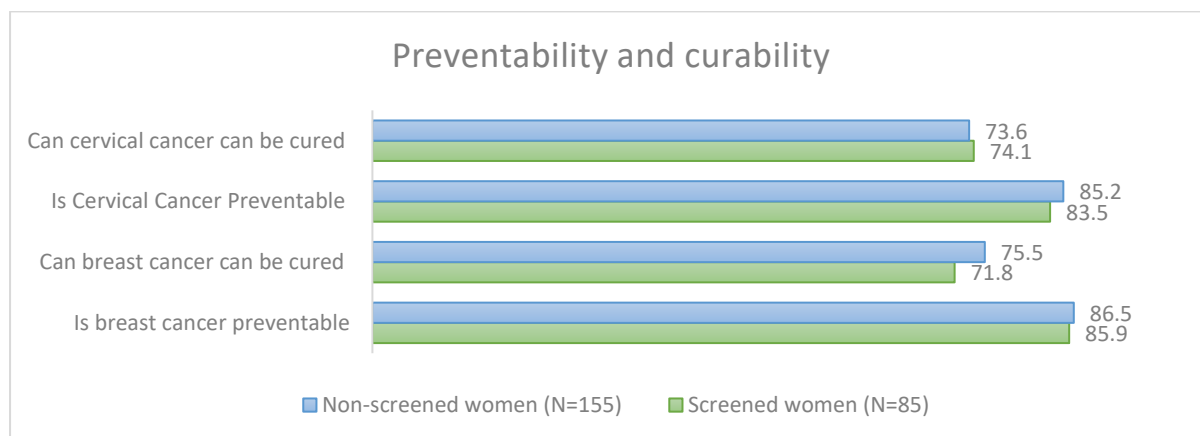


Figure 18: Respondents' perception of preventability and curability of cervical and breast cancer

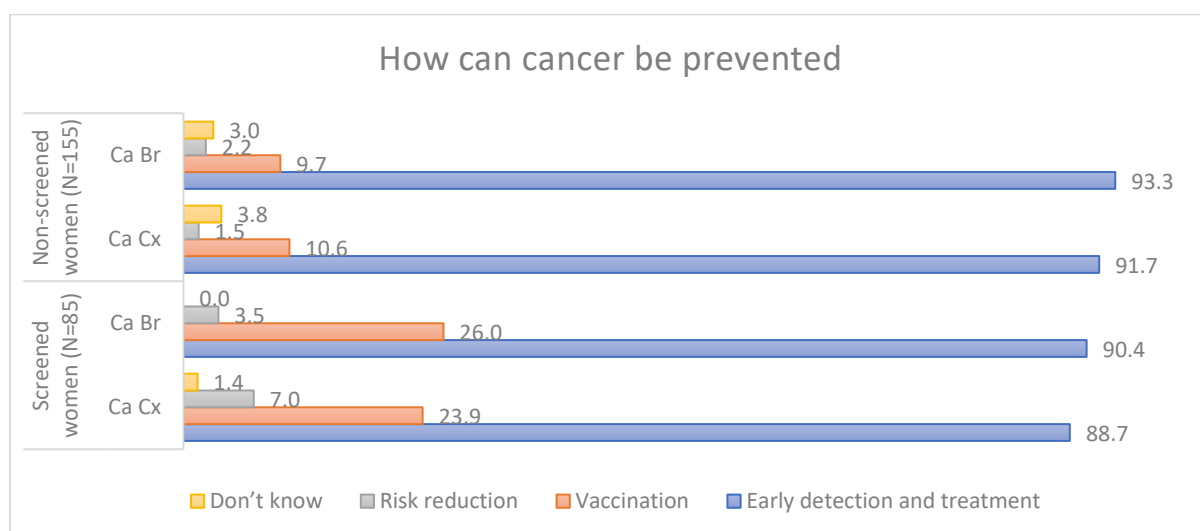


Figure 19: Respondents' understanding of the ways through which cancer can be prevented

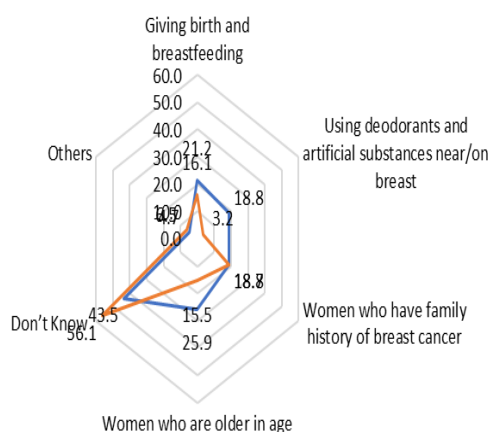
Among both groups of screened and non-screened, about 86% of the women said that breast cancer could be preventable and more than 70% reported that it can be prevented with the help of early detection and treatment. In the case of cervical cancer, more than 83% of the women said that it could be preventable, and about 74% reported that it could be prevented with the help of early detection and treatment.

Perceived risk factors and eligibility for screening

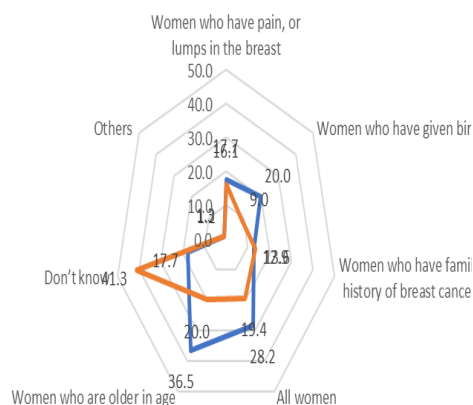
To get insights into women's understanding and perceptions about Cancer, several questions related to the risk factors of the disease and perception of those eligible for screening were asked to the respondents. Figure 21, (Tables 12 and 13 in

annexure) show the perception and understanding of the respondents on Breast and Cervical Cancer, respectively.

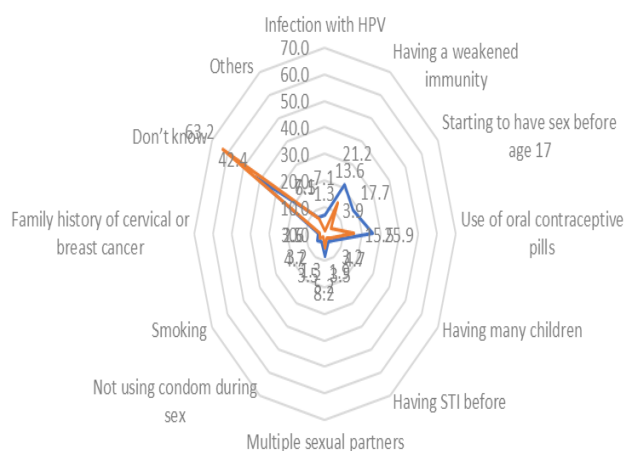
CaBr risk



CaBr who should screen



CaCx Risk



CaCx who should screen

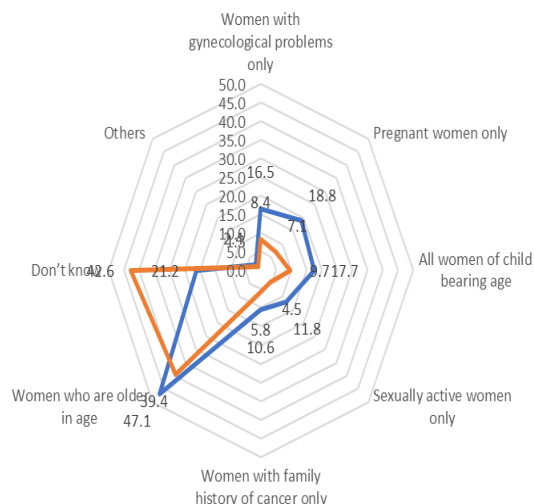


Figure 20: Perceived risk and eligible women for screening for both cancers

Women were asked about the conditions that increase the chances of having breast cancer. It was found that among the screened women, 26% of participants said that older women have a greater chance of acquiring breast cancer, followed by 21% of the respondents who reported that breast cancer could increase by giving birth and breastfeeding the child. In comparison, around 44% of the screened and 56% of the non-screened women reported that they didn't know about the conditions that increase the risk of breast cancer. 19% of the screened

and non-screened women reported that women with a family history of cancer have more chances of having breast cancer. Participants were also asked which group generally should be screened for cancer. Of the 85 screened women, 37% reported that older women should be screened for breast cancer. While among the non-screened women, 41% said that they don't know which group should be screened for cancer, but around 19% reported that all women should be screened, followed by women who have pain, or lumps in the breast (16%). The participants were also asked about the signs and symptoms of breast cancer. It was found that the majority of the screened women knew at least one symptom of breast cancer, with half of them knowing that pain in breast or nipple areas is a risk factor for breast cancer. The knowledge of symptoms was meagre among non-screened women, with around 58% did not know the symptoms of breast cancer, while 30% reported that lumps on the breast were a significant sign of breast cancer.

Women were asked about their awareness of the causes of cervical cancer, and it was found that among the screened women, 42% did not know about any reason for cervical cancer. In comparison, 26% said oral contraceptive pills were the primary cause of cervical cancer in India, followed by weakened immunity (21%). Among the non-screened women, 63% didn't know about any cause of cervical cancer, while 15% reported that cervical cancer could occur due to the use of oral contraceptive pills. Participants were also asked which group generally should be screened for cancer. Of 85 screened women, 47% reported that older women should be screened for cervical cancer, while among non-screened, 43% said that they don't know which group should be screened for cancer, but around 39% reported that older women should be screened. The participants were also asked about the signs and symptoms of cervical cancer. It was found that the majority of the screened women know at least one symptom of cervical cancer, with 44% knowing that vaginal discharge is one of the common symptoms, followed by vaginal bleeding (37%). The knowledge of symptoms was very low among non-screened women, with around 60% not knowing cervical cancer symptoms, while 28% reported vaginal bleeding as one of the symptoms.

Women were asked to report their perspectives towards cancer. Both positive and negative statements were asked of the women (Table 16, annexure). For negative statements, a comparison of proportion shows high levels of agreement with the following statements: "Cervical or breast cancer is a deadly disease" (72%), among screened, and 81% among non-screened, "I do not know at what age it is necessary to have a screening test", 50% among screened, and 65% among non-screened women. For positive statements, the higher level of agreement was found in the statement "the screening can save my life", which was 75% among screened women, and 85% among non-screened women.

Perceived Susceptibility

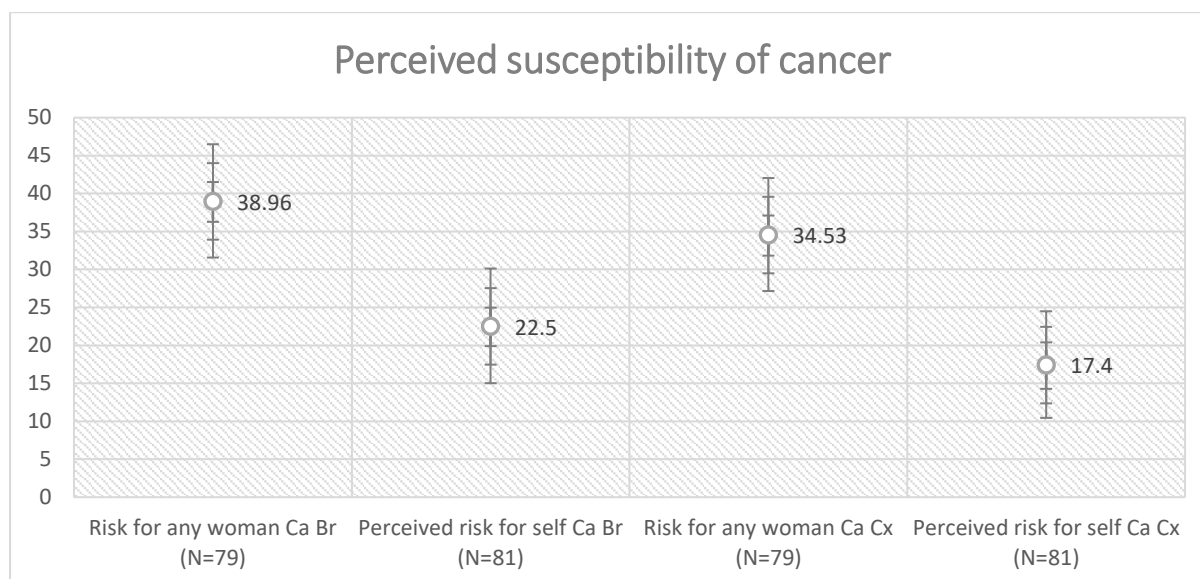


Figure 21: how women perceive their susceptibility to cancer and that of others

The non-screened women were also asked their future perception of cancer in India and asked to rate four items out of 100 (Figure 22, Table 17, annexure). The maximum mean score of 39 (2.42) was given to the statement, "Any women your age to develop breast cancer in the next ten years", followed by 35(2.40) to the statement, "Any women your age to develop cervical cancer in the next ten years".

2.3. Belief

Around 67% of screened women reported that their families were optimistic about being screened, and approximately 58% said that they were allowed to get another screening.

Reason for not screening

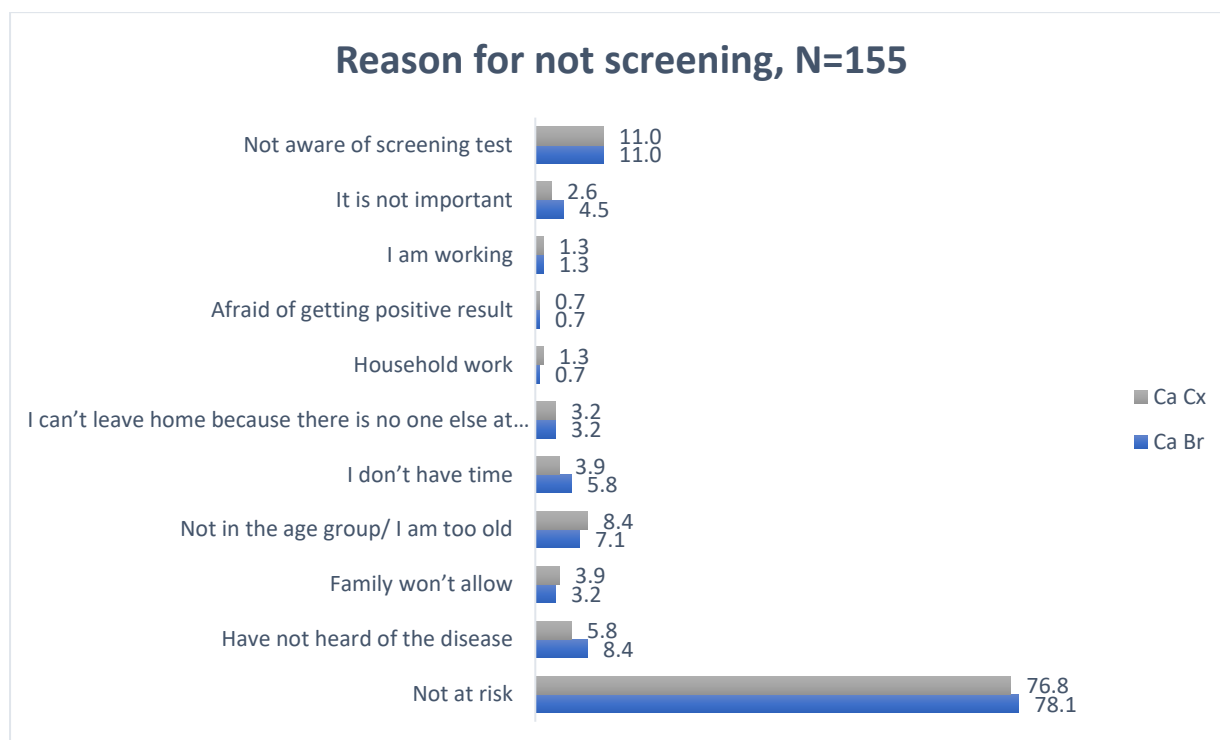


Figure 22: Reasons why non-screened women have not undergone screening

Those who were not screened were asked to report the reason for not screening for cancer; more than 75% said that they were not screened for both breast or cervical cancer as they were not at risk (Figure 23, Table 15 annexure).

Perceived Economic Cost/Value

The respondents were asked about their perception of the cost of screening. Among the screened women, 27% did not know about the cost of breast and cervical cancer screening using clinical examination. Among the 155 non-screened women, 40% didn't know about the cost of breast cancer screening, while about 45% of the women did not know the cost of cervical cancer screening. It is noteworthy that a larger percentage of non-screened women, as compared to screened women, did not know about the screening cost. Further, about 45%-47% of the screened women and about 30% of the non-screened women valued the screening services highly as they reported a cost of 2000-4000 INR and 4000+).

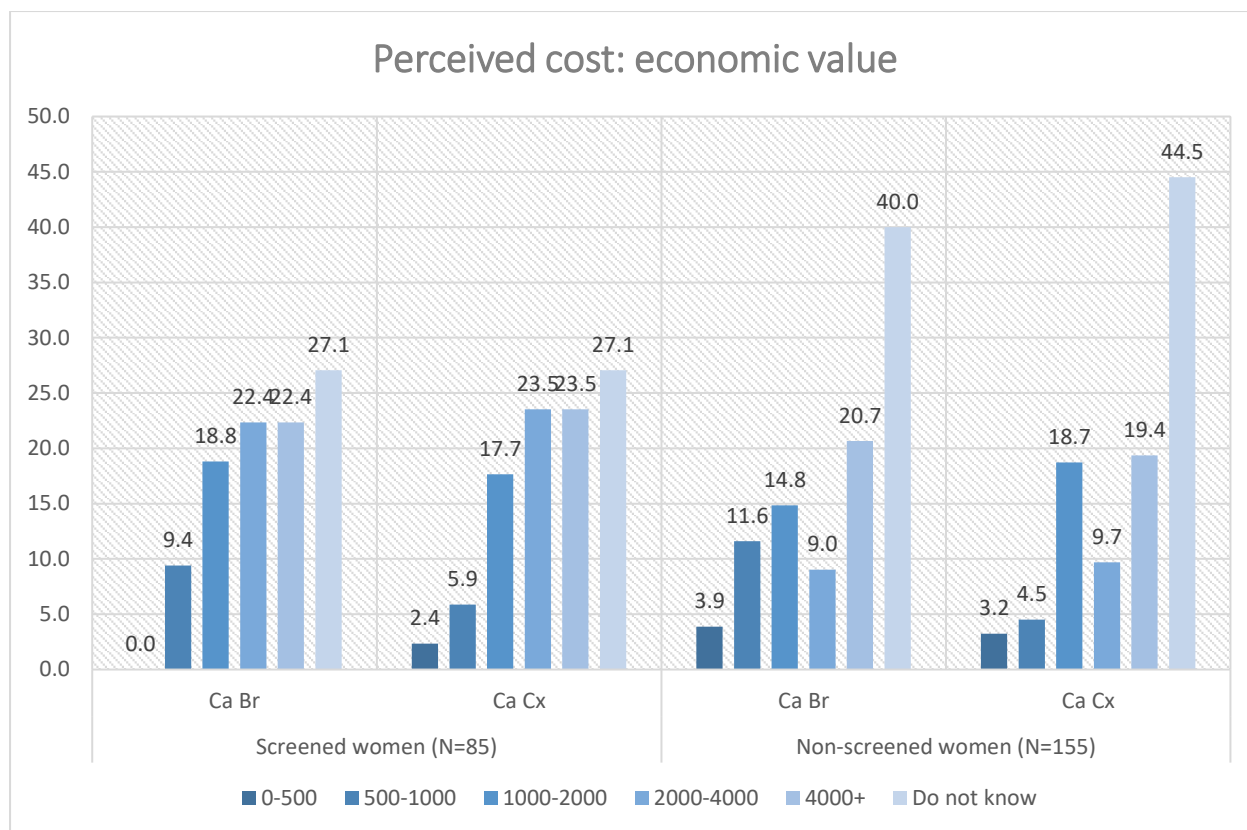


Figure 23: Respondents' perception of the cost of screening

Actual Screening Cost

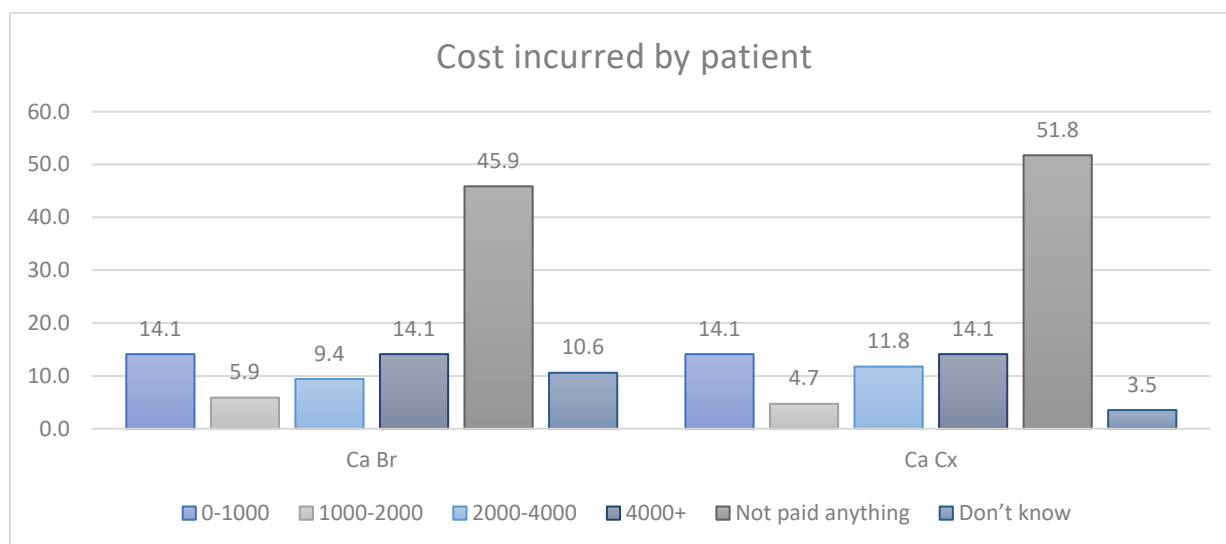


Figure 24: Actual screening cost incurred by the patient

Those screened were asked about the cost they spent on screening; 46% and 52% of the women said that they did not spend anything on their breast cancer and cervical cancer screening, respectively. While 14% of the screened women reported a cost of less than INR 500 for breast cancer and a cost of less than INR

1000 for cervical cancer. For each of the categories, 14% also reported a cost more than INR 4000.

Barriers to screening

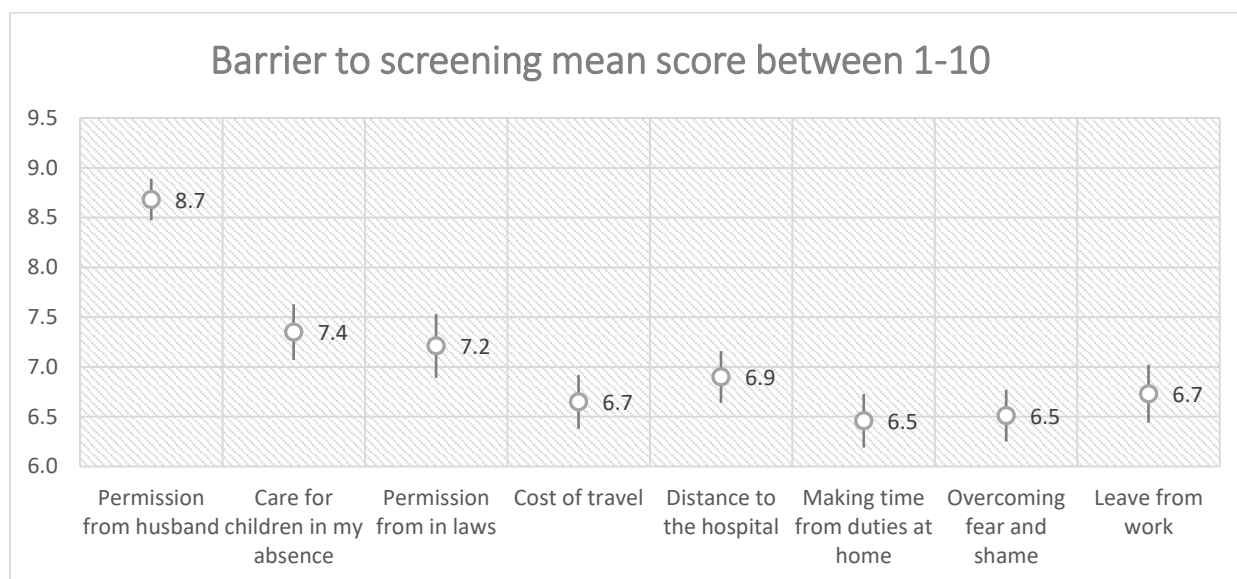


Figure 25: Barriers to screening on a mean score between 0-10

The screened women were asked to rate the major barriers to screening out of 10. Those who were screened at the health centre reported that permission from a husband is the primary barrier to screening, followed by care for children in her absence (7.35 (0.28)). Only 27% reported that they overcame the barrier to deciding for coming to the screening.

2.4. Social and personal norms

Under norms, we covered interpersonal relations of who accompanies for screening, their agreement on general perceptions on screening and their perceived prevalence of screening in the community.



Figure 26: Who accompanied the respondent to the screening site (%)

55% of the women were reported that they were accompanied by their husbands to the health centre for screening, followed by 17%, who reported that they came to the centre alone. Further, about 14% were accompanied by their family members and 14% of the respondents were accompanied by others (health workers, neighbours).

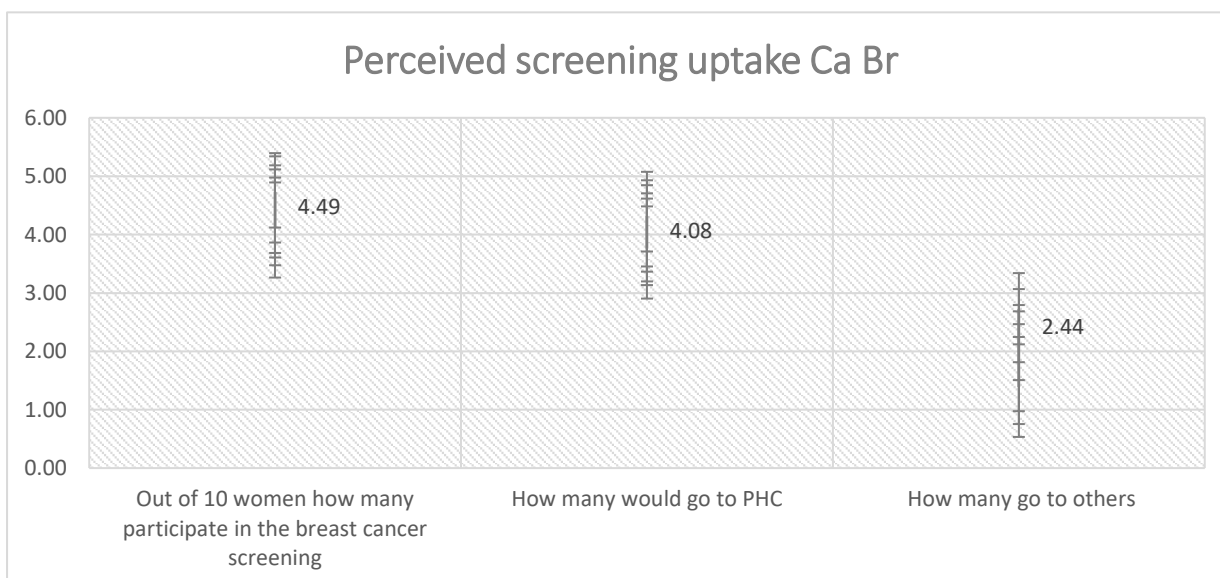


Figure 27: Perceived screening uptake of breast cancer

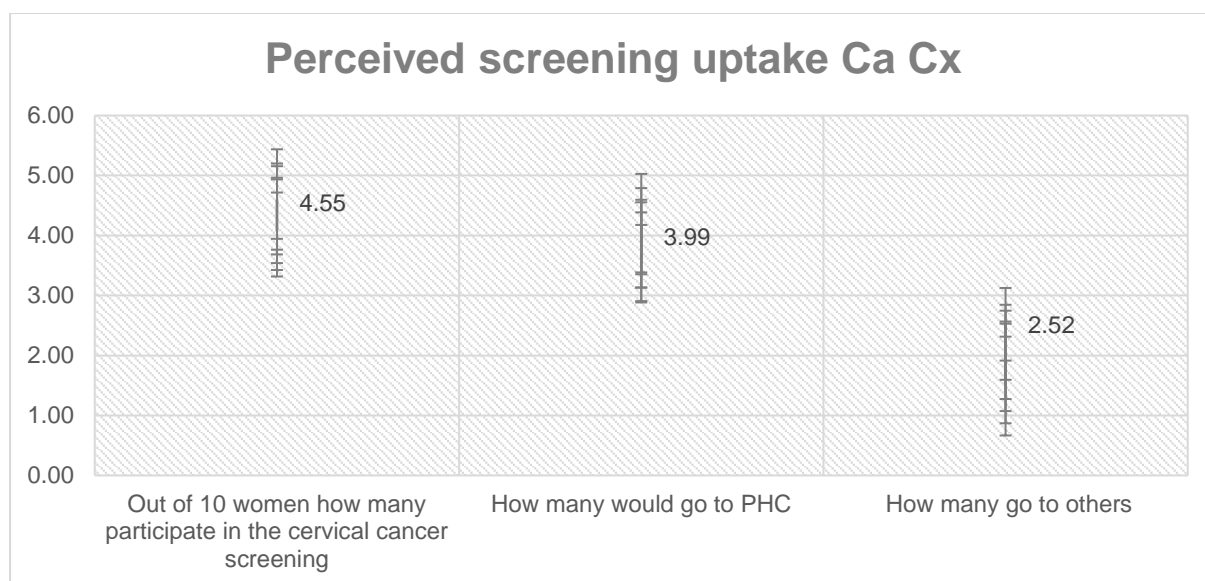


Figure 28: Perceived screening uptake of cervical cancer

Participants in the last module were asked to report the societal norms and the norms related to cancer in their society (Figure 29-30, Table 18 annexure). The women were asked to guess how many out of 10 women participate in breast and cervical cancer screening if eligible. The women reported that 4 out of 10 women who are eligible for breast and cervical cancer screening go for screening. There is a high perception of screening uptake and it is perceived that the majority of the women go to a local PHC for both breast and cervical screening.

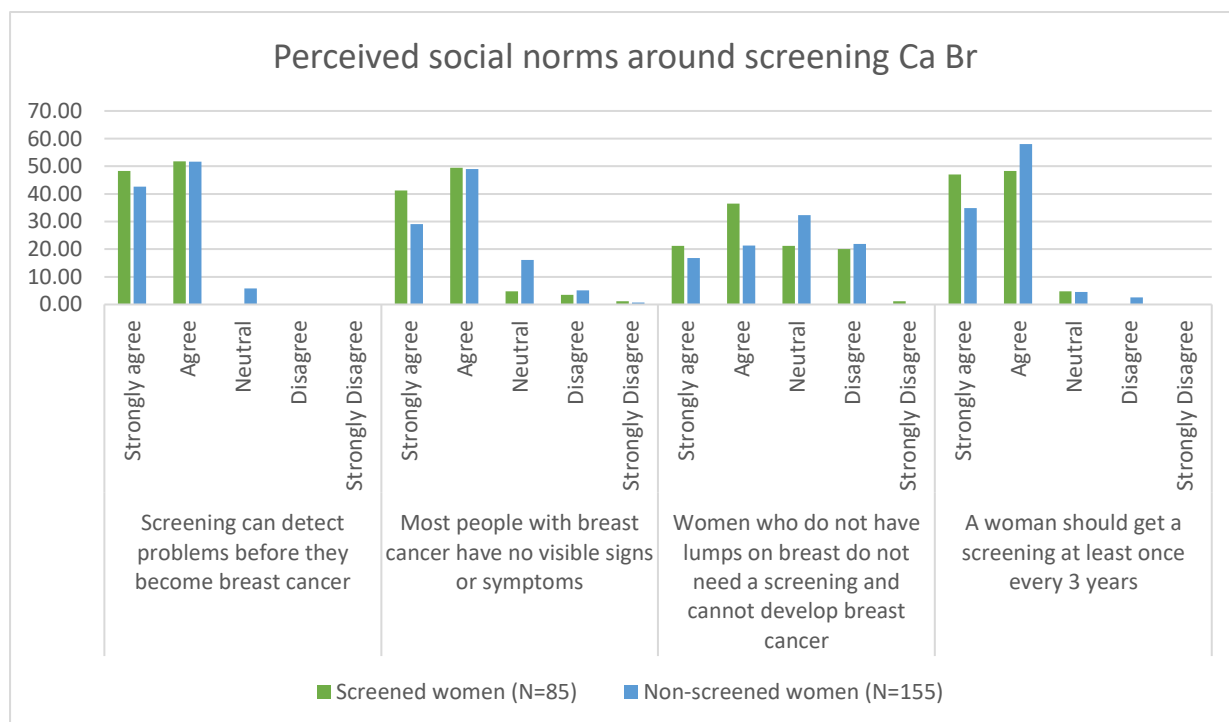


Figure 29: Perceived personal and social norms on the utility of breast cancer screening among screened and non-screened women

About 90% of the women agree to the positive norms, like screening can detect problems before they become breast cancer, most people with breast cancer do not have any visible signs and symptoms and a woman should get screened every 3 years. 58% of the screened and 38% of the non-screened agreed to the negative norms.

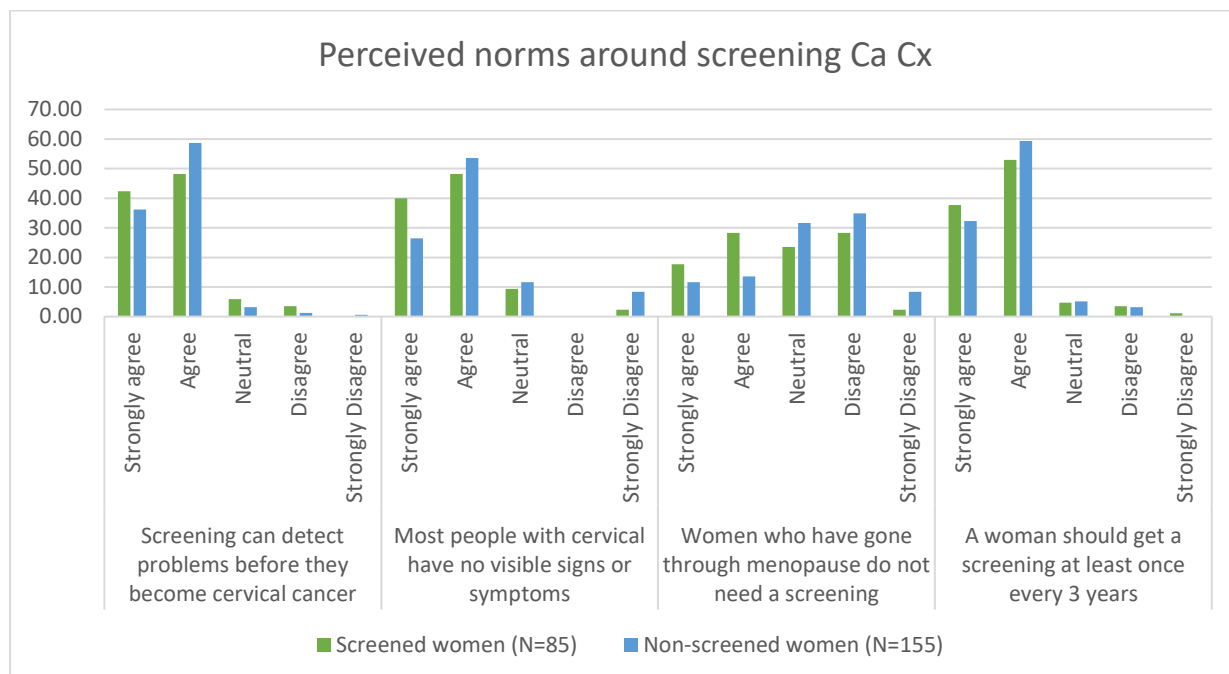


Figure 30: Perceived personal and social norms on the utility of cervical cancer screening among screened and non-screened women

Similar trends in agreement to positive norms can be seen in the case of cervical cancer. Though a smaller percentage of the women (46% of the screened and 25% of the non-screened) believed in the negative norm associated with cervical cancer (women who have gone through menopause do not need a screening), more than 90% of both screened and non-screened women reported that a woman should get a screening done at least once every three years for both breast and cervical cancer. Such a high percentage could be indicative of social desirability bias.

2.5. External factors

Information sources

The participants were asked where they got information about cancer if screened, whether they searched for information, and what were their cost and time preferences for screening. They were also asked to rate the quality of care

provided in the health facility at the time of screening and what they expected from the screening.

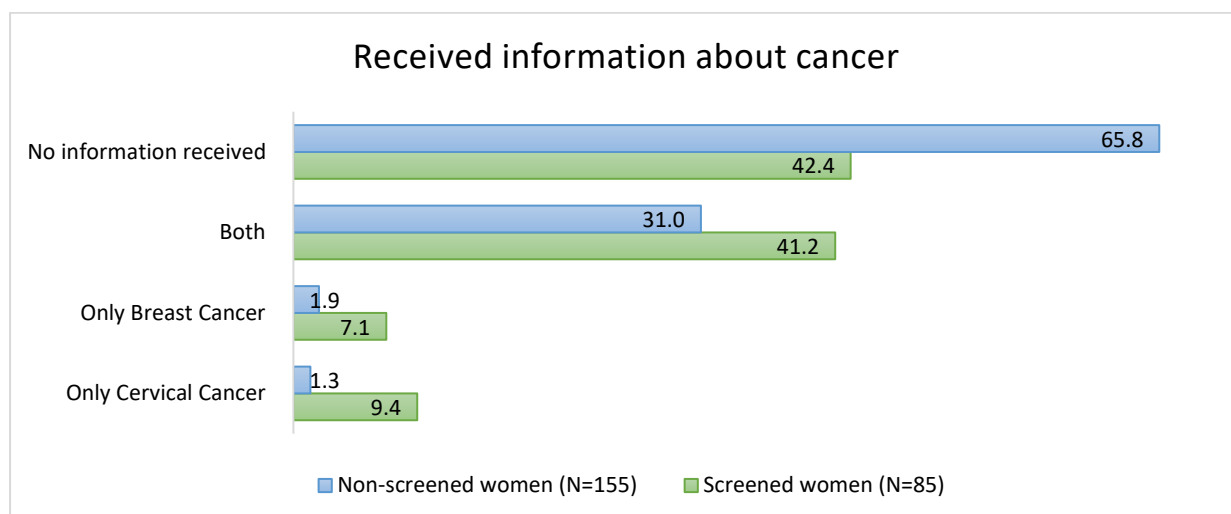


Figure 31: Whether respondents received information on cancer

Figure 33 (Table 14 annexure) provides the percentage distribution of sources of information about cancer, its screening access and quality care for both screened and non-screened women. Around 42% and 66% of screened and non-screened women reported not receiving any information from any health provider about cancer. In comparison, 41% of screened women and 31% of non-screened participants said that they acquired knowledge about both cancers.

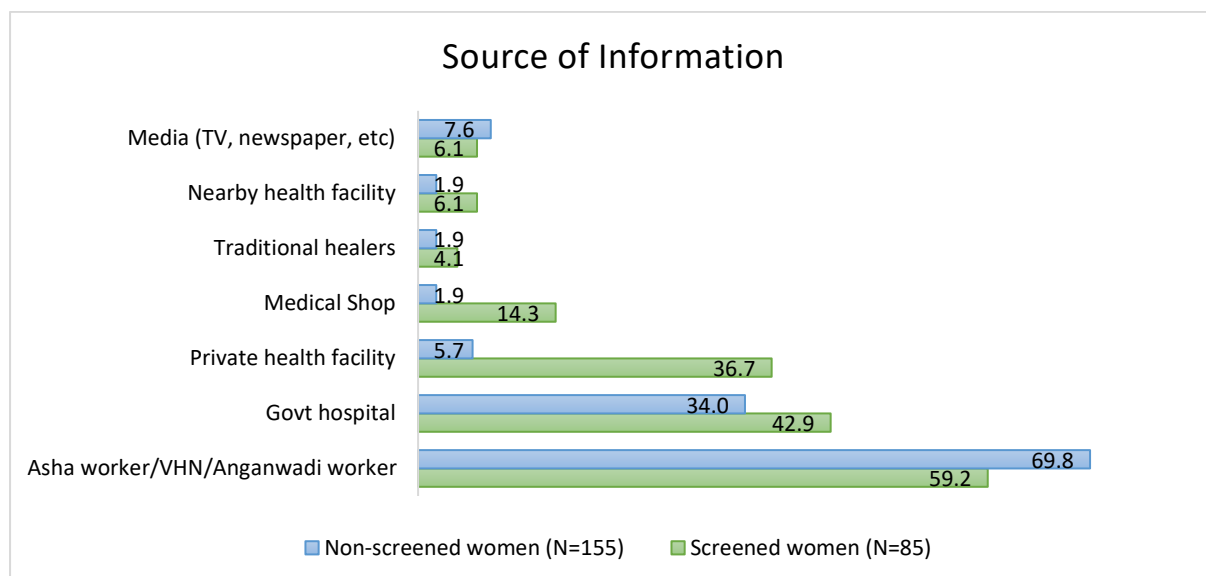


Figure 32: Source of information received on cancer

Those who received information about 60% of screened women, and 70% of non-screened women received information from ASHA workers/VHN/Anganwadi workers.

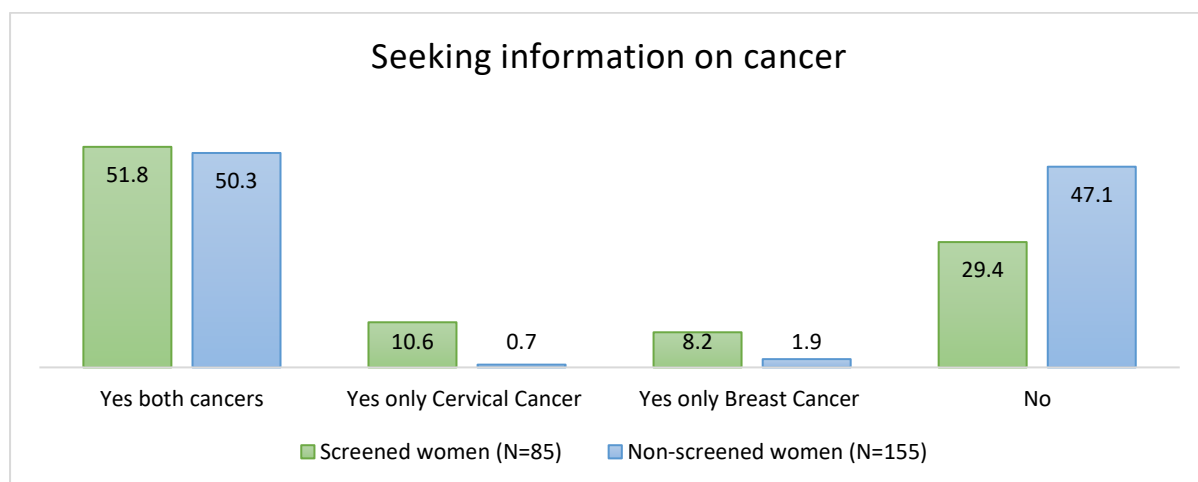


Figure 33: Whether respondents searched for information on cancer

The participants were also asked whether they searched for information about cervical or breast cancer. About 50-52% of the respondents reported that they were seeking information on both cervical and breast cancer. This percentage could be indicative of social desirability bias.

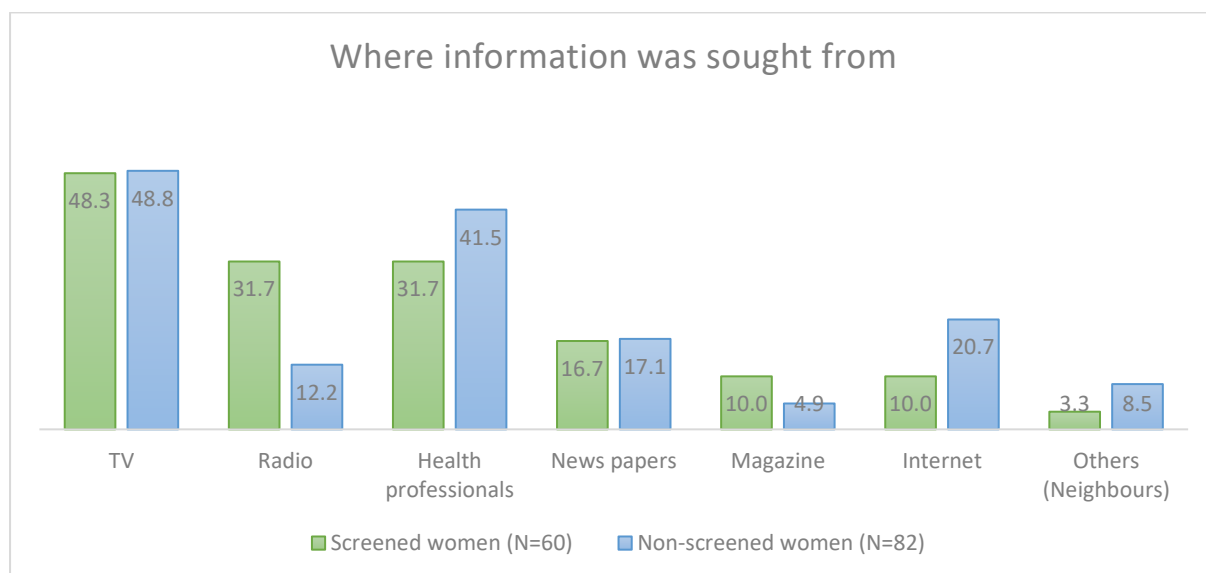


Figure 34: Of those seeking information, the source used to get information

Of those seeking information, 50% of both the screened and non-screened women reported that they had found information about cancer from television.

Physical access

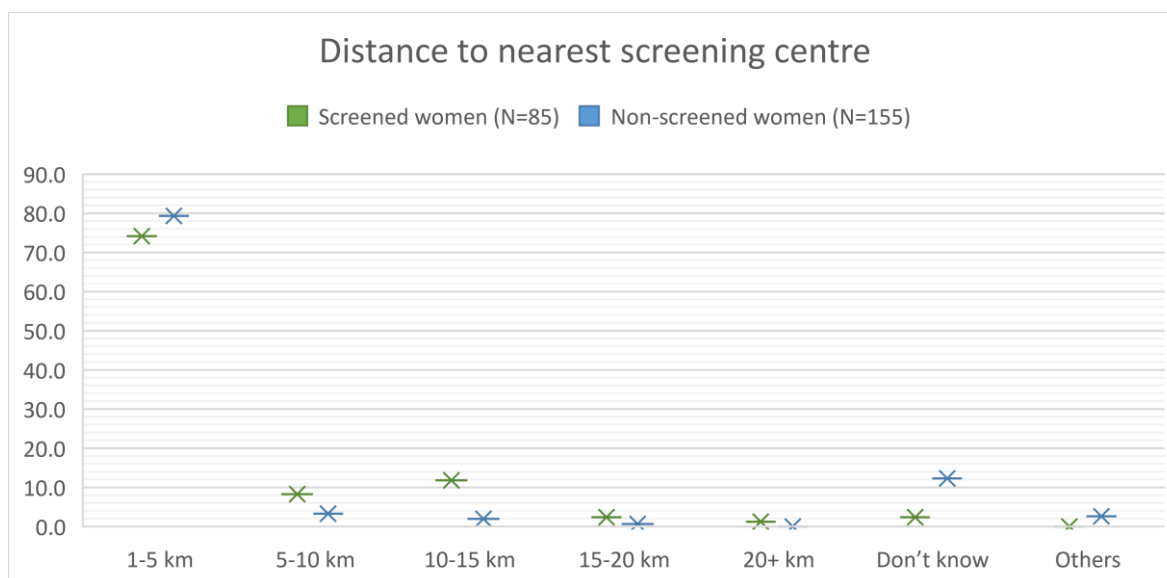


Figure 35: The distance of the nearest screening centre from the respondents' house

The respondents were also asked to report their accessibility to screening. More than 70% of the participants said that the screening centre is 1-5km from their homes.

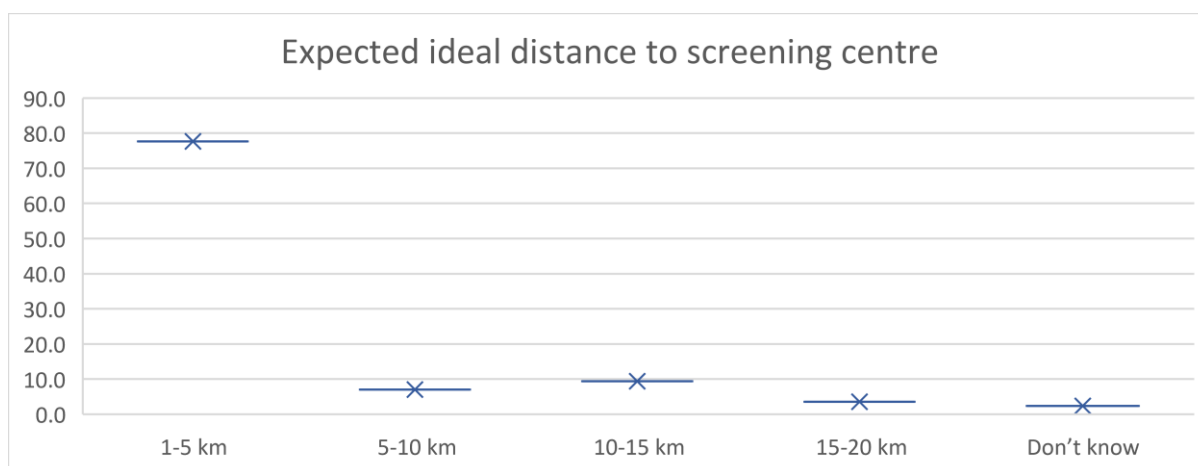


Figure 36: Preference of the distance to the screening centre

Of those who had already been screened, 78% reported that they would again be screened if the distance to the health facility was less than 5 km.

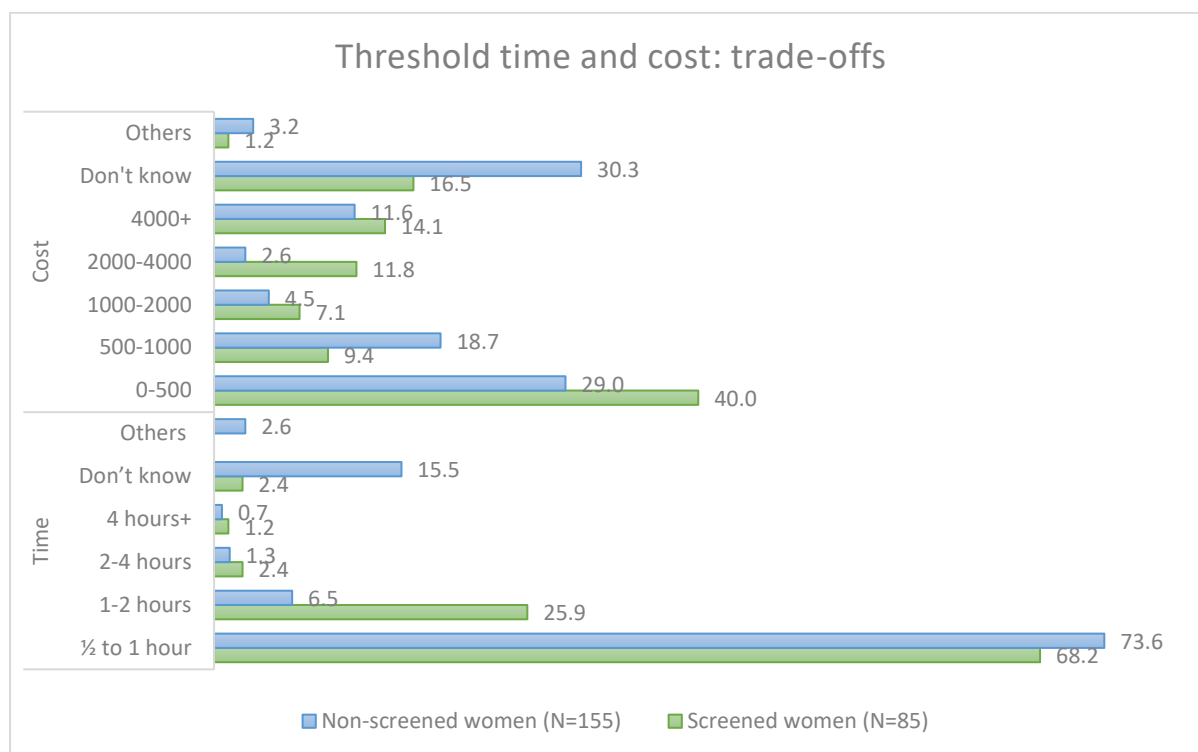


Figure 37: Threshold screening cost and time among screened and non-screened women

The majority of the participants are willing to trade-off at certain threshold levels and said that they will get screened when the cost is 0-500 INR, and the time to get screened takes less than 1 hour.

Experience at Screening Centre

Women were also asked to rate their screening experience at PHC and how their families reacted to the screening. At first, the participants were asked to rate their screening experience, and 13 items were asked to rate the screening experience. The respondents' screening experience was measured on a Likert scale, 1-4: disagree, probably disagree, probably agree, and agree.

A comparison of proportion shows high levels of agreement with the statements "doctor/nurse explained everything to me and were approachable" (95%) and "The staff made me comfortable" (97%). The women rated their screening experience an 8 out of 10. A high level of agreement was given to the statements, "the staff made me comfortable" (97%), "The staff explained the procedure to me" (91%), "The staff clarified any doubts I had" (86%), "To have a female doctor/nurse do the screening" (97%), "To make available more information about screening method" (97%), and "Doctor/nurse must listen more to the person who

is being screened” (93%). Around 54% of screened women reported that they would be screened again at PHC.

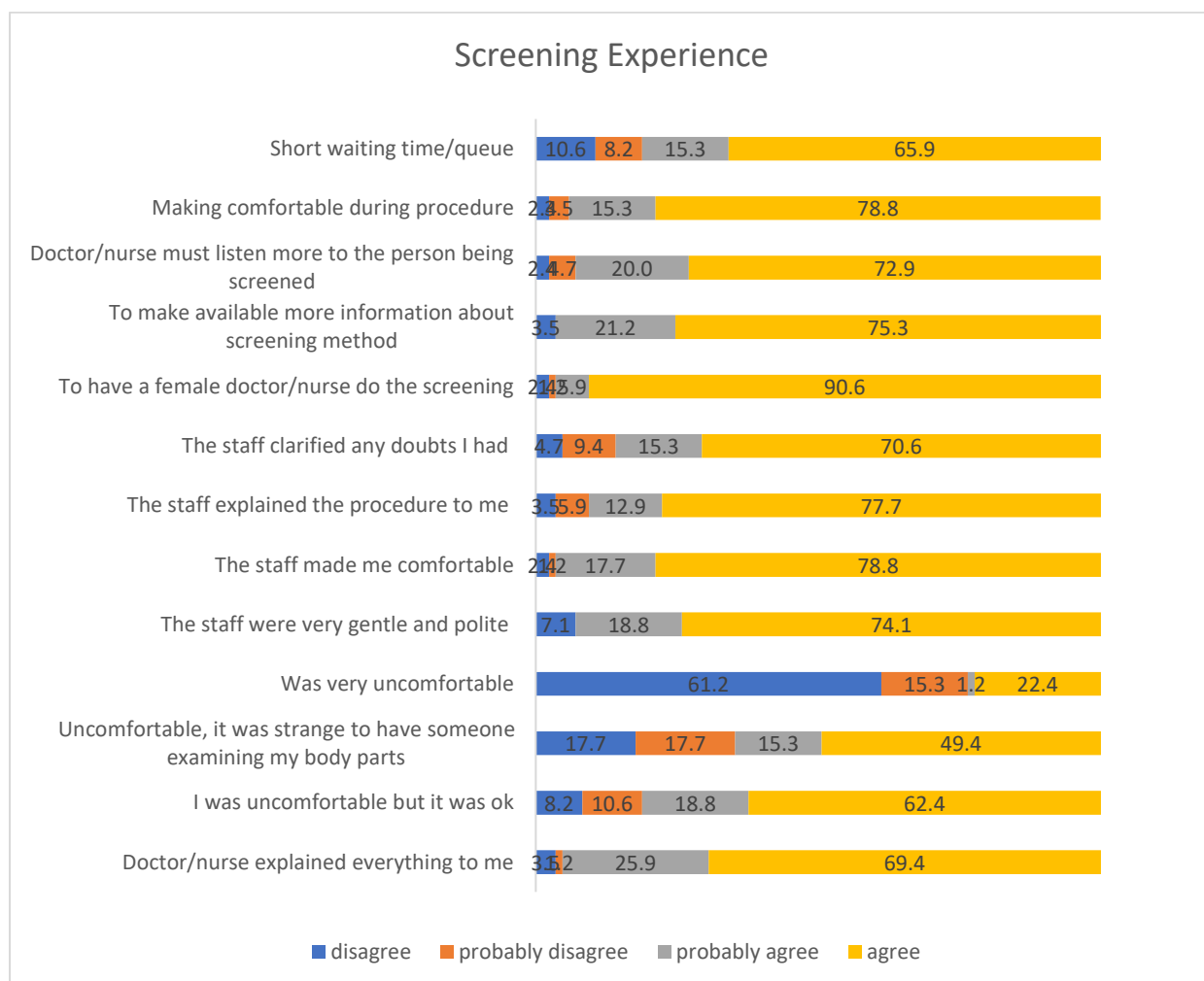


Figure 38: Respondents' opinions on the screening experience



Figure 39: Mean rating of services on a scale of 1 to 10

The participants were also asked to rate their perceptions about screening and when they get screened. The women rated cleanliness, quality of the test, the correctness of the result, making comfortable during the procedure, and welcoming of staff as 8 out of 10.

2.6. Factors associated with screening behaviour and willingness to screen

Tables 6 and 7 present the percentage distribution along the chi-square p-value estimates to understand if there are differences w.r.t to socioeconomic characteristics and KAP of cancer and its screening among screened and non-screened group. Among those over 45 years, 57% belonged to the non-screened group, and 43% belonged to the screened group, and there was a statistical difference at a 5% level of significance among the groups (p-value <0.01). Among married women, 65% belonged to non-screened women, and 35% from screened women. For the women's caste, there was a statistical difference at a 5% level of significance among the groups (p-value <0.03). There were no statistical differences between the group for all rest of the socio-demographic, women's autonomy, and child-related variables. For KAP of cancer and its screening, there was a statistical difference found in knowledge about breast cancer, knowledge about groups to be screened for breast or cervical cancer, knowledge about a

condition that increases the risk of cervical cancer, knowledge about symptoms of cervical cancer, was found significant at 5% level of significance.

Table 6: Factors associated with adoption of screening among screened and non-screened women (N = 240).

	N	%	AOR (95% CI)
Knowledge about cancer			
Poor Knowledge	9	10.6	
Improved knowledge	54	63.5	15.71***(6.59 37.45)
Knowledge of condition that increases the chance of Ca Br			
two or less	30	35.3	
more than two	30	35.3	0.59 (0.22 1.53)
Who should screen CaBr			
one group or less	23	27.1	
more than one group	36	42.4	1.75 (0.69 4.40)
Signs and symptoms CaBr			
one symptom or less	28	32.9	
more than one symptom	37	43.5	0.71 (0.26 1.95)
Condition that increases the chance CaCx			
Poor Knowledge	24	28.2	
Improved knowledge	39	45.9	1.22 (0.31 4.82)
Advantage of early detection CaCx			
No advantage	24	28.2	
At least One advantage	31	36.5	1.3 (0.48 3.52)
Signs and symptoms CaCx			
one or less	20	23.5	
more than one	41	48.2	1.08 (0.33 3.47)
Who should screenCaCx			
no group	20	23.5	
at least one group	36	42.4	1.31 (0.50 3.45)
Received information			
No information received	22	25.9	
At least from one source	41	48.2	1.55 (0.54 4.43)
Sought information about cancer			
No	22	25.9	
Yes	36	42.4	0.76 (0.20 2.82)
Want to be tested for cancer			
No	27	31.8	
At least one cancer	31	36.5	1.28 (0.50 3.27)
Get tested if distance to screening centre			
5+	48	56.5	
Less than 5 km	30	35.3	1.31 (0.55 3.08)
Get tested if time to get screened			

>1 hr	51	60.0	
Less than 1 hr	29	34.1	1.08 (0.35 3.30)
Get tested if screening cost			
More than 500	33	38.8	
Less than 500	37	43.5	1.54 (0.54 4.34)
Perceived Susceptibility and Perceived Severity			
Positive perception of fewer than 2 items	30	35.3	
Positive perception of more than 3 items	30	35.3	1.26 (0.24 6.69)
Social and personal norms			
Positive attitude towards less than 6 items	35	41.2	
Positive attitude towards more than 6 items	24	28.2	1.14 (0.49 2.63)
Age of women			
<45	24	28.2	
45+	37	43.5	0.95 (0.44 2.08)
Marital Status			
Married	30	35.3	
Single/Divorced/Widow	34	40.0	2.74**(1.08 6.99)
Religion			
Non-Hindu	30	35.3	
Hindu	28	32.9	0.99 (0.43 2.24)
Caste of women			
SC/ST	38	44.7	
OBC	22	25.9	0.19***(0.06 0.60)
Others	32	37.6	0.97 (0.34 2.77)
Educational Status			
Never enrolled/did	27	31.8	
Less than Primary	40	47.1	1.75 (0.56 5.45)
secondary	23	27.1	0.6 (0.2 0 1.83)
higher	35	41.2	1.28 (0.32 5.18)
Occupational Status			
Not working	29	34.1	
Working	32	37.6	0.99 (0.43 2.24)
Had child got vaccinated for polio			
Yes	30	35.3	
No	14	16.5	1.44 (0.56 3.70)
Women able to take decisions on health care and large household decisions			
No	27	31.8	0.73 (0.32 1.67)
Yes	35	41.2	1.01 (0.43 2.41)

p<0.05, *p<0.000

Socio-demographic factors did not show any significant association with accessing screening except belonging to the OBC caste category and being single. This could

have been affected by the low numbers in the sub category. Among the behavioural factors which are associated with accessing screening, having improved knowledge of cancer was more associated with accessing screening.

Table 7: Factors associated with willingness to screen among screened and non-screened women (N = 240).

Factor variables	Willing		AOR (95% CI)
	N	%	
Non-screened	70	45.2	
Screened	46	54.1	1.13 (0.43 2.94)
Knowledge about cancer			
Poor Knowledge	51	39.8	
Improved knowledge	65	58.0	2.60**(1.00 6.72)
Knowledge of Ca Br risk factors			
None to two condition	79	43.7	
More than 2 condition	37	62.7	2.22*(0.88 5.57)
Who should screen for Ca Br			
Knowledge of no group or at least one group	44	43.1	
Knowledge of more than one group	72	52.2	0.32**(0.13 0.83)
Signs and symptoms of Ca Br			
None to one	83	45.6	
More than one	33	56.9	0.79 (0.30 2.09)
Knowledge of Ca Cx risk factors			
Poor Knowledge	63	44.4	
Improved knowledge	53	54.1	3.12**(1.08 8.99)
Advantage of early detection Ca Cx			
No advantage	10	23.8	
At least One advantage	106	53.5	5.24***(1.59 17.2)
Signs and symptoms of Ca Cx			
Knowledge of no symptom or at least one symptoms	52	42.3	
Knowledge of more than one symptoms	64	54.7	0.35*(0.12 1.03)
Who should screen for Ca Cx			
Knowledge of no group	29	34.1	
Knowledge of at least one group	87	56.1	1.32 (0.47 3.68)
Received Information on cancer			
No information received	62	44.9	
At least from one source	54	52.9	1.18 (0.49 2.81)
Searching Information about cancer			
No	23	23.5	
Yes	93	65.5	4.77***(2.10 10.83)
Distance to screening centre			
5+	16	53.3	
Less than 5 km	100	47.6	0.53 (0.11 2.54)
Time to get screened			
>1 hr	26	38.2	
Less than 1 hr	90	52.3	2.11 (0.66 6.73)
Get tested if screening cost			
More than 500	53	56.4	
Less than 500	41	51.9	0.65 (0.25 1.68)
No response	22	32.8	0.72 (0.24 2.18)
Susceptibility and Severity of cancer			
Positive perception of fewer than 2 items	66	42.9	
Positive perception of more than 3 items	50	58.1	1.95 (0.86 4.43)
Social and personal norms			
Positive attitude towards less than 6 items	57	44.2	
Positive attitude towards more than 6 items	59	53.2	2.04*(0.93 4.48)
Age of women			
<45	67	56.3	
45+	49	40.5	0.81 (0.33 2.01)

Marital Status			
Married	114	49.6	
Single/Divorced/Widow	2	20.0	0.70 (0.06 7.88)
Religion			
Hindu	112	48.5	
Non-Hindu	4	44.4	0.89 (0.13 6.16)
Caste of women			
SC/ST	35	43.2	
OBC	53	60.9	4.66***(1.50 14.51)
Others	28	38.9	1.34 (0.47 3.81)
Educational Status			
Never enrolled/did	24	34.8	
Less than Primary	22	51.2	0.72 (0.22 2.33)
secondary	33	47.8	0.73 (0.23 2.23)
higher	37	62.7	0.86 (0.22 3.48)
Occupational Status			
Not working	63	50.8	
Working	53	45.7	1.44 (0.64 3.24)
Number of children			
Less than 2 children	27	54.0	
2+ children	89	46.8	0.78 (0.29 2.08)
Age at first pregnancy			
Less than 21	39	41.1	
More than 21	77	53.1	0.897 (0.39 2.02)
Higher decision making			
No	73	47.7	
Yes	43	49.4	1.86 (0.79 4.36)
Total	116	48.3	

*p<0.1 **p<0.05, ***p<0.00

Socio-demographic factors did not show any significant association with willingness to screen in this study except for belonging to the OBC caste category. The factors which are associated with willingness to get screened show that women who had improved knowledge in the areas of cancer, screening and its advantages, and held positive attitudes on seeking information and norms were more likely to be willing to be screened. This is true for those women who have not been screened as well as those who have been screened and are willing to repeat screening. The experience of having been screened once is associated significantly with a willingness to screen again.

Section 3. Qualitative Methods

3.1. Architecture

Programme Design

There are three primary Departments that provide medical services in the state. The Department of Medical and Rural Health Services (DMRHS) has the largest network and provides services, especially to rural areas across all districts through

the District and Taluk Hospitals. The Department of Public Health and Preventive Medicine (DPH/DPHPM) is responsible for the implementation of various National and State Health Programmes and is focused on prevention. They work with the DMRHS to implement programmes. The Department of Medical Education provides care services through teaching hospitals, non-teaching hospitals and dispensaries. The Cancer screening programme is conducted in coordination with all these 3 departments.

DMRHS	DPH	DME
<ul style="list-style-type: none"> The Department of Medical and Rural Health Services provides services to the public through the Non-Teaching Medical Institutions through the grid of District Head Quarters Hospitals, Taluk Hospitals, Non Taluk Hospitals, Dispensaries and a small number of Mobile Medical Units, T.B. Centres/ Hospitals/Clinics and Leprosy Hospital. 	<ul style="list-style-type: none"> The Department of Public Health and Preventive Medicine is responsible for the implementation of various National and State Health Programmes and also plans and implements measures to prevent communicable and non-communicable diseases. 	<ul style="list-style-type: none"> The Functions of the Department of Medical Education is two-fold. One is Education in Medical / Dental / Para Medical sciences. Other is providing clinical care in the teaching hospitals through Govt. Medical/ Dental College. Additionally, some hospitals and dispensaries also function under the Directorate.

Figure 40: Departments that provide health services and their broad functions²

'Makkalai Thedi Maruthuvam' MTM scheme was launched in April 2021, with the overall goal of "Healthcare for all" as a part of the 10-year vision statement for the state. The scheme envisages 'treatment at doorstep' for the diagnosis and management of non-communicable diseases. The main targets are men and women aged 45 and above, and others with NCDs. The main scheme objective is to provide a care package including diagnostics, medicine, physiotherapy and palliative care at the doorstep. One of the strategies is individual-level tracking and monitoring using a "social welfare register". The MTM scheme will be anchored at the community level using Women Health Volunteers trained by the Tamil Nadu Corporation for Development of Women. The scheme calls for close coordination between multiple departments. The implementation is through the DPHPM in coordination with the DMRHS and the Department of Medical Education. There is

²Based on KII and secondary source: Health & Family Welfare Department, Government of Tamil Nadu (tn.gov.in)

also coordination with the WCD Department (GO, MD NHM,2021). The MTM scheme has several components which may be beneficial to identifying and reaching out to eligible women for cancer screening.

DPO... "Now PHR public health registry is being very strictly implemented and now this population health registry giving us unique health ID... Once this completes, we can easily, make all the data perfect. This means if a person is going to any facility, government or private or you know super-speciality hospitals or primary... We are sending visiting women health volunteers in the house can easily know who is the patient.

Screening delivery model

Women who are above 30 years of age can get their cancer prevention screening done by walking into the PHC, attending the medical camps organised by the PHC in collaboration with private hospitals, or through the MTM scheme. The women who come to the PHC seldom come for the sole purpose of cancer screening. Therefore, the demand generated is more opportunistic.

Housewife who has done screening, "I went along with my mother-in-law for something, they were talking about this screening and hence I got it done"

If any matters of concern arise during the screening, they are referred to bigger health centres where they can get examined further to understand whether or not they have cancer and then take up appropriate treatment. Any woman aged above 30 who may walk in to the PHC for other purposes such as a sudden illness or a regular check-up and medicine re-fill are also requested to get their cervical screening and clinical breast exam done. Hearing from the doctor or staff nurse makes the clients take screening more seriously and motivates action.

A housewife who had gotten screened and referred... "When the nurses come to do the survey, they can talk about it. When people visit the clinic, doctors can talk about the test, people will listen"

Whenever the staff go into their service area to meet ante-natal post-natal mothers, older women who accompany them and talk to the staff about symptoms related to cervical or breast cancer, they are requested to get a screening done at the PHC. However, the ICE measures that are meant to cover the population more proactively do not seem to have substantial conversion. Volunteer health workers are soon to be inducted into the MTM programme and are expected to survey every household in the service area. This opens up the possibility of broad coverage of the population in the future.

Medical camps that are conducted in collaboration with large private hospitals have scope for covering a larger set of population for screening at a shorter time and are also received well by the population. But the timeline might be extended because of the time it takes for results to come (pap smear) and the staff is

dependent on mobile phones for communicating further with the patient. Camps that were recently set up as part of the MTM scheme have been able to achieve broader coverage as compared to walk-ins.

School teacher who had a screening at an MTM camp, "The fact that it was on the school campus was an advantage. We don't have to compromise on our work, we can go in our free time and get it done. It is less likely that we'd go just for this sake, as we have many commitments. When they come like this, we can utilise that."

Daily wage labourer who has gotten screened, "I heard about the camp nearby while I was working. I and other women who work there went to the camp for a check-up"

Planning & management

Screening process

In the context of opportunistic screening, women of eligible age that come into the PHC are first made to get an array of tests done – blood tests, BP check, weight check, etc. It takes about 45-60 minutes for the results to come in. By this time one of the 2 tests is done, ideally by the NCD staff, else the staff nurse. After the results come, the 2nd test is also done and then the patient meets the doctor for the consultation. Sometimes, the doctor is in the screening room along with the nurse either to aid or for monitoring purposes.

If any matters of concern come up, they are then referred to the government hospital in Mettupalayam or Coimbatore for further examination and treatment. All of this is recorded in the card that is given to each patient. If they are not a regular patient, there is little control over whether or not a referred patient goes to have further examination or treatment as they may not have a card given in their name.

Medical officer at PHC.. "In NCD, if a patient comes generally or OP, we will look at height, weight, BMI. We will check BP, sugar regularly for all patients. If a female patient comes, we have to do CA breast & via screening as well. IF there is an issue, we will write out a referral"

Flow of patients

At the PHC patients rarely come for the sole purpose of cancer screening. Patients enter the clinic through the OP section. Patients above 30 years of age who come for regular check-ups and medicine refills for other diseases are then sent into the lab for blood tests. While they wait for their report, they are sent into cervical screening and clinical breast exam after which they meet the female medical officer for consultation.

If required the consultant writes out a referral slip/form for the patient to get tested further at government hospitals. The whole process takes about 45 minutes to an hour for the patient. Ideally, a dedicated NCD staff should be manning the

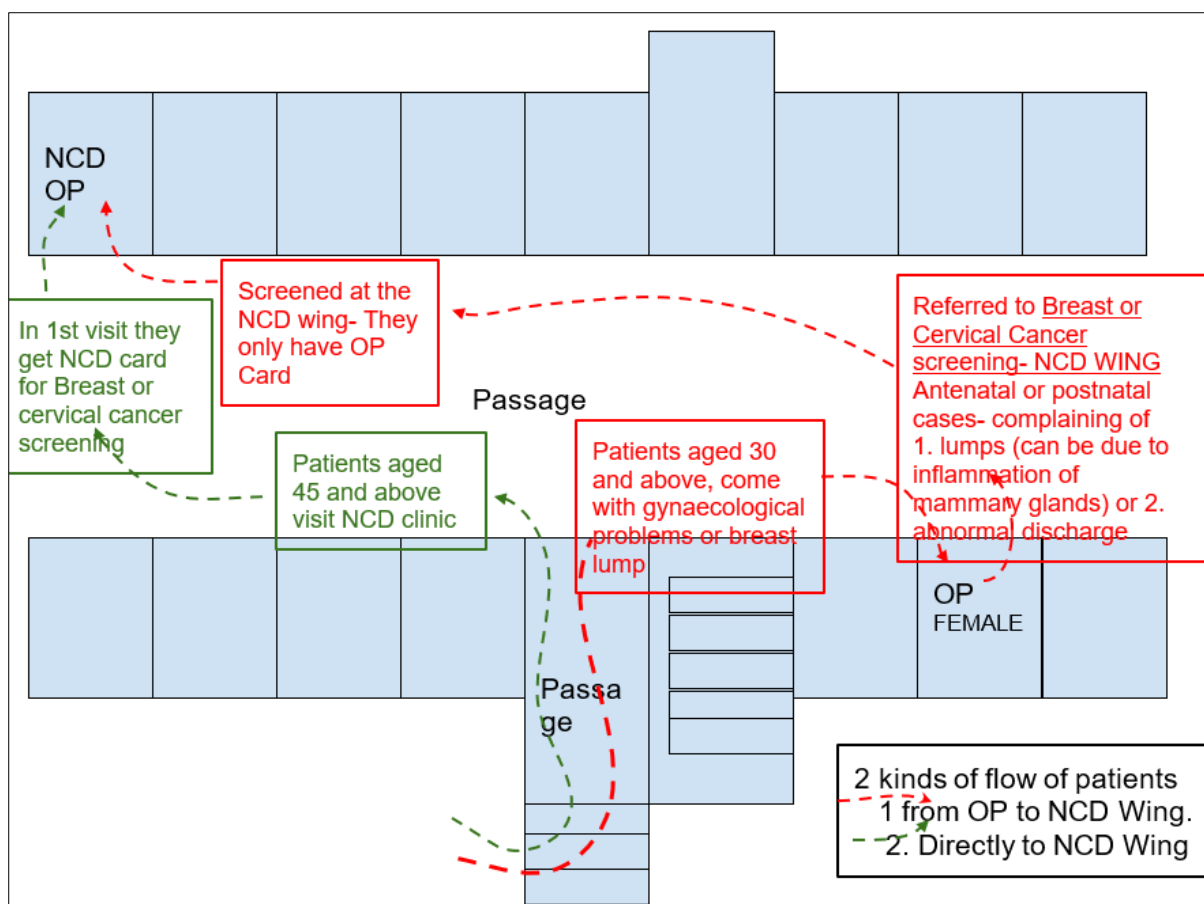


Figure 42: Mapping and analysis of the layout of GH and patient flow pattern

The NCD cases have more stable documentation of their screening status as compared to the RCH service visitors who may be younger and be accessing services for short term access to RCH services. The NCD stream women have been only screened once due to the maturity of the programme. There is no way the MO at the site can figure out the status of the screening after a year or three years because they work in rotation and may not be able to check the last date of the screening for each patient. The RCH stream patients may not have records of their screening at all for future reference.

Acceptance rates: Based on secondary data is 16% from the NCD clinic. Around 36 new patients come in per month in the NCD clinic, if 50% of these are female, 18 cases/month and 216 per year. The referrals from MCH clinics are 2-3 out of every 150 cases in a typical OP day. It is hard to ascertain the split of cases between these two streams yet the MCH stream clearly brings in the younger cases which tend to fail to follow up.

from 9 to 10 a.m. there are 5 females in the age group above 30. We can cover 5 females thoroughly for one hour.

At a capacity of 10 per day, 3 days a week of screening, they can screen 1440 per year at one PHC. Currently, 3 out of 5 PHCs have a dedicated NCD resource, therefore the range of women who could be covered with current capacity to full capacity will range from 4320 women to 7200 women, which is about 10-20% of the total female population in the catchment area at Annur.

DPO... "You have 1,60,000 population of which if 50% is female, let's say 80,000 population of which, in Annur, so you have around 80,000 population will be female. 40,000 will be your eligible woman.

So, 20 women health volunteers are there in that block now. But all the 20 will be spreading the message in the, entire area. I'm asking for them to refer minimum of 5 persons, every day for every PHC"

Based on this estimate, even with opportunistic screening, the capacity is maxed out for cervical and breast cancer screening on a given day at the PHC. If more demand were to be generated actively, other channels will have to be employed- such as camps, mobile screening vehicles, etc

Human resources

Resource availability

At the district level, challenges are faced due to transfers and re-training of the staff. The regularization that happened in 2018-19 resulted in a transfer of well-trained NCD staff to regular posts. Re-training had to happen when the staff were circulated out and new ones came in and it feels like the program has to start all over again.

At the PHC level, one staff member has to be dedicated to NCD, but many PHCs reported that currently the position is not filled and there is a lack of resources. Although other nurses are also trained in NCD screening, the lack of this resource in a PHC puts a strain on the remaining staff and in turn slows down the screening process for cancer prevention. This was reported as one of the biggest challenges in executing this programme.

DMO... "Later on in 2018 mid, it started back picking up uh when the staff nurses had real time, where they were really trained and they were posted in all the places but suddenly what happened in 2018 and 19, in between there, there was a regularization process and all the staff nurses who are well trained were all absorbed as regular and they all got transferred.

See now I'm in a dip. Now I'm in a very, very bad dip because around 30 to 50% of my staff are going away, trained staff are leaving, leaving to regular posts. Now again I have to receive new staff nurses and then again I have to train them."

Medical officer at PHC.. "Actually, no NCD staff. Recently only we started again. Regular staff are doing work"

With the entry of volunteers as part of the makkalai thaedi maruthuvam plan, the medical officers hope that they might help in increasing coverage of the population and getting non-regular patients also to come to the PHC for screening. But the staff nurse anticipates a learning curve for the volunteers to become helpful and that would cost the time of the existing staff nurses.

Medical officer at PHC.... " These women health volunteers also have to survey every household. The number of members, age, ANC, children. Etc. Those who don't come to us patients we can't screen right? We have told women health volunteers to ask for complaints (like lump, discharge, etc) and request them to screen at PHC. We will do via test for them."

VHN..." If we get a good one, it might be good for us. They could bring cases that I might miss and we can find out cases that they might miss. IF they cooperate well, it will turn out well. But at first, we only have to help them more than they can help us, ma'am"

Training/Prep/competence building

NCD training is given at the district level by female medical officers with the DPO's involvement and supervision. Theoretical and practical sessions are designed to cover cancer screening and other NCD skills related to hypertension and diabetes.

DMO..."We give them three days of training. 3 hours session in the morning. On day one, they have a full theory class and followed by the same day they will be having some knowledge on patients who are waiting will be screened by them, at least shown what's to be done. Next two days, handhands-onning will be there the whole day. In the the same three days of skill training, we will be giving a hypertension module, diabetic module. All the four components will be still down there.

It is standardized and it is universal for all the NCD DPOs to train all their NCD staff in the same way in the same manner"

All of the staff members are trained for NCD with periodical refreshers happening. It is the medical officer's responsibility to make sure that the training is translated as competence at the clinic. The MO regularly monitors the progress and offers on the job training if needed.

Medical officer at PHC... "When a new NCD nurse comes, we are not just going entrust everything to them right away. We will also observe if they are doing right and then we will cross-check. It is even possible that they might write down the reading without even measuring. So, we will have to look at their sincerity and also cross-check by taking another reading."

Communication/Community outreach

Most respondents living in the service area are unaware of the preventive screening done at the PHC. Some do come to know about it, but there is an understanding that it needs to be done only for people who have symptoms. Therefore, the current methods employed in the awareness programme prove to be inadequate. Conversations with some respondents indicate that although there is awareness about cancer as a disease, there is also some misinformation about the disease i.e. cancer is misunderstood as a communicable disease and that there is a stigma around it.

A housewife who has not gotten screened... "I haven't heard from the PHC staff about this screening. I haven't heard before the telephonic survey actually"

A school teacher who has gotten screened at an MTM camp... "On TV they talk about cancer, but I didn't know they screen for everybody in the PHC"

Conducting awareness camps at work locations and reaching out through community influencers might increase the rate of awareness of the programme. Some examples for sites include the office where people sign in every day for the NREGA programme, the worksite of NREG programmes, medium and large size farms, schools, etc. Examples of influencers include those who have recovered from cancer, Anganwadi workers, officials who take care of attendance and accounting for NREGA, school teachers, etc. Information about generic medical camps seems to reach faster and broader than screening services at the PHC, specifically for cancer prevention screening

A community influencer who has recovered from breast cancer. "I have held many important positions in the SHG, NREGA office, cooperative society, etc. I have also survived the disease. So people listen to me when I ask them to get themselves checked."

A small business owner who has Not gotten screened. "There is a playground near my place where many important meetings happen. If the PHC staff hold a meeting there and talk about the screening, it might reach more people."

A community influencer who has recovered from breast cancer.. "Sometimes people think twice to drink water from me, thinking that cancer is contagious, but I have been strong throughout and now they show me as an example and want to be like me"

3.2. Access

Dedicated day/days, camps, outreach, etc

Almost all of the respondents were aware of the fact that Tuesdays are dedicated to pregnant women and new mothers. Currently, opportunistic cancer screening is done on any day of the week if women of eligible age walk in for anything else. Some of the staff felt that a dedicated day can be declared for cancer screening

where female MOs can be assigned to screening while male MOs could take care of general OP. But this would be effective only if enough advertising is done about the fact that anyone can be screened irrespective of the presence of symptoms that need to be emphasised.

Husband of a patient recovered from cancer... "We know that Tuesdays are always for pregnant mothers and mothers with infants, so they won't look at other issues on that day, sometimes we ourselves won't go on Tuesdays because of that"

Post-screening follow up

Since only one round of screening has been done, it is difficult to understand behaviour w.r.t subsequent screenings. If the patient is not regular at the PHC, there is no mechanism in place to know whether or not the patient got further tests done. If updates do happen, it is either because of the patient's will or because of the friendly relationship maintained by the staff.

When any matters of concern come up during the screening at the PHC, women are referred to go to bigger hospitals (government centres) for further testing-colposcopy, biopsy, mammogram, etc. A referral slip is written out and given to them. But there is little record about whether or not the visit happens. The information comes to PHC mostly out of the patient's will.

3.3. Adoption

Awareness levels

While some respondents did not know about the screening at all, some respondents in the service area believed that the cancer screening needs to be done at the PHC, only if there were any issues/symptoms. More educated women, such as those working as teachers and those who already have a habit of getting regular checkups done, like to utilise the government programme.

A school teacher who does regular screening.. "I had already done it in 2019 December. I had done a master check-up in a private hospital because I am aware that I have to do a check-up every year. They did a pap smear there. Now when the government was doing it for us I thought why not make use of it and got it done."

A small business owner who has done screening... "I have told others also about the importance of screening. I plan to get it done every April"

Motivators for screening

Women who had any symptoms or issues related to menstrual health were motivated to get screened as soon as they were informed of it. Some staff members did mention that fear motivates women to get screened i.e., when they speak to them about the possibility/risk of the disease at their age. Women who

have heard of illnesses and death due to cancer in their circles (relatives or neighbours) are more motivated to get screened.

A small business owner who has screened... "One Akka who lives nearby died of cancer. She found out too late. She got herself treated but it was not enough, it was too late. Hence, I think it is important to get preventive screening"

Anganwadi worker who has NOT gotten screened... "I work in an Anganwadi, I have heard about all this when I have gone for training. It is good only to get it done"

A housewife who plans to get screened... "I have heard of people getting cancer, my own relative had it. It is better to get checked"

Although some respondents acknowledged having noticed the poster about cancer screening, it did not motivate action. Hearing from the doctor or the staff nurse makes them take it more seriously and actually consider getting screened.

A housewife who had gotten screened and referred... "When the nurses come to do the survey, they can talk about it. When people visit the clinic, doctors can talk about the test, people will listen"

While some respondents were open to doing screening when they came to know about it, some were reluctant because they believed that they did not have any issue and hence did not need screening. Those who had any issues/symptoms are open to getting screened once informed/referred by a staff member from PHC.

Daily wage labourer who has NOT done screening... "Yes, I have seen the poster, but I didn't get a screening done cos I don't have any symptoms"

Other major inhibitors for screening include the idea of missing work, lack of company and lack of support for child care or household work. When camps are conducted near the workplace, there is more willingness to participate and get screened, along with getting other tests/check-ups.

A housewife who has done screening at PHC... "I didn't go to the big hospital for further tests because I don't have any support to do my household work"

A school teacher who got screened at an MTM camp... "I have an awareness of the importance of these check-ups, so I could get it done. But the issue is that I might not want to allocate separate time for this and do it. I keep running in my daily life, there is so much to do. It will be tough."

Some have a strong preference for a private hospital as against government clinics. They have a negative opinion or impression based on their own past experiences or hearing from others.

A young housewife who plans to get screened.... "I don't prefer to go to the PHC because it isn't hygienic. Plus, sometimes they treat us like we don't know anything and talk down to us, that is not very pleasant"

A housewife who has NOT done screening... "They only give tablets, they don't give injections even if we ask. I went there for my delivery when my water had already broken.. but they said it will take another 3 days for delivery. I had to go to a private hospital. I find it tough to rely on them. For someone who lives here, they asked for a residence certificate to give me an injection"

A housewife who has NOT done screening... "There won't be any response if we go to government hospitals"

There is a special group of women- those at the menopausal stage. Since they have irregular periods, they fear that they might have a cancer-related issue. For some people, this serves as a motivator, while for some others, it serves as an inhibitor.

A school teacher who got screened at an MTM camp... "You see, I am in a menopausal stage, having irregular periods, hence I am wondering if something might be wrong. "

A housewife who has done screening at PHC_..... "Some of my neighbours are in a menopausal stage, having irregular periods. So they were scared that the screening will bring up some major issues. Because of that fear itself, they avoided getting screened"

Having heard of/witnessed screening done by known people definitely brings comfort. Going to camps along with women they work with, gives comfort.

Daily wage labourer who has done screening... "I went along with people who work with me. We heard about it when we were working"

A school teacher who got screened at an MTM camp..“You see, I am in a menopausal stage, having irregular periods, hence I am wondering if something might be wrong. ”

Sometimes the prior experience or anxiety around discovering something untoward made the women decide against screening.

A housewife who has done screening at PHC_.....“Some of my neighbours are in a menopausal stage, having irregular periods. So they were scared that the screening will bring up some major issue. Because of that fear itself, they avoided getting screened”

This personal experience and anxiety may be passed on among family and acquaintances. At times, the anxiety may be linked to the referral.

A daily wage labourer... “I got myself screened and they asked me to go for further testing, I did not go because I am worried about finding something bad”

They may also think conversely that there is nothing wrong with them.

A daily wage labourer... I went, they asked me to come the next day. But there is no one else to take me and be with me, so I didn't go back. I also feel like there might not be an issue (laughs sheepishly), of course only the doctor would know for sure. But I had a feeling that there might not be an issue. So, I did not go.

This may be indicative of bias which makes the women dismiss their own personal risk on one hand and on the other, they are anxious about negative screening outcomes. This is related to own as well as vicarious experiences.

3.4. Affordability

Given a majority of the screenings were opportunistic, the access was at the PHC or GH itself. The patients also did not have to pay for these services as these were free of cost. Hence the access here is about the experience during screening, access to information and results and follow up action.

Experience of screening

Having agreed to do the screening, women are fairly OK with the process when done at the PHC. There is a mild discomfort experienced but it has been accepted as something expected since it involves private areas.

A school teacher who got screened at an MTM camp... "I can't say pain, but since it is a private area, a touch itself is a bit uncomfortable. So, I would say it was a slight shyness mixed with slight pain. Not a kind of severe pain or discomfort worth mentioning.

Privacy concerns do come up during camps conducted in public places which can be an inhibitor to some women if not all. There were some suggestions for improvement that could have been incorporated with early planning.

Government school employee who got screened at an MTM camp... "I really welcome this initiative to have the camp at school. It was a really good attempt. If they had informed us about the camp even one day earlier, we would have arranged for some curtains. They had a standee-screen, but they used it for entry rather than for the cervical screening area. IT would have been a much better experience if we didn't have to worry about privacy.

Otherwise, it was a great camp and they all did a good job. Even voltage was an issue for the equipment they brought. If given prior notice, we could have tackled all that and made it more effective. We could have also informed the students to bring their parents for camp"

Post-screening engagement

While some women who have been referred to a centre have gone for further tests, some haven't gone for reasons like lack of company, lack of support with housework, fear of finding bad news or belief that there was nothing wrong.

During the camps, the women are told that they would receive a call only if there is an issue. There is a lack of communication on whether a report will be available at all and where it can be collected or viewed. Educated people even prefer that it is emailed or sent to them via WhatsApp. Not receiving a report creates anxiety.

A school teacher who got screened at an MTM camp... "I don't know how long it will take to receive the report and whether I would receive it at all. You see, I am in a menopausal stage, having irregular periods, hence I am wondering if something might be wrong."

Sustainability

There is very little possibility for follow-up with these referrals especially if they are not a regular patient or getting a regular refill of medicines. Only those who come regularly have a card with a unique ID that has been given to them.

Medical officer at GH...“We cannot always know if they have gone to the referred hospital, ma’am. We give a couple of options so that they can choose which centre to go to... If they are a regular patient with card, we are more likely to know.... Sometimes we write it in their token and just because they don’t want to do a further examination and don’t want to talk about it with us, they are even smart enough to get a new token by saying that the old one has gone missing”

Trinagulation with qualitative findings from SSI

As part of the survey, the respondents were asked open-ended questions to understand their perceptions and beliefs w.r.t their eligibility for screening. To understand the motivators and inhibitors, they were also asked whether or not they’d get themselves screened if recommended by the PHC staff and what their reason would be for the same. Wanting to do preventive screening in order to take care of their health was cited as important, almost as a theoretical or an obvious response. The presence/absence of symptoms seemed to be the most important reason for choosing to screen/not to screen. Other reasons for wanting to screen included following staff recommendations, following family member’s advice. A small population indicated the low cost and the proximity of the government centre as a reason to screen.

After the absence of symptoms, fear of finding out something unfavourable seemed like a major inhibitor. A small population preferred getting the screening done in a private facility to a government centre. Specifically with respect to cervical cancer, a significant number of people mentioned that they did not know about the availability of such a test. A small number of women mentioned that the cervical screening was not applicable for them as their uterus had been removed already. Amongst the responses, there wasn’t much of a difference between the population who have already screened versus those who have not screened.

Chapter 4: Discussion

The objective of the study was to understand the level of general awareness, perceptions of women in regards to cancer and the barriers to screening. This study delves into both the demand-side and supply-side factors, thereby building a comprehensive understanding and generating insights that are evidence-backed.

A multi-methodology operations research approach was used with a focus on generating evidence that can be relevant and used for programmatic changes.

The geography chosen was Annur taluk in Coimbatore where out of an estimated 40000 eligible women, around 14% have been covered for CaCx screening and 25% for CaBr screening. It will take approximately 4-5 years to complete a single round of CaBr screenings and 6-7 years to complete a single round of CaCx screenings. The NFHS-5 (2019-21) Tamil Nadu state statistics show that the 9.8% of women have ever undergone a screening test for cervical cancer in the state,

with 10% screening among urban women and 9.6% among rural women. According to NFHS-5, breast cancer screening rates are 5.9% in urban areas, 5.3% in rural areas and 5.6 % in total in the state. This taluk is therefore one of the better performers in terms of screening coverage. The test positivity rates at GH were higher at 0.78% for CaBr and 0.65% for CaCx, presumably because GH is a referral centre. The positivity rates also indicate efficiency in detecting cancer. If an additional layer of referral is added to the PHC, there can be a funnelling which may increase case detection rates. The number of screenings had dropped due to the Covid pandemic and the lack of dedicated staff for screening.

The demand-side factors were explored at the level of individual women. In the survey of 240 total sample, 155 women were not screened, while 85 were screened, with a mean age of more than 40 years, most of whom were married and had at least two children. The women perceived that they have a general awareness about breast and cervical cancer. Results were better for screened women as compared to not-screened ones; almost all of the screened women had heard about these cancers, in comparison, a majority (83% for breast cancer and 77% for cervical cancer) of the non-screened women. A majority (88%) of the screened women were aware of the screening tests for breast cancer as well. Among the screened women, the awareness about the tests was limited, for example 87% knew that there were tests to screen for cervical cancer, yet 54% didn't know what these tests were. Among the non-screened women, 77% didn't know about any test for breast cancer and 86% hadn't heard about any test for cervical cancer. Regarding their eligibility for screening, higher proportions of screened women (84%) seemed to have a better idea, and 52% of non-screened women reported that they were eligible for the test. It would be prudent to consider the source of the high knowledge as being their own experience of screening given the evidence that a majority of these screenings were opportunistic screenings. Given that 16% of the screened women underwent screening despite not being sure if they were eligible may be indicative of this involuntary decision-making. Based on the evidence from IDI, many of the tested were referrals from MCH screening by nurses and some of these cases have been repeat screens which were done on their own accord and were done by more educated patients as a part of their master health check-up or annual health check-ups, or when they might have gone for some other ailment to a private clinic and were asked to screen for cancer as well.

There was a widespread acceptance of the preventability of both cancers, with 86 % of the women agreeing that breast cancer could be preventable and 83% agreeing that cervical cancer could be preventable. A lesser proportion than that, about 3/4th of them thought both cancers are curable. More than 70% reported that breast cancer can be prevented with the help of early detection and treatment, and in the case of cervical cancer, this number was more- at about 74%. The women in their IDI were also confident that prevention, early detection and cure are possible for these cancers.

Both sets of women had multiple misconceptions about risk and screening as have been reported by others (Puri et al, 2008) and this may affect acceptance though the evidence is not established (Mirick, Davis, Thomas, 2002). Most screened women and even more non-screened women didn't know about the group which should be screened for breast cancer. Most women also reported that early screening could detect cancer, and that most people with breast or cervical cancer have no visible signs or symptoms. Around 58% of screened women thought that women who do not have lumps on breasts cannot develop breast cancer, whereas only 38% of non-screened women believe the same. 46% of the screened and 25% of the non-screened women also believed that women who have gone through menopause do not need a screening. More than 90% of both screened and non-screened women reported that a woman should get a screening done at least once every three years. Such a high percentage could be indicative of social desirability bias. Participants also had knowledge that early detection and treatment can prevent cancer, and can be cured. Around 26% of screened women and 16% of non-screened women perceived that the use of oral contraceptives increases the risk of cervical cancer, similar to others (Chandrika et al, 2020, Kumar,2015).

A majority (95%) of the screened women prefer to screen at the Government centres, including those who have already screened with respect to their next screening and those who have never screened for their first screening. The women rated cleanliness, quality of the test, the correctness of the result, making comfortable during the procedure, and welcoming of staff as 8 out of 10. Among the the non-screened, 41% and 38% reported that they would like to be screened for breast and cervical cancer at a local PHC/CHC if the health worker asks them to. More than 70% of screened women were willing to do breast cancer screening and around half of the screened women said yes to cervical cancer screening. Among non-screened women, 65% said yes to breast screening and 60% said yes to cervical cancer screening in future. A point to note is that once a woman has been screened for Cervical cancer, nearly half of them do not want to be screened again. There are many areas of similarity with the findings of the study that explored willingness to screen in Tamil Nadu (Kumar, 2015). The acceptance of screening here is higher.

The screened women were asked to rate the major barriers to screening out of 10. Those who were screened at the health centre reported that permission from a husband is the primary barrier to screening, followed by care for children in her absence (7.35 (0.28)). Those who were not screened were asked to report the reason for not screening for cancer; more than 75% said that they were not screened for both breast or cervical cancer as they were not at risk. This was reflected in the analysis of the open-ended questions where not being at risk was mentioned most frequently as the reason to not screen. The in-depth interviewing also gleaned such perceptions where the women's perception of risk ranged from "I do not have risk" to "I do not want to detect if anything is wrong".

Additionally, the women had optimism bias due to which they perceived lower risk for themselves compared to similar others. They rated mean score of 39 (2.42) for any women of their age to develop breast cancer and 35(2.40) to develop cervical cancer in the next ten years. These figures are indicative of optimism bias as women perceive the risk to be lower with regard to themselves as compared to their perception of the risk with regard to a third person. Other studies show that women's past experience with themselves or friends and family, their perceived control may create unrealistic optimism towards their own lower risk of getting breast and cervical cancer, thus affecting their intention to undergo screening tests (Barnoy et al (2003)). Also, women may have a poor understanding of their risk and have an optimistic bias about their personal risk, except when having a positive family history (Katapodi et al (2004)). This relationship is evident in the in-depth interviews with the women. Evidence from reviewing different studies that have tried to understand women's anxiety related to screening and varied sources of their fears have illustrated similar results. They found that women fear medical examinations and providers, and may not want to know about their risk, and therefore, decide against screening. When there is a trust established with the care providers, the results are better and, therefore, it is recommended that providers speak to women about perceptions and knowledge about screening when discussing benefits (Ackerson et al, 2009). However, the women perceived very high screening rates in the population and the bias seemed to be reversed here. In their opinion, 4 out of 10 women who are eligible for cancer screening go for screening, and the majority go to a local PHC for both breast and cervical screening. In comparison, the real penetration of screening is much lesser.

The logistic-regression analysis clearly suggests statistical differences among the two groups (screened and non-screened women). The improved knowledge was found more among screened women than non-screened. Of those who received knowledge about cancer, 58% of non-screened women had received knowledge from at least one source, while only 42% of screened women received information about cancer. Out of all women, more non-screened women than screened women wanted to get tested for cancer if the distance was less than 5 km and if the procedure would take less than 1 hour. Also, it was found that the non-screened women had a more positive attitude towards social and personal norms about cancer than screened women, and the differences are statistically significant at 5% level of significance. Yet we did not find any socio-demographic factors of significance unlike others (Mishra 2020), probably because we sampled from within the client base in a rural block setting with limited population variation.

Four practical barriers to screening explored were information, cost, distance, and time. Around 42% and 66% of screened and non-screened women respectively reported not receiving any information from any health provider about cancer. In comparison, 41% of screened women and 31% of non-screened participants said that they acquired knowledge about both cancers. Those who received information, about 60% of screened women and 70% of non-screened women received information from ASHA workers/VHN/Anganwadi workers. 50% of the

women reported that they had found information about cancer from television. Therefore, the issue seems to be less about access to information than this information being able to translate into an actual cue to behaviour.

Similarly, cost-distance did not also seem like a barrier. More than 70% of the participants said that the screening centre is 1-5 km from their homes. Of those who had already screened, 78% reported that they would again be screened if the distance to the health facility was less than 5 km. Among the screened women, the economic value of the screening was very high, with 22-24% reporting costs of 1000-2000 and 2000-4000 INR. The threshold cost and time for majority of the participants is when the cost is 0-500 INR, and the time to get screened takes less than 1 hour. In terms of time, the analysis of the supply side factors shows that in reality, the women may end up spending 2-3 hours at the screening centre. This is much higher than their threshold levels.

The supply-side factors were explored using the 4A framework and are described below.

Architecture

Programme Design

There are three primary Departments that provide medical services in the state—the DMRHS, DPH and DME. Coordination amongst these departments is vital in the areas of human resources, data collection and documentation for effective coverage of the population for screening and treatment. System challenges related to the delivery model being largely MCH-based is a historical legacy. These challenges are a reality of all such MCH-based models. Among some of the operational challenges to successful screening programmes listed by WHO are the over-reliance upon MCH for screening; women in RCH being generally too young; opportunistic rather than organised screening. This may lead to missing the real target group, yet in Tamil nadu there are recent model adaptations to include NCD coverage and move from RCH-based opportunistic screening.

'Makkalai Thedi Maruthuvam' MTM scheme, designed in a way to reach people where they are, offers hope for better coverage. The community involvement in the planning, implementation and communication can increase its effectiveness significantly. The start of the Population Health Registry (PHR) scheme shows potential for better documentation, data management and in turn wholistic delivery of services.

Service delivery model and process

At the PHC and the GH, the recruitment for screening is a largely opportunistic model. Women above 30 years of age can get themselves screened at the PHC or camps organised by the PHC. At the PHC, screening done is more opportunistic, and women who contact the clinic or the staff regarding other issues or those who accompany their family or friends are requested to get their screening done.

The patient moves through getting registered and counselled followed by a waiting time before the screening. Counselling provided by the doctor/ nurse at the PHC is valued by the client who is motivated to make the decision of screening. This holds a higher value than that of community outreach efforts and communication by posters and advertisements. This process at the clinic can be supplemented by communication from VHNs/WHVs.

Another method of identification/recruitment is through outreach drives and medical camps. These camps that are conducted in collaboration with large private hospitals have scope for covering a larger set of population for screening at a shorter time, and are also received well by the population.

For referral services, the government hospitals are the referral hospitals for further examination and/or treatment. The follow-up and review is done on the staff's own accord but there is less room to keep track of the referrals systematically.

At the GH there is a higher reliance on RCH, with not only the regular NCD patients and PHC referrals (average age range 45-60), but cases from the RCH clinic with inflammatory lump issues (average age range 30-35). Additionally, documentation in both cases is also different with the NCD cases have a more stable documentation of their screening status as compared to the RCH service visitors who may be younger and may be accessing services for short-term access to RCH services.

System capacities to absorb demand and scale up

The capacity to absorb any active demand generated is dependent on the availability of a dedicated NCD resource at the PHC. The female medical officers and staff will have to portion their time to service the demand for cancer screening amongst other female-centric issues or illnesses. Although the screenings are done by the nurse, the screening process is complete only after a consultation with the female MO.

If current postings are fully occupied, even with opportunistic screening, the capacity is maxed out for cervical and breast cancer screening on a given day at the Primary health centre. If more demand were to be generated actively, other channels will have to be employed, such as camps, mobile screening vehicles, etc.

Human resources

Resource availability & Training

Ideally, every PHC is supposed to have a dedicated NCD staff, but not all positions are filled at any given time. With the entry of volunteers as part of the makkalai thaedi maruthuvam plan, there is hope that they might help in increasing the coverage of the population.

The repeated transfer of staff, turnover and leave schedule makes it difficult for screening to be done at full capacity and challenging for training and refresher

training as well. It is the medical officer's responsibility to make sure that the training is translated as competence at the clinic and the female MO monitors the progress and offers on-the-job training. However, the absence of NCD staff leads to adaptations which lead to patient drop-outs and increased time spent by clients at the centre.

Adoption

Awareness factors

Existing ICE channels (TV, posters, etc) are imparting awareness about screening yet the strategy has limited recall and use outcomes. Worldwide celebrities have been used for promoting public health initiatives and the evidence across studies has called for careful understanding of whether it is facilitating significant and positive change (Hoffman, 2017). Although potential clients saw the ads, they could not connect to its practical importance for them. Similarly, clients had seen posters at the clinic, but they could not connect it to their own eligibility. Message from the medical staff themselves carry a lot more value for the women.

Motivators for screening uptake

Women who have any symptoms and those who have heard about other women who died of cancer due to lack of screening are more motivated to get screened. While fear can be a motivator, it also proves to be an inhibitor as some women do not get screened as they fear hearing bad news. Hearing from their own doctor or nurse also motivates them better than a poster or an advertisement. In a very different contextual setting, among women in England, regular attendance at screening was found to be affected by them feeling a sense of reassurance, a sense of duty and herd signalling (Whynes, 2007).

Inhibitors for screening uptake

Women prefer to go with their co-workers and get screened when camps are conducted nearer to their workplace because major inhibitors for screening include the idea of missing work, lack of company and lack of support for child care or household work. Some also prefer private facilities over government centres due to negative experiences or opinions.

Experience of screening

Once having their privacy ensured, most women who have agreed to screening have accepted the mild discomfort during screening and do not let that stop them or others from screening. Yet, many women tend to "slip off" after the consent process owing to shared experiences with others, especially regarding CaCx screening. This may be the reason behind the huge gap between the CBE and VIA VILLI outputs in camps. The behaviour related to shirking of socially promoted health behaviours like vaccinations have been tried to be theorised in that these behaviours may be highly social in nature and more an avoidance, "a quiet abstention" rather than a "wilful resistance" to "medical citizenry" (Sobo, 2016).

Post-screening engagement

Some of the women were lost to follow-up because they dropped from the communication lines with government hospitals owing to issues regarding available time slots and nurses. At the PHC, the follow-up was done by the medical officers of their own accord, but this was not possible during camps as it was dependent on private providers, thus resulting in patient anxiety.

Access and affordability

Given a majority of the screenings were opportunistic, the access was at the PHC or GH itself. The patients also did not have to pay for these services as these were free of cost. Hence the access here is about the experience during screening, access to information, and results and follow-up action.

Recommendations

Architecture

Referring to the best practices to be employed to successfully implement cervical cancer screening, WHO lists a set of strategies to engage the screened woman. We have taken these into account in light of our findings to make the following recommendations. These strategies include informing the results in an understandable form, ensuring that women with an abnormal test result attend for management and treatment, and continuation of the engagement through a mechanism to follow up treated women as well as negative screened women to plan subsequent screens.

Leveraging the MTM scheme

The clients have to set aside separate time for preventive screening at the cost of their professional/personal work. The MTM camps that were held at work locations or near work locations have better preference. The footfall can increase if informed earlier and planned well.

The MTM scheme intends to reach people where they are, labour sites can be used as a way to create a collective demand. Each service area has some important places that have many people moving in and out – playground, school, NREGA attendance office, NREGA work locations, etc. Holding formal/informal awareness meetings in these locations may ensure better reach. Influencers who have good social standing, cancer survivors who have taken the treatment completely, school teachers, Anganwadi workers are some examples of people who can be partners in awareness building.

Strengthening existing delivery model

In the context of opportunistic screening at the PHC, hearing from the doctor or the staff nurse at the PHC was one of the main factors that prompted the decision to screen. This holds higher recall and decision-making value than that of community outreach efforts and communication by posters and advertisements.

This process at the clinic can be supplemented by communication from VHNs/WHVs. At the PHC level, dedicated days of the week for screening (similar to pregnant mothers) might help in coverage and better resource allocation at the PHC (female MOs essential to complete screening), provided there is enough advertising about the same. At the GH level, data management and follow-up processes with communication channels with PHC need to be put in place to ensure the whole loop of screening and diagnosis is completed and the patient is advised about treatment. Positive testimonials could change the perception of the hesitant and avoidant.

Alternate channels to absorb demand

While active demand generation is recommended for better coverage of the population, this might require alternate channels of screening as the capacity is maxed out for walk-ins at the clinic, even with opportunistic screening. The alternate channels will also have to be effectively integrated into the program w.r.t staffing, process and data.

Grass-root planning

Camps work really well in terms of covering the breadth of the population- be it MTM or the PHC camp. Partnership with private hospitals, government organisations (school, Anganwadi, etc) has proved to be highly beneficial and effective. However, the quality can be enhanced if the planning is done by involving WHVs and VHNs, if the focus of the planning is on deepening coverage, making sure the equipment and power connections work, utilising the space most effectively to ensure privacy and completion, ensuring to collect data and distribute reports, etc.

Adoption

Using Real-life vignettes for communication

Given that the posters and TV ads have not motivated action, vignettes demonstrating access to local PHC and positive outcomes of screening in cancer can be used as prompters for action.

Anchoring the screening camp clients

Attendees of the screening camps report higher anxiety related to not receiving their test results. A card or a flier can be used to establish proper communication for the patient to know what to expect, such as: the next steps, contact person, results and mode of sharing. Some of the clients also prefer follow-up and sharing of results using social media messenger tools like WhatsApp.

Access and Affordability

End-to-end client-centric approach

There is a need to maintain contact with the patient until the end of the cycle, i.e., from the time a reference is given at the PHC till the time further testing is done

& treatment is undertaken. Given that the staff at the PHC are already working at maximum capacity, we suggest that the VHN/WHV be in charge of the follow-up that is currently done by the MOs out of their own accord. The contact details of the referral cases may be shared with the corresponding VHN/WHV for follow-up.

Even if the patient/ their family is unwilling or incapable w.r.t. treatment, it can be recorded. In referrals, the distance from the centre, the time availability of equipment/staff at the centre, the cost, etc. can be potential deterrents at the clients' end. The supply-side logistical deterrents can be taken care of if the PHC has data available about the status of equipment, availability of staff, etc., and a mechanism of booking appointments on behalf of the patient. The post-referral follow-up can include private hospitals as well, since they already partner with the PHCs for conducting camps.

Follow up data and action

There is no record of whether or not a patient took the referral forward unless they are a regular patient with diabetes/BP. Some of the staff follow up with the patient on their own accord. An enquiry from the service-end can ensure follow up tests and this can be personalised by the use of the MTM community worker. . Individual level documentation will be beneficial to record patient compliance and for follow up action.

Limitations

The study is a descriptive cross-sectional study, and we do not have baseline information on aspects of acceptance and use for comparisons. The sample size for surveys was also limited and required the listing of two sets of participants—users of screening services and non-users. There was no available household listing or listing of women of eligible categories which could be used as a sampling frame. Hence, we had to complete the listing initially as a separate exercise to generate two sets of participants. We were unable to connect to many listed participants' phone numbers in the MIS, presumably because of faulty phone number, change in number, or movement owing to the time-lapse. One additional limitation to the non-user sample was that we could not sample directly from the communities due to the objectives and scope. Instead, the study focussed on getting good representative samples from the eligible women of both categories. The sample size and the drawing of samples from the system-generated listing have limitations to generalisability. However, given that the objective is to understand and address operational reach, the sampling, the sample size and the mixed methods approach are suitable to produce robust insights.

Another limitation was that the survey was done using computer-assisted telephone interviewing and this method has limitations related to time availability, rapport building, and clarity in questioning. To overcome this, we kept the survey short, limited to half an hour to 40 minutes including the consent procedure. This was ascertained in the piloting of the tool. We also kept the questions and

response options to be as easy as possible for the respondents to reflect and report on phone calls. The generic and non-personal nature of the questions, was useful because they did not have respondents recall in great detail their own behaviour. Specifically taking into consideration the Covid pandemic, the surveys were of 40 minutes in duration and due process of consent included confirming any discomfort of the participants.

Conclusion

The study has assessed the factors of acceptance and use of the publicly-provided breast cancer and cervical cancer screening programmes in Tamil Nadu. The demand and supply-side factors associated with the coverage and use of screening are described for users and no-user categories. The results have been presented for policy uptake by the Health Department, Government of Tamil Nadu. There are additional valuable insights on the operational aspects of the screening programme. Some recommendations are also drawn for further improvement of the implementation. These insights will not only be useful for a programmatic response within the state but also to expand the existing knowledge on the acceptance and uptake of cancer screening services by women in India.

Acknowledgements

We acknowledge the inputs and the support given by the following for making the project possible

- *The Director, Joint Directors, and other officials at Central office, TNHSRP, Tamil Nadu state*
- *The DD, JD, DPO and other district-level officials of DPHFW and DPH*
- *The medical officers, nurses, staff and VHN from the GH and PHC*
- *Survey participants*

References

Ackerson K, Gretebeck K. Factors influencing cancer screening practices of underserved women. *J Am Acad Nurse Pract.* 2007 Nov;19(11):591-601. doi: 10.1111/j.1745-7599.2007.00268.x. PMID: 17970859.

Agarwal R, Sharma M, Pradesh U. Level of cervical cancer awareness among hospital visitors. *J Fam Med Prim Care* 2019;8:3452-3. Back to cited text no. 33

Anderson de Cuevas, R. M., Saini, P., Roberts, D., Beaver, K., Chandrashekar, M., Jain, A., Kotas, E., Tahir, N., Ahmed, S., & Brown, S. L. (2018). A systematic review of barriers and enablers to South Asian women's attendance for asymptomatic screening of breast and cervical cancers in emigrant countries. *BMJ Open*, 8(7), e020892. <https://doi.org/10.1136/bmjopen-2017-020892>

Barnoy, Sivia RN, PhD; Bar-Tal, Yoram PhD; Treister, Lilit RN, MA Effect of Unrealistic Optimism, Perceived Control Over Disease, and Experience With Female Cancer on Behavioral Intentions of Israeli Women to Undergo Screening Tests, *Cancer Nursing*: October 2003 - Volume 26 - Issue 5 - p 363-369

Bhatt, S., Isaac, R., Finkel, M., Evans, J., Grant, L., Paul, B., & Weller, D. (2018). Mobile technology and cancer screening: Lessons from rural India. *Journal of Global Health*, 8(2), 020421. <https://doi.org/10.7189/jogh.08.020421>

Bobdey, S., Sathwara, J., Jain, A., & Balasubramaniam, G. (2016). Burden of cervical cancer and role of screening in India. *Indian Journal of Medical and Paediatric Oncology*, 37(4), 278. <https://doi.org/10.4103/0971-5851.195751>

Belete, N., Tsige, Y., & Mellie, H. (2015). Willingness and acceptability of cervical cancer screening among women living with HIV/AIDS in Addis Ababa, Ethiopia: a cross sectional study. *Gynecologic oncology research and practice*, 2(1), 1-6.

Chandrika, K., Naik, B., & Kanungo, S. (2020). Awareness on cancer cervix, willingness, and barriers for screening of cancer cervix among women: A community-based cross-sectional study from urban Pondicherry. *Indian Journal of Public Health*, 64(4), 374. https://doi.org/10.4103/ijph.IJPH_29_20

Dahiya N, Aggarwal K, Singh MC, Garg S, Kumar R. Knowledge, attitude, and practice regarding the screening of cervical cancer among women in New Delhi, India. *Tzc Chi Med J* 2019;31:240-3. Back to cited text no. 17

Dahiya N, Basu S, Singh MC, Garg S, Kumar R, Kohli C. Knowledge and practices related to screening for breast cancer among women in Delhi, India. *Asian Pacific J Cancer Prev* 2018;19:155-9. Back to cited text no. 27

Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science*, 4(1). doi:10.1186/1748-5908-4-50

Dowling, E. C., Klabunde, C., Patnick, J., Ballard-Barbash, R., & For The International Cancer Screening Network (Icsn). (2010). Breast and cervical cancer screening programme implementation in 16 countries. *Journal of Medical Screening*, 17(3), 139-146. <https://doi.org/10.1258/jms.2010.010033>

Dsouza, J. P., Van den Broucke, S., Pattanshetty, S., & Dhoore, W. (2020). Exploring the Barriers to Cervical Cancer Screening through the Lens of Implementers and Beneficiaries of the National Screening Program: A Multi-Contextual Study. *Asian Pacific Journal of Cancer Prevention*, 21(8), 2209-2215. <https://doi.org/10.31557/APJCP.2020.21.8.2209>

Elangovan V, Rajaraman S, Basumalik B, Pandian D. Awareness and perception about cancer among the public in Chennai, India. *J Glob Oncol* 2017;3:469-79. Back to cited text no. 29

Factsheet - National Cancer Registry Programme (ICMR-NCDIR), Bengaluru, India, Retrieved March 11 2020 from https://ncdirindia.org/All_Reports/Report_2020/Factsheet/Fact_Sheet_2020.pdf

Ferlay, J.M. Colombet, I. Soerjomataram, R. Siegel, L. Torre, and A. Jemal. (n.d.). Global and regional estimates of the incidence and mortality for 38 cancers: GLOBOCAN 2018. World Health Organization, International Agency for Research on Cancer. Retrieved March 12, 2020, from gco.iarc.fr

Gakidou, E., Nordhagen, S., & Obermeyer, Z. (2008). Coverage of Cervical Cancer Screening in 57 Countries: Low Average Levels and Large Inequalities. *PLoS Medicine*, 5(6), e132. <https://doi.org/10.1371/journal.pmed.0050132>

Gangane N, Ng N, Sebastián MS. Women's knowledge, attitudes, and practices about breast cancer in a rural district of Central India. *Asian Pacific J Cancer Prev* 2015;16:6863-70. Back to cited text no. 31

Ghosh, S., Mallya, S. D., Shetty, R. S., Pattanshetty, S. M., Pandey, D., Kabekkodu, S. P., Satyamoorthy, K., & Kamath, V. G. (2021). Knowledge, Attitude and Practices Towards Cervical Cancer and its Screening Among Women from Tribal Population: A Community-Based Study from Southern India. *Journal of Racial and Ethnic Health Disparities*, 8(1), 88-93. <https://doi.org/10.1007/s40615-020-00760-4>

Guidelines for Cervical Cancer Screening Programme. (2005). 42.

Government Order, Mission Director, National Health Mission - Tamil Nadu - Implementation. "Makkalai Thedi Maruthuvam" Scheme in Tamil Nadu, Government Order number 340, Issued 03-Aug-2021, Accessed online at http://cms.tn.gov.in/sites/default/files/go/hfw_e_340_2021.pdf

Hernandez JBR, Kim PY. Epidemiology Morbidity And Mortality. [Updated 2020 Oct 13]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK547668/>

Hoffman, S.J., Mansoor, Y., Natt, N. et al. Celebrities' impact on health-related knowledge, attitudes, behaviors, and status outcomes: protocol for a systematic review, meta-analysis, and meta-regression analysis. *Syst Rev* 6, 13 (2017). <https://doi.org/10.1186/s13643-016-0395-1>

Islam, R. M., Billah, B., Hossain, M. N., & Oldroyd, J. (2017). Barriers to Cervical Cancer and Breast Cancer Screening Uptake in Low-Income and Middle-Income Countries: A Systematic Review. *Asian Pacific Journal of Cancer Prevention*, 18(7). <https://doi.org/10.22034/APJCP.2017.18.7.1751>

Jackson, C. (1997). Behavioral Science Theory and Principles for Practice in Health Education. *Health Education Research*, 12, 143 - 150.

Kadian L, Gukshan G, Sharma S, Kumari I, Yadav C, Nanda S, et al. A Study on knowledge and awareness of cervical cancer among females of rural and urban areas of Haryana, North India. *J Cancer Educ* 2020;2020:1-6. Back to cited text no. 16

Kahesa, C., Kjaer, S., Mwaiselage, J., Ngoma, T., Tersbol, B., Dartell, M., & Rasch, V. (2012). Determinants of acceptance of cervical cancer screening in Dar es Salaam, Tanzania. *BMC Public Health*, 12(1), 1093. <https://doi.org/10.1186/1471-2458-12-1093>

Katapodi MC, Lee KA, Facione NC, Dodd MJ, Predictors of perceived breast cancer risk and the relation between perceived risk and breast cancer screening: a meta-analytic review, *Preventive Medicine*, Volume 38, Issue 4, 2004, Pages 388-402, ISSN 0091-7435, <https://doi.org/10.1016/j.ypmed.2003.11.012>.

Khanna D, Khargekar N, Budukh A. Knowledge, attitude, and practice about cervical cancer and its screening among community healthcare workers of Varanasi district. *J Fam Med Prim Care* 2019;8:1715-9. Back to cited text no. 34

Kim JJ, Burger EA, Regan C, Sy S. Screening for Cervical Cancer in Primary Care: A Decision Analysis for the US Preventive Services Task Force. Rockville, MD: Agency for Healthcare Research and Quality; 2018. AHRQ publication 15-05224-EF-2

Kulasingam SL, Havrilesky L, Ghebre R, Myers ER. Screening for Cervical Cancer: A Decision Analysis for the US Preventive Services Task Force. Rockville, MD: Agency for Healthcare Research and Quality; 2011. AHRQ publication 11-05157-EF-1.

Kumar, Y., Mishra, G., Gupta, S., & Shastri, S. (n.d.). Cancer Screening for Women Living in Urban Slums—Acceptance and Satisfaction. 5.

Labani, S., Asthana, S., & Chauhan, S. (2014). Breast and cervical cancer risk in India: An update. *Indian Journal of Public Health*, 58(1), 5. <https://doi.org/10.4103/0019-557X.128150>

Lauver, D. (1992). A Theory of Care-seeking Behavior. *The Journal of Nursing Scholarship*, Volume 24, Issue 4, Pages 281-288.

, D., Henriques, J. B., Settersten, L., & Bumann, M. C. (2003). Psychosocial variables, external barriers, and stage of mammography adoption. *Health Psychol*, 22, 649–653.

Lauver, D., Nabholz, S., Scott, K., & Tak, Y. (1997). Testing theoretical explanations of mammography use. *Nurs Res*, 46, 32–39.

Lauver, D., Settersten, L., Kane, J. H., & Henriques, J. B. (2003). Tailored messages, external barriers, and women's utilization of professional breast cancer screening over time. *Cancer*, 97, 2724–2735.

Lawal, O., Murphy, F., Hogg, P., & Nightingale, J. (2017). Health Behavioural Theories and Their Application to Women's Participation in Mammography Screening. *Journal of Medical Imaging and Radiation Sciences*, 48, 122-127.

Lor, M., Khang, P. Y., Xiong, P., Moua, K. F., & Lauver, D. (2013). Understanding Hmong Women's Beliefs, Feelings, Norms, and External Conditions About Breast and Cervical Cancer Screening. *Public Health Nursing*, 30, 420-428.

Manikandan S, Behera S, Naidu NM, Angamuthu V. Knowledge and awareness toward cervical cancer screening and prevention among the professional college female students. *J Pharm Bioallied Sci* 2019;11:S314-20. Back to cited text no. 30

Mbamara SU, Ikpeze OC, Okonkwo JE, Onyiaorah IV, Ukah CO. Knowledge, attitude and practice of cervical cancer screening among women attending gynecology clinics in a tertiary level medical care center in southeastern Nigeria. *J Reprod Med*. 2011 Nov-Dec;56(11-12):491-6. PMID: 22195332.

Ministry of Health and Family Welfare, Government of India, Operational Framework : Management of Common Cancers, 2016

Ministry of Health and Family Welfare, Government of India, Training Module for Medical Officers for Prevention, Control and Population Level Screening of Hypertension, Diabetes and Common Cancer (Oral, Breast & Cervical), 2017

Mirick DK, Davis S, Thomas DB. Antiperspirant use and the risk of breast cancer. *J Natl Cancer Inst*. 2002 Oct 16;94(20):1578-80. doi: 10.1093/jnci/94.20.1578. PMID: 12381712.

Monica, & Mishra, R. (2020). An epidemiological study of cervical and breast screening in India: District-level analysis. *BMC Women's Health*, 20(1), 225. <https://doi.org/10.1186/s12905-020-01083-6>

Monticciolo, D. L., Newell, M. S., Hendrick, R. E., Helvie, M. A., Moy, L., Monsees, B., ... Sickles, E. A. (2017). *Breast Cancer Screening for Average-Risk Women: Recommendations From the ACR Commission on Breast Imaging*. *Journal of the American College of Radiology*, 14(9), 1137–1143. doi:10.1016/j.jacr.2017.06.001

National Cancer control Programme <https://www.who.int/cancer/modules/India.pdf?ua=1>

National Cancer Grid, Consensus Evidence Based Resource Stratified Guidelines on Secondary prevention of Cervical , Breast & Oral Cancers, 2019

Noroozi, A., & Tahmasebi, R. (2011). Factors influencing breast cancer screening behavior among Iranian women. *Asian Pac J Cancer, Prev* 12, 1239–1244.

Olaza-Maguiña, A. F., & De la Cruz-Ramirez, Y. M. (2019). Barriers to the non-acceptance of cervical cancer screenings (pap smear test) in women of childbearing age in a rural area of Peru. *Ecanermedicalscience*, 13. <https://doi.org/10.3332/ecancer.2019.901>

Paraska, K. (2012). Relationship Between Expanded Health Belief Model Variables and Mammography Screening Adherence in Women with Multiple Sclerosis: A Pilot Study. *International Journal of MS Care*, 14 (3): 142–147.

Puri S., Mangat C., Bhatia V., Kalia M., Sehgal A., Kaur A. Awareness of risk factors and aspects of breast cancer among North Indian women. *Internet J Health*. 2008;8(2) [[Google Scholar](#)]

Rangarajan, B., Shet, T., Wadasadawala, T., Nair, N. S., Sairam, R. M., Hingmire, S. S., & Bajpai, J. (2016). Breast cancer: An overview of published Indian data. *South Asian Journal of Cancer*, 05(03), 086–092. <https://doi.org/10.4103/2278-330X.187561>

Raychaudhuri S, Mandal S. Socio-demographic and behavioural risk factors for cervical cancer and knowledge, attitude and practice in rural and urban areas of North Bengal, India. *Asian Pacific J Cancer Prev* 2012;13:1093-6. Back to cited text no. 28
Rivera-Franco, M. M., & Leon-Rodriguez, E. (2018). Delays in Breast Cancer Detection and Treatment in Developing Countries. *Breast Cancer: Basic and Clinical Research*, 12, 117822341775267. <https://doi.org/10.1177/1178223417752677>

Roy, B., Tang, T.S. Cervical cancer screening in Kolkata, India: Beliefs and predictors of cervical cancer screening among women attending a women's health clinic in Kolkata, India. *J Canc Educ* 23, 253 (2008). <https://doi.org/10.1080/08858190802189105>

Sabeena S, Bhat P V, Kamath V, Arunkumar G. Knowledge, attitude and practice concerning human papilloma virus infection and its health effects among rural women, Karnataka, South India. *Asian Pacific J Cancer Prev* 2015;16:5053-8. Back to cited text no. 15

Sankaranarayanan, R., Rajkumar, R., Arrossi, S., Theresa, R., Esmey, P. O., Mahé, C., Muwonge, R., Parkin, D. M., & Cherian, J. (2003). Determinants of participation of women in a cervical cancer visual screening trial in rural south India. *Cancer Detection and Prevention*, 27(6), 457–465. <https://doi.org/10.1016/j.cdp.2003.09.006>

Sankaranarayanan, R., Swaminathan, R., Brenner, H., Chen, K., Chia, K. S., Chen, J. G., ... & Al-Hamdan, N. (2010). Cancer survival in Africa, Asia, and Central America: a population-based study. *The lancet oncology*, 11(2), 165-173.

Sawadogo, B., Gitta, S. N., Rutebemberwa, E., Sawadogo, M., & Meda, N. (2014). Knowledge and beliefs on cervical cancer and practices on cervical cancer screening among women aged 20 to 50 years in Ouagadougou, Burkina Faso, 2012: a cross-sectional study. *The Pan African Medical Journal*, 18.

Schopper, D., & de Wolf, C. (2009). How effective are breast cancer screening programmes by mammography? Review of the current evidence. *European journal of cancer*, 45(11), 1916-1923.

Senthil Kumar, M., Shanmugapriya, P. C., & Kaur, P. (2015). Acceptance of cervical and breast cancer screening and cancer awareness among women in Villupuram, Tamil Nadu, India: A cross sectional survey. *Clinical Epidemiology and Global Health*, 3, S63-S68. <https://doi.org/10.1016/j.cegh.2015.10.007>

Shah, S. C., Kayamba, V., Peek, R. M., & Heimbürger, D. (2019). Cancer Control in Low- and Middle-Income Countries: Is It Time to Consider Screening? *Journal of Global Oncology*, 5, 1-8. <https://doi.org/10.1200/JGO.18.00200>

Sharma, S., Adetoro, O. O., Vidler, M., Drebit, S., Payne, B. A., Akeju, D. O., Adepoju, A., Jaiyesimi, E., Sotunsa, J., Bhutta, Z. A., Magee, L. A., von Dadelszen, P., & Dada, O. (2017). A process evaluation plan for assessing a complex community-based maternal health intervention in Ogun State, Nigeria. *BMC Health Services Research*, 17(1), 238. <https://doi.org/10.1186/s12913-017-2124-4>

Sivaram, S., Majumdar, G., Perin, D., Nessa, A., Broeders, M., Lynge, E., Saraiya, M., Segnan, N., Sankaranarayanan, R., Rajaraman, P., Trimble, E., Taplin, S., Rath, G., & Mehrotra, R. (2018). Population-based cancer screening programmes in low-income and middle-income countries: Regional consultation of the International Cancer Screening Network in India. *The Lancet Oncology*, 19(2), e113-e122. [https://doi.org/10.1016/S1470-2045\(18\)30003-2](https://doi.org/10.1016/S1470-2045(18)30003-2)

Sivaram, S., Sanchez, M. A., Rimer, B. K., Samet, J. M., & Glasgow, R. E. (2014). Implementation Science in Cancer Prevention and Control: A Framework for Research and Programs in Low- and Middle-Income Countries. *Cancer Epidemiology Biomarkers & Prevention*, 23(11), 2273-2284. <https://doi.org/10.1158/1055-9965.EPI-14-0472>

So, Vivian H.T.a; Channon, Andrew A.b; Ali, Mohamed M.f; Merdad, Leenad; Al Sabahi, Sultanag; Al Suwaidi, Hudah; Al Ajeel, Abdullahi; Osman, Nabile; Khoja, Tawfik A.M.c Uptake of breast and cervical cancer screening in four Gulf Cooperation Council countries, *European Journal of Cancer Prevention*: September 2019-Volume28-Issue5-p451-456 doi:10.1097/CEJ.0000000000000466

Sobo, E.J. (2016), Theorizing (Vaccine) Refusal: Through the Looking Glass. *Cultural Anthropology*, 31: 342-350. <https://doi.org/10.14506/ca31.3.04>

Subba SH. Too little too late? Or a small step in the right direction? - Cancer screening in India. *Indian J Community Fam Med* [serial online] 2021 [cited 2022 Mar 14];7:71-3. Available from: <https://www.ijcfm.org/text.asp?2021/7/2/71/333670> TNHSP. Programme for Prevention and Treatment of Non Communicable Diseases, Manual for Programme Managers. Chennai, India: Health & Family Welfare Dept, Government of Tamil Nadu; 2011.

Wang, W.-L., Hsu, S.-D., Wang, J.-H., Huang, L.-C., & Hsu, W.-L. (August 2014,). Survey of breast cancer mammography screening behaviors in Eastern Taiwan based on a health belief model. *The Kaohsiung Journal of Medical Sciences*, Volume 30, Issue 8, Pages 422-427.

Whynes D.K. , Philips Z., Avis M., Why do women participate in the English cervical cancer screening programme? *J. Health Econ.*, 26 (2) (2007), pp. 306-325

World Health Organization. (2007). Cancer control: Knowledge into action : WHO guide for effective programmes. Module 3, Module 3,. World Health Organization. <http://catalog.hathitrust.org/api/volumes/oclc/219104041.html>

World Health Organization. Cancer Today- Estimated number of new cases in 2020, India, females, all ages- https://gco.iarc.fr/today/online-analysis-table?v=2020&mode=cancer&mode_population=continents&population=900&populations=356&ke

[y=asr&sex=2&cancer=39&type=0&statistic=5&prevalence=0&population_group=0&ages_group%5B%5D=0&ages_group%5B%5D=17&group_cancer=1&include_nmssc=1&include_nmssc_other=1](#)

Annexure

Institutional Ethical Review Certificate: IFMR



Response of IFMR Human Subjects Committee

Principal Investigator : Sapna Nair
Associated Investigator : Jithin Jose
Title of Study : Operational Research Programme of the Tamil Nadu Health System Reform Program (TNHSRP) : Acceptability of cervical and Breast cancer screening
Date of Submission : September 9, 2021
Date of Approval : September 13, 2021

Approved

Approved with stipulations/modifications (*explain*)

Does the committee find that risks to subjects are reasonable, in relation to anticipated benefits to subjects (if any), and to the importance of the knowledge that may reasonably be expected to result, and justify the use of the experimental framework?

Disapproved (*explain*)

Other remarks:

Signature - Chair (IFMR-IRB)

IRB00007107; FWA00014616; IORG0005894

Descriptive tables

Table 8: Description of indexes generated

Constructs/ Variable	Categories	Description of variables
Basic awareness about cancer		The knowledge about cancer was created using the two variables, heard of the term cancer (breast and cervical), and tests associated with it. All the variables were coded as 0 and 1. A total score of less than 4 indicated poor knowledge, which was coded as 0 and a score of more than 4 indicated improved knowledge, which was finally coded as 1.
<i>Heard of the term breast cancer</i>	Yes = 1 , No=0	
<i>Aware that there are tests to screen for breast cancer?</i> <i>What are the tests? (Multiple Response)</i>	Yes=1, No=0	
<i>Self-Examination</i>	Yes = 1 , No=0	
<i>Professional/Clinical Examination</i>	Yes = 1 , No=0	
<i>Mammogram</i>	Yes = 1 , No=0	
<i>Heard of the term cervical cancer</i>	Yes = 1 , No=0	
<i>Aware that there are tests to screen for cervical cancer</i> <i>What are the tests? (Multiple Response)</i>	Yes=1, No=0	
<i>Vaginal examination</i>	Yes = 1 , No=0	
<i>Swab/Smear examination</i>	Yes = 1 , No=0	
Perception of risk factors of breast cancer		The condition which increases the chances of having breast cancer was created using four items, provided below. All the variables are coded 0 and 1. A total score of 0-2 indicates “knowledge of at most two conditions” was coded as 0 and a score of 3-4 depicted “knowledge of more than two conditions”, which was coded as 1.
<i>Giving birth and breastfeeding</i>	Yes = 0 , No=1	
<i>Using deodorants and artificial substances near/on breast</i>	Yes = 0 , No=1	
<i>Women who have family history of breast cancer</i>	Yes = 1 , No=0	
<i>Women who are older in age</i>	Yes = 1 , No=0	
Perception of who should get screened for breast cancer		The group of women that should be screened for breast cancer was created using four items, provided below. Each of the four variables were coded as 0 and 1. A total score of 0 or 1 was considered to be a low score and was finally coded as 0.
<i>Women who have pain, or lumps in the breast</i>	Yes = 1 , No=0	
<i>Women who have given birth</i>	Yes = 0 , No=1	
<i>Women who have family history of breast cancer</i>	Yes = 1 , No=0	
<i>All women</i>	Yes = 1 , No=0	

Perception of signs and symptoms of breast cancer

- Lumps on breast*
- Pain in breast, nipple area*
- Nipple discharge*
- Skin irritation, itching*
- Flaky skin or rashes on nipple*

- Yes = 1 , No=0
- Yes = 1 , No=0
- Yes = 1 , No=0
- Yes = 1 , No=0
- Yes = 1 , No=0

The knowledge about signs and symptoms of breast cancer was created using five items, provided below. All the variables were coded as 0 and 1. A total score of 0-1 indicated that women had the knowledge of at most one symptom which was coded as 0, and a score of more than 1 out of 5 indicated the knowledge of more than one sign or symptoms, which was finally coded as 1.

Understanding of conditions that increase the chance of having cervical cancer for women

- Infection with HPV*
- Having a weakened immunity*
- Starting to have sex before age 17*
- Use of oral contraceptive pills*
- Having many children*
- Having STI before*
- Multiple sexual partners*
- Not using condom during sex*
- Smoking*
- Family history of cervical or breast cancer*

- Yes = 1 , No=0
- Yes = 1 , No=0
- Yes = 0 , No=1
- Yes = 0 , No=1
- Yes = 0 , No=1
- Yes = 1 , No=0
- Yes = 1 , No=0
- Yes = 1 , No=0
- Yes = 1 , No=0
- Yes = 1 , No=0

The condition which increases the chances of having breast cancer was created using ten items, provided below. A total score 0 meant that women had no knowledge of any one condition and rather had "poor knowledge," which was coded as 0 and a score of 1 was awarded to women who had the correct knowledge of at least one condition and those women had "improved knowledge"

Advantage of early detection of cervical cancer

- Prevent*
- Control*

- Yes = 1 , No=0
- Yes = 1 , No=0

The advantage of early detection of cervical cancer was created using two items. 0 indicated women with no knowledge of advantage of early screening, and 1 included women with knowledge of at least one advantage

Perception of signs and symptoms are of cervical cancer

- Vaginal bleeding*
- Vaginal discharge*
- Pain during sex*
- Pelvic pain*

- Yes = 1 , No=0
- Yes = 1 , No=0
- Yes = 1 , No=0
- Yes = 1 , No=0

The knowledge about signs and symptoms of breast cancer was created using four items, provided below. All the variables were coded as 0 and 1. 0 indicated women with knowledge of at most one symptom (those who scored 0-1), and 1 indicated knowledge of more than one sign or symptoms

Perception of who should get screened for cervical cancer

Women with gynaecological problems only
 Pregnant women only
 All women of child bearing age
 Sexually active women only
 Women with family history of cancer only
 Women who are older in age
External factors: Source of information /

Asha worker/VHN/Anganwadi worker
 Govt hospital
 Private health facility
 Medical Shop
 Traditional healers
 Nearby health facility
 Media (TV, newspaper, etc)
Searching Information about cancer

TV
 Radio
 Health professionals
 News papers
 Magazine
 Internet

Willingness to get screened for cancer

Breast Cancer
 Cervical Cancer
Willingness to get screened if distance to screening centre
Willingness to get screened if screening time is
Willingness to get screened if screening cost is

The group of women that should be screened for breast cancer was created using six items, provided below. All the variables were coded as 0 and 1. 0 included women with knowledge of at least one group, and 1 included knowledge of more than one group

Yes = 0 , No=1	
Yes = 0 , No=1	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	The information received about cancer from any health facility or media was created using seven items. All the variables were coded as 0 and 1. 0 included women who received no knowledge from any source. A total score of 1-7 indicated that women had received at least some knowledge and was finally recoded as 1
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	The information searched about cancer was created using six items. All the variables were coded as 0 and 1. 0 indicated that women did not search about cancer. A total score of 1-6 indicated that women searched from at least source, which was finally recoded as 1.
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	
Yes = 1 , No=0	Wanted to get tested for cancer was created from two items. 0 included who did not want to get tested for both breast and cervical cancer. A total score of 1-2 included women who wanted to test for at least one test, which was finally recoded as 1.
Yes = 1 , No=0	
Yes = 1 , No=0	
Less than 5 km = 0 , More than equal to 5km = 1	
Less than 1 hr = 0, More than 1 hr = 1	
Less than 500=0, More than equal to 500 = 1	

Perceived Susceptibility and Perceived Severity of cancer

Cervical or breast cancer is a deadly disease.
Cervical or breast cancer is an infection that can be transmitted sexually.
Getting screening makes me feel good because it means that I take care of Myself
I do not know at what age it is necessary to have a screening test
The screening can save my life
I do not know how often I need to get a screening Test

Social and personal norms

Screening can detect problems in the breast before they become breast cancer
Most people with breast cancer have no visible signs or symptoms
Women who do not have lumps on breast do not need a screening and cannot develop breast cancer
A woman should get a for breast cancer screening at least once every 3 years
Screening can detect problems before they become cervical cancer
Most people with cervical have no visible signs or symptoms
Women who have gone through menopause do not need a screening
A woman should get a screening for cervical cancer at least once every 3 years

	The index is created using six items, all coded as 0 and 1. 0 included those women who have positive perception about less than 3 items, and 1 was coded for women with positive perception of more than 3 items
Agree=1, Disagree=0	
Agree=1, Disagree=0	
Agree=1, Disagree=0	
Agree=0, Disagree=1	
Agree=1, Disagree=0	
Agree=0, Disagree=1	
	The variable is created using eight items, all coded as 0 and 1. 0 was coded for women who had positive attitude on 6 or less items and 1 was coded for women who had a positive perception of 7 or more items
Agree=1, Disagree=0	
Agree=1, Disagree=0	
Agree=0, Disagree=1	
Agree=1, Disagree=0	
Agree=1, Disagree=0	
Agree=1, Disagree=0	
Agree=0, Disagree=1	
Agree=1, Disagree=0	

Table 9: Basic awareness of Breast and Cervical cancer and their screening

(in %)	Screened women (N=85)	Non-screened women (N=155)
Heard of the term breast cancer	98.8	82.6
Aware that there are tests to screen for breast cancer?	88.2	40.7
Tests for Breast Cancer		
Self-examination	43.5	7.7
Professional/clinical examination	22.4	17.4
Mammogram	4.7	
Don't know	41.2	76.8
Eligible for test	83.5	52.3
Ever screened for breast Cancer	87.1	6.5
Aware of the term cervical cancer	98.8	76.1

Aware that there are tests to screen for cervical cancer	87.1	32.3
Tests to examine Cervical Cancer		
Vaginal examination	45.9	11.6
Swab/Smear examination	8.2	3.2
Don't know	54.1	86.5
Eligible for test	84.7	49.7
Ever screened for Cervical cancer	88.2	7.1

Table 10: General health seeking behaviour

	Screened women (N=85)	Non-screened women (N=155)
General health seeking Behaviour		
Times in a year do you visit a doctor for your own health concerns (Mean (SE))	3.5(0.39)	3.9 (0.29)
Usually go for regular medical care		
Don't go	1.2	3.2
Government - PHC/CHC	62.4	56.8
Private	36.5	40.0
How do you pay for your health care?		
Took treatment at Government Hospital	47.1	47.1
Pay on my own	47.1	51.6
Private / Government Health Insurance	4.7	1.3
Others	1.2	0.0
Seek medical help from a licensed professional		
Never	1.2	2.6
Sometimes	22.4	26.5
Often	5.9	8.4
Always	70.6	62.6
Trust Doctors and Nurses with providing you the correct information		
Never	2.4	1.9
Sometimes	34.1	22.6
Often	5.9	12.3
Always	57.7	63.2
Discuss your health regularly with your family		
Never	9.4	5.2
Sometimes	34.1	25.8
Often	18.8	19.4
Always	37.7	49.7
Got Vaccinated for COVID-19	95.3	96.1
Reasons for not vaccinated		
Other Morbidity	0.0	16.7
Non-eligibility	0.0	16.7
Fear Of side effect	75.0	50.0
Don't have time	25.0	16.7
Children vaccinated of Polio (N=69)	98.6	96.1
Reasons for not vaccinated for Polio among children		
Fear of side effect	100.0	0.0
Non-availability of vaccine	0.0	40.0
Don't know about that	0.0	40.0
Child death	0.0	20.0

Table 11: Women's autonomy in healthcare decisions

	Screened women (N=85)	Non-screened women (N=155)
Respondent	38.8	27.1

Decision on Health care	Respondent and partner together	50.6	60.7
	Respondent and someone else together	7.1	2.6
	Partner alone	0.0	7.7
	Someone else	3.5	1.9
Decides on large household purchases	Respondent	35.3	26.5
	Respondent and partner together	44.7	58.1
	Respondent and someone else together	8.2	1.9
	Partner alone	7.1	9.7
	Someone else	4.7	3.2
	Others	0.0	0.7

Table 12: Perception and understanding of the respondents on breast cancer

Perception and understanding of the respondents on Breast cancer	Screened women (N=85)	Non-screened women (N=155)
Condition do you think increases the chance of having Breast cancer		
Giving birth and breastfeeding	21.2	16.1
Using deodorants and artificial substances near/on breast	18.8	3.2
Women who have family history of breast cancer	18.8	18.7
Women who are older in age	25.9	15.5
Don't Know	43.5	56.1
Others	4.7	6.5
Which group of women do you think should get screening For breast cancer?		
Women who have pain, or lumps in the breast	17.7	16.1
Women who have given birth	20.0	9.0
Women who have family history of breast cancer	12.9	13.6
All women	28.2	19.4
Women who are older in age	36.5	20.0
Don't know	17.7	41.3
Others	1.2	1.3
Signs and symptoms are of breast cancer		
Lumps on breast	37.7	30.3
Pain in breast, nipple area	49.4	26.5
Nipple discharge	14.1	7.1
Skin irritation, itching	9.4	4.5
Flaky skin or rashes on nipple	2.4	0.0
Don't know	28.2	58.1
Others	1.2	0.0
Is breast cancer preventable	85.9	86.5
How breast cancer can be prevented		
Early detection and treatment	90.4	93.3
Vaccination	26.0	9.7
Risk reduction	2.7	2.2
Don't know	0.0	3.0
Others	0.0	0.8
Do breast cancer can be cured	71.8	75.5
Cost for breast screening using clinical Examination		
0-500	0.0	3.9
500-1000	9.4	11.6
1000-2000	18.8	14.8

2000-4000	22.4	9.0
4000+	22.4	20.7
Do not know	27.1	40.0
Cost you paid for cancer screening		
0-500	14.1	NA
500-1000	0	NA
1000-2000	5.9	NA
2000-4000	9.4	NA
4000+	14.1	NA
Not paid anything	45.9	NA
Don't know	10.6	NA

Table 13: Perception and understanding of the respondents on cervical cancer

Perception and understanding of the respondents on Cervical cancer	Screened women (N=85)	Non-screened women (N=155)
Perception of risk factors of cervical cancer		
Infection with HPV	7.1	1.3
Having a weakened immunity	21.2	13.6
Starting to have sex before age 17	17.7	3.9
Use of oral contraceptive pills	25.9	15.5
Having many children	4.7	3.2
Having STI before	3.5	1.9
Multiple sexual partners	8.2	5.2
Not using condom during sex	3.5	1.3
Smoking	4.7	3.2
Family history of cervical or breast cancer	3.5	2.6
Don't know	42.4	63.2
Others	7.1	6.5
Is early detection of cervical cancer helpful	85.9	81.9
What do you think is the advantage?		
Prevent	71.2	88.2
Control	43.8	19.7
Don't know	0.0	1.6
Is one time screening for cervical cancer enough	35.3	23.2
Which group of women do you think should get screening For cervical cancer		
Women with gynaecological problems only	16.5	8.4
Pregnant women only	18.8	7.1
All women of child bearing age	17.7	9.7
Sexually active women only	11.8	4.5
Women with family history of cancer only	10.6	5.8
Women who are older in age	47.1	39.4
Don't know	21.2	42.6
Others	2.4	1.3
Common signs and symptoms of cervical cancer		
Vaginal bleeding	36.5	28.4
Vaginal discharge	43.5	16.8
Pain during sex	9.4	2.6
Pelvic pain	21.2	11.6
Don't know	32.9	60.0
Others	2.4	0.7
Is Cervical Cancer Preventable	83.5	85.2
How it can be prevented		
Early detection and treatment	88.7	91.7
Vaccination	23.9	10.6

Risk reduction	7.0	1.5
Don't know	1.4	3.8
Do cervical cancer can be cured	74.1	73.6
Aware of free screening at PHCs	87.1	51.0
Cost for cervical screening using clinical Examination		
0-500	2.4	3.2
500-1000	5.9	4.5
1000-2000	17.7	18.7
2000-4000	23.5	9.7
4000+	23.5	19.4
Do not know	27.1	44.5
Cost you paid for cancer screening		
0-500	11.8	NA
500-1000	2.4	NA
1000-2000	4.7	NA
2000-4000	11.8	NA
4000+	14.1	NA
Not paid anything	51.8	NA
Don't know	3.5	NA

Table 14: Sources of Information about Cancer, Screening Access & Quality of Care

	Screened women (N=85)	Non-screened women (N=155)
Received information from any health providers about Cancer		
Only Cervical Cancer	9.4	1.3
Only Breast Cancer	7.1	1.9
Both	41.2	31.0
No information received	42.4	65.8
Receive the information from		
Asha worker/VHN/Anganwadi worker	59.2	69.8
Govt hospital	42.9	34.0
Private health facility	36.7	5.7
Medical Shop	14.3	1.9
Traditional healers	4.1	1.9
Nearby health facility	6.1	1.9
Media (TV, newspaper, etc)	6.1	7.6
Looking for information about cervical or breast cancer		
Only Cervical Cancer	10.6	0.7
Only Breast Cancer	8.2	1.9
Both	51.8	50.3
No	29.4	47.1
Searched for the information from		
TV	48.3	48.8
Radio	31.7	12.2
Health professionals	31.7	41.5
News papers	16.7	17.1
Magazine	10.0	4.9
Internet	10.0	20.7
Others (Neighbours)	3.3	8.5
Times screened for breast cancer		
1	68.2	Na
2-3	27.1	Na
4-5	3.5	Na
5 and above	1.2	Na

First Time screened where		
Home	10.6	Na
ANM or Midwife at home	2.4	Na
Nurse or doctor at local clinic/PHC	36.5	Na
General Government Hospital or Private Hospital	32.9	Na
Cancer specialty hospital	5.9	Na
Workshop/cancer awareness drive	11.8	Na
Second Time screened where		
Home	3.7	Na
Nurse or doctor at local clinic/PHC	7.4	Na
General Government Hospital or Private Hospital	74.1	Na
Cancer specialty hospital	11.1	Na
Workshop/cancer awareness drive	3.7	Na
Third Time screened where		
Home	7.4	Na
ANM or Midwife at home	3.7	Na
Nurse or doctor at local clinic/PHC	7.4	Na
General Government Hospital or Private Hospital	51.9	Na
Cancer specialty hospital	11.1	Na
Workshop/cancer awareness drive	11.1	Na
Don't know	7.4	Na
Fourth Time screened where		
Home	25.0	Na
General Government Hospital or Private Hospital	50.0	Na
Cancer specialty hospital	25.0	Na
More than four Time screened where		
Home	40.0	Na
General Government Hospital or Private Hospital	40.0	Na
Don't Know	20.0	Na
Reason for breast cancer screening		
Instructed at health centre	48.2	Na
Abnormal discharge	15.3	Na
Similar cancer in a relative	5.9	Na
Newspaper article/media report	1.2	Na
Invitation by health worker	18.8	Na
Others (Specify)	10.6	Na
If approached by a health worker will you examine breast cancer at local PHC		
Definitely not	23.5	25.8
Probably not	4.7	9.0
Probably yes	30.6	31.0
Definitely yes	41.2	34.2
Has anyone ever recommended for you to be tested or screened for cervical cancer	49.4	Na
Who recommended it for you?		
Spouse	33.3	Na
Colleague	16.7	Na
Neighbour	14.3	Na
ASHA/Health worker	45.2	Na
Relatives	2.4	Na
Others	4.8	Na
Times screened for cervical cancer		
1	68.2	Na
2-3	27.1	Na
4-5	4.7	Na
First Time screened where		
Home	10.6	Na
ANM or Midwife at home	2.4	Na
Nurse or doctor at local clinic/PHC	30.6	Na
General Government Hospital or Private Hospital	40.0	Na
Cancer specialty hospital	5.9	Na
Workshop/cancer awareness drive	10.6	Na
Second Time screened where		
ANM or Midwife at home	3.7	Na
Nurse or doctor at local clinic/PHC	22.2	Na

IFMR Study report: Operational Research Programme of the Tamil Nadu Health System Reform Programme (TNHSRP)

General Government Hospital or Private Hospital	48.2	Na
Cancer specialty hospital	14.8	Na
Workshop/cancer awareness drive	11.1	Na
Third Time screened where		
Home	7.4	Na
ANM or Midwife at home	3.7	Na
Nurse or doctor at local clinic/PHC	7.4	Na
General Government Hospital or Private Hospital	40.7	Na
Cancer specialty hospital	14.8	Na
Workshop/cancer awareness drive	3.7	Na
Tested only twice	29.6	Na
Fourth Time screened where		
General Government Hospital or Private Hospital	50.0	Na
Workshop/cancer awareness drive	50.0	Na
More than four Time screened where		
General Government Hospital or Private Hospital	25.0	Na
Cancer specialty hospital	50.0	Na
Don't Know	25.0	Na
Reason for cervical cancer screening		
Instructed at health centre	52.9	Na
Abnormal discharge	10.6	Na
Similar cancer in a relative	5.9	Na
Newspaper article/media report	5.9	Na
Invitation by health worker	16.5	Na
Others	8.2	Na
If approached by a health worker will you examine cervical cancer at local PHC		
Definitely not	42.4	34.8
Probably not	7.1	6.5
Probably yes	31.8	32.3
Definitely yes	18.8	26.5
How far is the screening centre		
1-5 km	74.1	79.4
5-10 km	8.2	3.2
10-15 km	11.8	1.9
15-20 km	2.4	0.7
20+ km	1.2	0.0
Don't know	2.4	12.3
Others	0.0	2.6
Mean Barrier for not going for screening		
Permission from husband (Mean (SE))	8.68 (0.21)	Na
Care for children in my absence (Mean (SE))	7.35 (0.28)	Na
Permission from in laws (Mean (SE))	7.21 (0.32)	Na
Cost of travel (Mean (SE))	6.65 (0.27)	Na
Distance to the hospital (Mean (SE))	6.90 (0.26)	Na
Making time from duties at home (Mean (SE))	6.46 (0.27)	Na
Overcoming fear and shame (Mean (SE))	6.51 (0.26)	Na
Leave from work (Mean (SE))	6.73 (0.29)	Na
Did you overcome the barrier in order to make the decision for coming to the Screening	27.1	Na
Would you get screened again at your local PHC	54.1	Na
If you were going to access screening what are your perceptions about your experience / when you went in to get screened how would you rate the following aspects on 1 to 10		
Cleanliness (Mean (SE))	8.02 (0.19)	Na

Welcoming attitude of staff (Mean (SE))	7.71 (0.21)	Na
Warmth (Mean (SE))	7.36 (0.24)	Na
Providing sufficient information on procedure (Mean (SE))	7.43 (0.23)	Na
Making comfortable during procedure (Mean (SE))	7.61 (0.20)	Na
Privacy (Mean (SE))	6.98 (0.23)	Na
Feeling shame and embarrassment (Mean (SE))	7.02 (0.24)	Na
Quality of the test (Mean (SE))	7.97 (0.23)	Na
Correctness of the result (Mean (SE))	7.89 (0.22)	Na
Discomfort and pain (Mean (SE))	6.62 (0.25)	Na
Short waiting time/queue (Mean (SE))	6.65 (0.26)	Na
Would you get screened again if the distance was		
1-5 km	77.7	Na
5-10 km	7.1	Na
10-15 km	9.4	Na
15-20 km	3.5	Na
Don't know	2.4	Na
Would you get screened again if the time taken for the entire process was		
½ to 1 hour	68.2	73.6
1-2 hours	25.9	6.5
2-4 hours	2.4	1.3
4 hours+	1.2	0.7
Don't know	2.4	15.5
Others	0.0	2.6
Would you get screened again if it cost up to		
0-500	40.0	29.0
500-1000	9.4	18.7
1000-2000	7.1	4.5
2000-4000	11.8	2.6
4000+	14.1	11.6
Do not know	16.5	30.3
Others	1.2	3.2

Table 15: Reasons for not being screened for breast, or cervical cancer among non-screened women

What is the reason for not being for screened for breast cancer	Non-screened women (N=155)
Not at risk	78.1
Have not heard of the disease	8.4
Family won't allow	3.2
Not in the age group/ I am too old	7.1
I don't have time	5.8
I can't leave home because there is no one else at home	3.2
Household work	0.7
Afraid of getting positive result	0.7
I am working	1.3
It is not important	4.5
Not aware of screening test	11.0
Would like to get screened for Breast cancer	40.7
What is the reason for not being for screened for cervical cancer	
Not at risk	76.8
Have not heard of the disease	5.8

Family won't allow	3.9
Not in the age group/ I am too old	8.4
I don't have time	3.9
I can't leave home because there is no one else at home	3.2
Household work	1.3
Afraid of getting positive result	0.7
I am working	1.3
It is not important	2.6
Not aware of screening test	11.0
Would like to get screened for Cervical cancer	38.1
Prefer Screening in which centre	
A government hospital - PHC/CHC	94.9
Government testing Camp	1.7
Government hospital	1.7
A private physician	1.7
How sure are you that you can ask your primary care doctor / VHN / ANM Nurse for a referral to get a screening	
I can easily and openly ask	56.1
I can ask only secretly	7.1
I cannot ask them	34.2
Others (Specify)	2.6
Can you discuss about having a screening with your doctor/nurse even if (s)he does not bring it up	53.6
If you get an appointment for screening, will your family allow you to go	52.3
Will you get the screening if doctor tells you, it will be painful?	47.1

Table 16: Perceived Susceptibility and Perceived Severity among participants

Perceived Susceptibility and Perceived Severity	Screened women (N=85)	Non-screened women (N=155)
Cervical or breast cancer is a deadly disease.		
Strongly agree	45.9	40.0
Agree	25.9	41.3
Neutral	4.7	7.7
Disagree	2.4	5.8
Strongly Disagree	21.2	5.2
Cervical or breast cancer is an infection that can be transmitted sexually.		
Strongly agree	24.7	16.8
Agree	25.9	42.6
Neutral	20.0	29.7
Disagree	5.9	4.5
Strongly Disagree	23.5	6.5
Getting screening makes me feel good because it means that I take care of Myself		
Strongly agree	41.2	Na
Agree	32.9	Na
Neutral	2.4	Na
Disagree	2.4	Na
Strongly Disagree	21.2	Na
I do not know at what age it is necessary to have a screening test		
Strongly agree	25.9	27.1
Agree	24.7	38.7
Neutral	17.7	9.0
Disagree	9.4	15.5
Strongly Disagree	22.4	
The screening can save my life		

Strongly agree	45.9	38.1
Agree	29.4	47.1
Neutral	2.4	3.2
Disagree	1.2	8.4
Strongly Disagree	21.2	3.2
I do not know how often I need to get a screening Test		
Strongly agree	30.6	24.5
Agree	22.4	44.5
Neutral	14.1	11.0
Disagree	7.1	12.9
Strongly Disagree	25.9	7.1

Table 17: Perceived susceptibility

	Mean (SE)
On a scale of 0 to 100 how likely is any woman your age to develop breast cancer in the next 10 years (N=79)	38.96 (2.42)
On a scale of 0 to 100 how likely are you to develop breast cancer in the next 10 years (N=81)	22.50(2.51)
On a scale of 0 to 100 how likely is any woman your age to develop cervical cancer in the next 10 years (N=79)	34.53(2.40)
On a scale of 0 to 100 how likely are you to develop cervical cancer in the next 10 years (N=81)	17.40(1.98)

Table 18: Social and personal norms about cancer among participants

Social and personal norms	Screened women (N=85)	Non-screened women (N=155)
Out of 10 women in your community who are eligible to participate in screening, how many do you think participate on average in the breast cancer screening test (Mean (SE))	4.49(0.24)	4.33(0.21)
Given that women screen at different kinds of facilities, of these (quote the number given), how many would go to PHC and how many to others		
PHC (Mean (SE))	4.08(0.24)	3.99(0.23)
Others (Mean (SE))	2.44 (0.299)	1.61 (0.22)
Screening can detect problems in the breast before they become cancer		
Strongly agree	48.2	42.6
Agree	51.8	51.6
Neutral	0.0	5.8
Most people with breast cancer have no visible signs or symptoms		
Strongly agree	41.2	29.0
Agree	49.4	49.0
Neutral	4.7	16.1
Disagree	3.5	5.2
Strongly Disagree	1.2	0.7
Women who do not have lumps on breast do not need a screening and cannot develop breast cancer		
Strongly agree	21.2	16.8
Agree	36.5	21.3
Neutral	21.2	32.3
Disagree	20.0	21.9

Strongly Disagree	1.2	
A woman should get a screening at least once every 3 years		
Strongly agree	47.1	34.8
Agree	48.2	58.1
Neutral	4.7	4.5
Disagree	0.0	2.6
Out of 10 women in your community who are eligible to participate in screening, how many do you think participate on average in the cervical cancer screening test (Mean (SE))		
	4.31(0.24)	4.37(0.23)
Given that women screen at different kinds of facilities, of these (quote the number given), how many would go to PHC and how many to others		
PHC (Mean (SE))	3.76(0.23)	3.96(0.23)
Others (Mean (SE))	2.22(0.30)	1.70 (0.21)
Screening can detect problems before they become cervical cancer		
Strongly agree	42.4	36.1
Agree	48.2	58.7
Neutral	5.9	3.2
Disagree	3.5	1.3
Strongly Disagree	0.0	0.7
Most people with cervical have no visible signs or symptoms		
Strongly agree	40.0	26.5
Agree	48.2	53.6
Neutral	9.4	11.6
Disagree	2.4	8.4
Women who have gone through menopause do not need a screening		
Strongly agree	17.7	11.6
Agree	28.2	13.6
Neutral	23.5	31.6
Disagree	28.2	34.8
Strongly Disagree	2.4	8.4
A woman should get a screening at least once every 3 years		
Strongly agree	37.7	32.3
Agree	52.9	59.4
Neutral	4.7	5.2
Disagree	3.5	3.2
Strongly Disagree	1.2	0.0

Survey Tools

Questionnaire for TNHSRP Operational Research Program

TNHSRP இயக்க செயல்முறை
IFMR Lead- Tool A (For women who have gotten screened)

திட்டத்திற்கான

கேள்விப்பட்டியல்

IFMR லீட் - கருவி A (ஸ்க்ரீன் செய்யப்பட்ட பெண்களுக்கு)

SECTION 0

பிரிவு 0

Identifiers அடையாளம் காணும் தகவல்			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
001A	Name பெயர்		
002A	Town/Village நகரம்/கிராமம்		
003A	Nearest PHC/Govt Hospital அருகாமை பொது சுகாதார மையம் / அரசு மருத்துவமனை		

SECTION I

பிரிவு I

Seeks to understand the background of the respondents including maternal parity

சுகப்பிரசவம் உள்ளிட்ட பங்கேற்பாளரின் பின்புலத்தை புரிந்துக்கொள்ள முயலுதல்

Socio-demographic Characteristics Of The Respondents

IFMR Study report: Operational Research Programme of the Tamil Nadu Health System Reform Programme (TNHSRP)

S.N வ. எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
101A	What is your Age? உங்க வயசு என்ன?	[] years [] வயசு	
102A	Are you currently married? நீங்க திருமணம் ஆனவரா?	(1) Married திருமணம் ஆனவர் (2) Single தனியாக வாழ்பவர் (3) Divorced விவாகரத்து ஆனவர் (4) Widowed விதவை (5) Separated பிரிந்து வாழ்பவர்	
103A	What is your religion? நீங்க எந்த மதத்த சேர்ந்தவர்?	(1) Hindu இந்து (2) Muslim முஸ்லீம் (3) Christian கிறிஸ்தவர் (888) Others (specify) மற்றது (சொல்லுங்க)	
104A	Which category does your caste belong to? நீங்க எந்த ஜாதிய சேர்ந்தவர்?	(1) SC (Adi dravida, Arunthathiyar, Pallar, Kadaiyar, Paraiyar) SC (ஆதி திராவிடர், அருந்ததியர், பல்லர், கடையர், பரையர்) (2) ST பழங்குடியினர்/மலைவாழ் மக்கள் (3) OBC இதர பிற்படுத்தப்பட்ட பிரிவினர் (4) General பொதுப்பிரிவினர் (5) No caste ஜாதி எதுவும் இல்லை (777) Refused to answer பதில் சொல்ல மறுத்துவிட்டார் (888) Other (Specify): _____ மற்றது (சொல்லுங்க) :	
105A	What is the highest standard of education that you have completed? நீங்க எதுவரைக்கும் படிச்சிருக்கீங்க?	(0) Never enrolled / did not pass even 1st grade பள்ளிக்கூடத்துக்கே போனதில்ல / முதல் வகுப்பு கூட பாஸ் பன்னலை (1) 1st grade முதல் வகுப்பு (2) 2nd grade இரண்டாம் வகுப்பு (3) 3rd grade மூன்றாம் வகுப்பு (4) 4th grade நான்காம் வகுப்பு (5) 5th grade ஐந்தாம் வகுப்பு (6) 6th grade ஆறாம் வகுப்பு (7) 7th grade ஏழாம் வகுப்பு (8) 8th grade எட்டாம் வகுப்பு (9) 9th grade ஒன்பதாம் வகுப்பு	

		<p>(10) 10th grade பத்தாம் வகுப்பு (11) 11th grade பதினொன்றாம் வகுப்பு (12) 12th grade பன்னிரெண்டாம் வகுப்பு (13) Graduate degree not completed பட்டப்படிப்பு முடிக்கல (14) Graduate degree completed பட்டப்படிப்பு முடிச்சிருக்கு (15) Higher Education (Post-graduate/ PhD) மேற்படிப்பு (முதுகலை படிப்பு/முனைவர் பட்டம்) (16) Diploma/ITI பட்டய படிப்பு / ஐடிஐ (-99) Don't know தெரியாது</p>	
106A	<p>What is your main occupation? உங்க முக்கிய தொழில் என்ன?</p>	<p>(0) Do not work to earn any income/Housewife சம்பாதிக்கிற வேலை எதுவும் செய்யல / வீட்டு எஜமானி (1) Cultivation விவசாயம் (2) Farm Labour விவசாய கூலி (3) Non-farm labour விவசாயம் சாராத கூலி (4) Household industry குடிசைத்தொழில் (5) Self-employment (auto rickshaw driver, shop) சுய தொழில் (ஆட்டோ ஓட்டுநர், கடை) (6) Government / Private salaried job அரசாங்க / தனியார் வேலை (சம்பளத்திற்கு) (7) Professional business (engineer, lawyer, doctor, etc.) வர்த்தக தொழில் (பொறியாளர், வக்கீல், டாக்டர், முதலியவை) (8) Rental income வாடகை வருமானம் (9) Investments /interest from savings முதலீடு / சேமிப்பு வட்டி வருமானம் (10) Pension ஓய்வூதியம் (888) Other மற்றவை</p>	
109A	<p>Family monthly income (salary, farming, trade, rental etc) குடும்பத்தோட மாச வருமானம் (சம்பளம், விவசாயம், வியாபாரம், வாடகை முதலியவை)</p>	<p>(1) 0 to 2,50,000 0 முதல் 2,50,000 (2) 2,50,000 to 5,00,000 2,50,000 முதல் 5,00,000 (3) 5,00,000 to 7,50,000 5,00,000 முதல் 7,50,000 (4) 7,50,000 to 10,00,000 7,50,000 முதல் 10,00,000 (5) 10,00,000 and above 10,00,000 மற்றும் அதற்கு மேல</p>	

IFMR Study report: Operational Research Programme of the Tamil Nadu Health System Reform Programme (TNHSRP)

110A	Have you given birth? உங்களுக்கு குழந்தைங்க இருக்காங்களா?	(0) No இல்ல (1) Yes ஆமா	If no, skip to next section
111A	How many children do you have உங்களுக்கு எத்தன குழந்தைங்க இருக்காங்க	[] No [] பேரு	
112A	Your age when you first got pregnant நீங்க எந்த வயசுல முதல் முறையா கர்பம் தரிச்சீங்க	[] Births [] வயசு	

Section 2

பிரிவு 2

Basic awareness of Breast and Cervical cancer and their screening மார்பக புற்றுநோய் மற்றும் கர்பப்பை வாய் புற்றுநோய் பற்றிய அடிப்படை விழிப்புணர்வு மற்றும் அதை கண்டறிதல்			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
201A	Have you heard of the term breast cancer? மார்பக புற்றுநோய் அப்படிங்கற வார்த்தையை இதுவரைக்கும் நீங்க கேள்விப்பட்டிருக்கீங்களா?	(0) No இல்ல (1) Yes ஆமா	
202A	Are you aware that there are tests to screen for breast cancer? மார்பக புற்றுநோய் கண்டுபிடிக்கிறதுக்கு நிறைய சோதனை எல்லாம் இருக்கு அப்படிங்கற விஷயம் உங்களுக்கு தெரியுமா?	(0) No இல்ல (1) Yes ஆமா	
203A	What are the tests? அந்த சோதனைகள் என்னென்ன?	(1) Self examination சுய பரிசோதனை (2) Professional/clinical examination தொழில்சார் / மருத்துவ பரிசோதனை (3) mammogram மாமோகிராம் (888) Other மற்றவை (999) I don't know தெரியாது	
204A	Do you think you are eligible for screening for breast cancer? மார்பக புற்றுநோய்க்கான பரிசோதனை செய்ய உங்களுக்கு தகுதி இருக்குனு நீங்க நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா	
205A	Why/Why not? ஏன்/ஏன் இல்லை?		
206A	Have you been screened for breast cancer? இதுவரைக்கும் மார்பக புற்றுநோய் கண்டுபிடிக்கிறதுக்கான சோதனை செஞ்சிருக்கீங்களா?	(0) No இல்ல (1) Yes ஆமா	If no use tool B
207A	Are you aware of the term cervical cancer? கர்பப்பை வாய் புற்றுநோய் அப்படிங்கற வார்த்தையை இதுவரைக்கும் கேள்விப்பட்டிருக்கீங்களா?	(0) No இல்ல (1) Yes ஆமா	
208A	Are you aware that there are tests to screen for cervical cancer? கர்பப்பை வாய் புற்றுநோய் கண்டுபிடிக்கிறதுக்கு நிறைய சோதனை எல்லாம் இருக்கு	(0) No இல்ல (1) Yes ஆமா	

IFMR Study report: Operational Research Programme of the Tamil Nadu Health System Reform Programme (TNHSRP)

	அப்படிங்கிற விஷயம் உங்களுக்கு தெரியுமா?		
209A	What are the tests? அந்த சோதனைகள் என்னென்ன?	(1) Vaginal examination யோனி/பெண்ணுருப்பு பரிசோதனை (2) Swab/Smear examination ஸ்வாப்/ஸ்மியர் பரிசோதனை (888) Others (please specify) மற்றவை (999) I don't know தெரியாது	
210A	Do you think you are eligible for screening for cervical cancer? கர்ப்பை வாய் புற்றுநோய்க்கான பரிசோதனை செய்ய உங்களுக்கு தகுதி இருக்குமா நீங்க நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா	
211A	Why/Why not? ஏன்/ஏன் இல்லை?		
212A	Have you been screened for cervical cancer? இதுவரைக்கும் கர்ப்பை வாய் புற்றுநோய் கண்டுபிடிக்கிறதுக்கான சோதனை செஞ்சிருக்கீங்களா?	(0) No இல்ல (1) Yes ஆமா	If no use tool B

SECTION 3

பிரிவு 3

This section will understand how respondents access routine healthcare இந்த பிரிவு பங்கெடுக்கிறவங்க தங்களோட உடல் ஆரோக்கியத்த எப்படி வழக்கமா பராமரிக்கிறாங்கனு புரிஞ்சிப்போம்.

Access to Healthcare and Information about Screening உடல் ஆரோக்கிய பராமரிப்பு மற்றும் ஸ்கிரீனிங் சம்பந்தப்பட்ட தகவல்			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
301A	How many times in a year do you visit a doctor for your own health concerns? உங்க உடம்ப பாத்துக்க வருத்துல எத்தனை முறை நீங்க வைத்தியர்/டாக்டர் போய் பார்ப்பீங்க?	Number (0-20) எண்ணிக்கை (0-20)	

303A	<p>Where do you usually go for regular medical care? வழக்கமான மருத்துவ பராமரிப்புக்கு இயல்பா நீங்க எங்க போவீங்க?</p>	<p>(1) I don't go for regular medical care வழக்கமான மருத்துவ பராமரிப்புக்கு நான் போறதே இல்ல (2) A government hospital - PHC/CHC அரசு மருத்துவமனை - பொது சுகாதார மையம் / சமுதாய சுகாதார மையம் (3) Government hospital - medical college or district hospital அரசு மருத்துவமனை - மருத்துவ கல்லூரி இல்ல மாவட்ட மருத்துவமனை (4) A private physician தனியார் மருத்துவர் (5) A private hospital outpatient department or clinic தனியார் மருத்துவமனை புறநோயாளி பிரிவு இல்ல சிகிச்சை மையம் (888) Other (Specify) மற்றவை (சொல்லுங்க)</p>	
304A	<p>In general, how do you pay for your health care? பொதுவுல, உங்க மருத்துவ செலவுக்கு நீங்க எப்படி பணம் கொடுப்பீங்க?</p>	<p>(1) I visit government hospitals and there are no charges நான் அரசாங்க மருத்துவமனைக்கு போவேன், அங்க கட்டணம் எதுவும் இல்ல (2) I or my family pay for it ourselves நானோ என் குடும்பமோ அந்த செலவே நாங்களே செய்வோம் (3) We have private health insurance எங்க கிட்ட தனியார்மருத்துவ காப்பீடு இருக்கு (4) We have Chief Ministers Health insurance program எங்க கிட்ட முதலமைச்சர் மருத்துவ காப்பீடு இருக்கு (888) Others (Specify) மற்றவை (சொல்லுங்க)</p>	
305A	<p>Do you seek medical help from a licensed professional when you are ill? உங்களுக்கு உடம்பு சரியில்லனா உரிமம் வெச்சிருக்கிற ஒரு மருத்துவர் கிட்ட தான் போவீங்களா?</p>	<p>(1) Never எப்பவுமே கிடையாது (2) Sometimes, சில நேரத்துல (3) Often எப்பவாவது (4) Always எப்பவுமே</p>	

IFMR Study report: Operational Research Programme of the Tamil Nadu Health System Reform Programme (TNHSRP)

306A	Do you trust Doctors and Nurses with providing you the correct information about your health? மருத்துவரும் (டாக்டர்) செவிலியரும் (நர்ஸ்) உங்க ஆரோக்கியத்த பத்தி சரியான தகவல தான் சொல்றாங்கனு நீங்க நம்புறீங்களா?	(1) Never எப்பவுமே கிடையாது (2) Sometimes, சில நேரத்துல (3) Often எப்பவாவது (4) Always எப்பவுமே	
307A	Do you discuss your health regularly with your family? உங்க குடும்பத்தோட சேர்ந்து நீங்க உங்க ஆரோக்கியத்த பத்தி விவாதிப்பீங்களா?	(1) Never எப்பவுமே கிடையாது (2) Sometimes, சில நேரத்துல (3) Often எப்பவாவது (4) Always எப்பவுமே	
311A	Did you get vaccinated for COVID-19? கோவிட்-19 தடுப்பூசி போட்டுக்கிட்டீங்களா?	(0) No இல்ல (1) Yes ஆமா	If yes, go to 313A
312A	Why did you not get vaccinated for covid-19? கோவிட்-19 தடுப்பூசி நீங்க எதுக்காக போட்டுக்கல?	(1) Non-availability of vaccine தடுப்பூசி கிடைக்கல (2) Non-eligibility ஊசி போட்டுக்க எனக்கு தகுதியில்ல (3) Fear of vaccine side effects தடுப்பூசியால ஏதாவது பக்க விளைவு ஏற்படுங்கிற பயம் (4) Doubts on usefulness of vaccine தடுப்பூசி அவசியமானு ஒரு சந்தேகம் (888) Other மற்றவை	
313A	Have your children been vaccinated for Polio (if the respondent is married). உங்க குழந்தைகளுக்கு , போலியோ தடுப்பு மருத்து போட்டீங்களா? (பங்கெடுக்கிறவருக்கு திருணம் ஆகியிருந்தா மட்டும் இந்த கேள்விய கேளுங்க)	(0) No இல்ல (1) Yes ஆமா	If yes, go to 401A
314A	Why aren't they vaccinated? ஏன் தடுப்பு மருந்து போடல?	(1) Non-availability of vaccine தடுப்பு மருந்து கிடைக்கல (2) Non-eligibility மருந்து போட்டுக்க குழந்தைக்கு தகுதி இல்ல (3) Fear of vaccine side effects தடுப்பு மருந்தால ஏதாவது பக்க விளைவு ஏற்படுங்கிற பயம் (4) Doubts on usefulness of vaccine தடுப்பு மருந்து அவசியமானு ஒரு சந்தேகம் (888) Other மற்றவை	

SECTION 4 Women's autonomy in healthcare decisions

பிரிவு 4 ஆரோக்கியம் சார்ந்த முடிவுகளில் பெண்களின் சுயாதிகாரம்

S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
401A	Who decides on your healthcare decisions? உங்க ஆரோக்கியம் சம்பந்தமா யார் முடிவெடுப்பாங்க?	(1) Respondent பங்கெடுக்கிறவர் (1) Respondent and partner together பங்கெடுக்கிறவரும் அவரது துணையும் சேர்ந்து (1) Respondent and someone else together பங்கெடுக்கிறவரும் வேற ஒருத்தரும் சேர்ந்து (0) partner alone துணை மட்டும் தனியா (0) someone else வேற ஒருத்தர் (0) Other மற்றவர்	
402A	Who decides on large household purchases? குடும்பத்துல பெருசா ஏதாவது வாங்கலும்னா யார் முடிவெடுப்பாங்க?	(1) Respondent பங்கெடுக்கிறவர் (1) Respondent and partner together பங்கெடுக்கிறவரும் அவரது துணையும் சேர்ந்து (1) Respondent and someone else together பங்கெடுக்கிறவரும் வேற ஒருத்தரும் சேர்ந்து (0) partner alone துணை மட்டும் தனியா (0) someone else வேற ஒருத்தர் (0) Other மற்றவர்	

SECTION 5

பிரிவு 5

Perception and understanding of the respondents on breast cancer will be understood. Basic awareness of the respondents on screening is gauged.

மார்பக புற்றுநோயை சரியாக புரிந்துக்கொள்வதற்கு பங்கெடுப்பவர்களுக்கு இருக்கும் எண்ணமும் புரிதலும். ஸ்கிரீனிங் பற்றி பங்கெடுப்பவர்களுக்கு இருக்கும் அடிப்படை விழிப்புணர்வை அளவிடுதல்.

Perception of Benefits of Cancer and Breast cancer Screening புற்றுநோய் மற்றும் மார்பக புற்றுநோயை சார்ந்த ஸ்கிரீனிங்கின் பயன்கள் குறித்த எண்ணம்			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
501A	Which condition do you think increases the chance of having breast cancer for women? (Circle all that apply) பெண்களுக்கு மார்பக புற்றுநோய் ஏற்படுற வாய்ப்ப அதிகரிக்கிற சந்தர்ப்பம்னு நீங்க எத நினைக்கிறீங்க? (பொருந்தற எல்லாத்தையும் வட்டமிடுங்க)	(1) Giving birth and breastfeeding குழந்தையை பெற்று பாலுட்டுதல் (2) Using deodorants and artificial substances near/on breast மார்பகத்திற்கு பக்கத்திலோ / மீதோ வாசனை திரவியங்கள் மற்றும் செயற்றை பொருட்களை பயன்படுத்துதல் (3) Women who have family history of breast cancer மார்பக புற்றுநோய் குடும்ப வரலாறு உள்ள பெண்கள் (4) Women who are older in age வயதில் மூத்த பெண்கள்(999) I do not know எனக்கு தெரியாது (888) Others (Specify)	

		மற்றவை (சொல்லுங்க)	
502A	Which group of women do you think should get screening for breast cancer? மார்பக புற்றுநோய் சமபந்தமா எந்தப் பிரிவு பெண்களை பரிசோதித்து பார்க்கலும்னு நீங்க நினைக்கிறீங்க?	(1) Women who have pain, or lumps in the breast மார்பகத்துல புடைப்போ இல்ல வலியோ இருக்கிற பெண்கள் (2) Women who have given birth குழந்தை பெற்றெடுத்துள்ள பெண்கள் (3) Women who have family history of breast cancer மார்பக புற்றுநோய் குடும்ப வரலாறு உள்ள பெண்கள் (4) All women அனைத்து பெண்களும் (5) Women who are older in age வயதில் மூத்த பெண்கள் (888) Others (Specify) மற்றவை (குறிப்பிடவும்) (999) I do not know எனக்கு தெரியாது	
503A	What are the signs and symptoms are of breast cancer? (Circle all that they mention) மார்பக புற்றுநோயோட அறிகுறிகள் என்ன? (பங்கெடுக்கிறவர் கூறும் அனைத்து பதிலையும் வட்டமிடவும்)	(1) Lumps on breast மார்பகத்தில் புடைப்பு (2) Pain in breast, nipple area மார்பகம், முலைக்காம்பில் வலி (3) Nipple discharge முலைக்காம்பில் பால் வடிதல் (4) Skin irritation, itching சரும எரிச்சல், அரிப்பு (5) Flaky skin or rashes on nipple செதில் போன்ற சருமத்தில் அல்லது முலைக்காம்பில் அழற்சி (888) Others மற்றவை (999) I do not know எனக்கு தெரியாது	
504A	Do you think that breast cancer is preventable? மார்பக புற்றுநோய் தடுக்க முடியும்னு நீங்க நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா	If yes go to 505A If no go to 506A
505A	How do you think it is prevented? (Circle all that apply) அத எப்படி தடுக்க முடியும்னு நீங்க நினைக்கிறீங்க? (பொருந்துற எல்லாவற்றையும் வட்டமிடவும்)	(1) Early detection and treatment ஆரம்பத்திலேயே கண்டறிந்து சிகிச்சை அளித்தல் (2) Vaccination தடுப்பூசி / மருந்து (3) Risk reduction அபாயத்தை குறைத்தல் 888) Others மற்றவை (999) Do not know தெரியாது	
506A	Do you think that breast cancer has a cure once it has been diagnosed? கண்டறிந்த உடனேயே மார்பக புற்றுநோய் குணப்படுத்த முடியும்னு நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா	

507A	How much do you think a breast cancer screening using a clinical examination cost in a similar hospital in the private setup இதைப்போலவே இருக்கிற ஒரு தனியார் மருத்துவமனையில் இந்த மார்பக புற்றுநோய் ஸ்கிரீனிங் செய்யற மருத்துவ பரிசோதனைக்கு என்ன செலவாகும்னு நீங்க நினைக்கிறீங்க?	1) 0-500 (2) 500-1000 (3) 1000-2000 (4) 2000-4000 (5) 4000+ (999) Do not know தெரியாது 888) Others மற்றவை	
508A	How much did you have to pay for breast cancer screening? மார்பக புற்றுநோய் ஸ்கிரீனிங் செய்றதுக்கு நீங்க எவ்வளவு கட்டணம் செலுத்தலும்? (வரம்பு)	1) 0-500 (2) 500-1000 (3) 1000-2000 (4) 2000-4000 (5) 4000+ (999) Do not know தெரியாது	

SECTION 6

பிரிவு 6

Perception and understanding of the respondents on cervical cancer will be understood. Basic awareness of the respondents on screening is gauged.

கர்ப்பை வாய் புற்றுநோயை சரியாக புரிந்துகொள்வதற்கு பங்கெடுப்பவர்களுக்கு இருக்கும் எண்ணமும் புரிதலும். ஸ்கிரீனிங் பற்றி பங்கெடுப்பவர்களுக்கு இருக்கும் அடிப்படை விழிப்புணர்வை அளவிடுதல்.

Perception of Benefits of Cancer and Cervical Cancer Screening புற்றுநோய் மற்றும் கர்ப்பை வாய் புற்றுநோயை சார்ந்த ஸ்கிரீனிங்கின் பயன்கள் குறித்த எண்ணம்			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
601A	What are the causes for cervical cancer (circle answers given by the respondent) கர்ப்பை புற்றுநோய்க்கு என்ன காரணம் (பங்கெடுக்கிறவர் சொல்ற பதில் எல்லாம் வட்டமிட்டு காட்டுங்க)	(1) Infection with HPV HPV தொற்று (2) Having a weakened immunity குறைவான நோய் எதிர்ப்பு சக்தி இருக்கிறது (3) Starting to have sex before age 17 17 வயசுக்கு முன்னடியே தாம்பத்தியத்துல ஈடுபடுறது (4) Use of oral contraceptive pills கர்ப்பத்தடை மாத்திரை சாப்பிடுறது (5) Having many children பல குழந்தைகள் பெத்துக்கிறது (6) Having STI before முன்னடியே பால்வினை நோய்கள் இருக்கிறது (7) Multiple sexual partners பல பேர் கூட தாம்பத்திய உறவு வெச்சுக்கிறது (8) Not using condom during sex தாம்பத்திய உறவு அப்ப காண்டம் பயன்படுத்தாம இருக்கிறது	

		(9) Smoking புகை பிடிக்கிறது (10) Family history of cervical or breast cancer கர்ப்பை வாய் இல்ல மார்பக புற்றுநோய் குடும்பத்துல வேற யாருக்காவது இருந்தா (999) I do not know எனக்கு தெரியாது (888) Others (Specify) மற்றவை (சொல்லுங்க)		
602A	Do you think that early detection of cervical cancer is helpful? கர்ப்பை வாய் புற்றுநோய் முன்கூட்டியே கண்டுபிடிக்கிறது உதவியா இருக்கும்னு நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா (999) I do not know எனக்கு தெரியாது	If no, skip to 604A	
603A	What do you think is the advantage? இதுல என்ன அனுகூலம்னு நினைக்கிறீங்க?	(1) To prevent தடுத்தல் (2) To control கட்டுப்படுத்துதல் (888) Others specify மற்றவை (சொல்லுங்க) (999) I do not know எனக்கு தெரியாது		
604A	Do you think that one time screening for cervical cancer is enough? கர்ப்பை வாய் புற்றுநோய் ஒரு தடவ பரிசோதிச்சு பாத் போதுமா?	(0) No இல்ல (1) Yes ஆமா (999) I do not know எனக்கு தெரியாது		
605A	Which group of women do you think should get screening for cervical cancer? கர்ப்பை வாய் புற்றுநோய் சம்பந்தமா எந்தப் பிரிவு பெண்களை பரிசோதித்து பார்க்கணும்னு நீங்க நினைக்கிறீங்க?	(1) Women with gynecological problems only குழந்தை பிறப்பு சம்பந்தப்பட்ட பிரச்சனை உள்ள பெண்கள் (2) Pregnant women only கருத்தரித்துள்ள பெண்கள் மட்டும் (3) All women of child bearing age குழந்தை பெற்றுக்கொள்ளும் வயதுள்ள பெண்கள் (4) Sexually active women only தாம்பத்திய உறவில் ஈடுபடும் பெண்கள் மட்டும் (5) Women with family history of cancer only குடும்ப புற்றுநோய் வரலாறு உள்ள பெண்கள் மட்டும் (6) Women who are older in age வயதில் மூத்த பெண்கள்		

		(888) Others (Specify) மற்றவை (குறிப்பிடவும்)(999) Do not know தெரியாது		
606A	What are the common signs and symptoms of cervical cancer? (Circle all responses given by respondent) கர்ப்பை வாய் புற்றுநோய்க்கான பொதுவான அறிகுறிகள் என்ன? (பங்கெடுக்கிறவர் கூறும் அனைத்து பதிலையும் வட்டமிடவும்)	(1) Vaginal bleeding பெண்ணுருப்பில் உதிரப்போக்கு (2) Vaginal discharge வெள்ளைப்படுதல் (3) Pain during sex தாம்பத்திய உறவின் போது வலி ஏற்படுதல் (4) Pelvic pain இடுப்பு வலி (888) Others (Specify) மற்றவை (குறிப்பிடவும்) (999) I do not know எனக்கு தெரியாது		
607A	Do you think that cervical cancer is preventable? கர்ப்பை வாய் புற்றுநோய் தடுக்க முடியும்னு நினைக்கிறீர்களா?	(0) No இல்ல (1) Yes ஆமா	If no go to 609A	
608A	How do you think it is prevented? (Circle all that apply) அத எப்படி தடுக்க முடியும்னு நினைக்கிறீங்க?	(1) Early detection and treatment முன்கூட்டியே கண்டறிந்து சிகிச்சை அளித்தல் (2) Vaccination தடுப்பூசி / மருந்து (3) Risk reduction அபாயத்தை குறைத்தல் (999) Do not know தெரியாது		
609A	Do you think that cervical cancer has a cure once it has been diagnosed? கண்டறிந்த உடனேயே கர்ப்பை வாய் புற்றுநோய் குணப்படுத்த முடியும்னு நினைக்கிறீர்களா?	(0) No இல்ல (1) Yes ஆமா		
610A	Were you aware that there is free screening at PHCs? இருந்தன சுகாதார மையத்துல இலவச ஸ்கிரீனிங் வசதி இருக்குனு உங்களுக்கு தெரியுமா?	(0) No இல்ல (1) Yes ஆமா		
611A	How much do you think a cervical cancer screening using a clinical examination cost in a similar hospital in the private setup இதைப்போலவே இருக்கிற ஒரு தனியார் மருத்துவமனையில் இந்த கர்ப்பை வாய் புற்றுநோய் ஸ்கிரீனிங்	1) 0-500 2) 500-1000 3) 1000-2000 4) 2000-4000 5) 4000+ (888) others(specify) தெரியாது (999) Do not know	If they were screened at government hospital அவங்க அரசு மருத்துவமனையில ஸ்கிரீனிங் செயற பட்சத்துல	

	செய்யற மருத்துவ பரிசோதனைக்கு என்ன செலவாகும்னு நீங்க நினைக்கிறீங்க?			
612A	How much did you have to pay for cervical cancer screening? கர்ப்பை வாய் புற்றுநோய் ஸ்கிரீனிங் செய்றதுக்கு நீங்க எவ்வளவு கட்டணம் செலுத்தனும்? (வரம்பு)	1) 0-500 (2) 500-1000 (3) 1000-2000 (4) 2000-4000 (5) 4000+ (6) I did not pay anything நான் எதுவும் செலுத்தவில்லை (999) Do not know தெரியாது	If they were screened in other places அவங்க மத்த இடத்துல ஸ்கிரீனிங் செய்யற பட்சத்துல	

EXTERNAL FACTORS

வெளிப்புற காரணிகள்

SECTION 7

பிரிவு 7

This section contains questions on sources of information about cancer and screening available to the respondents. It also has questions about availability and the respondent's ability to access quality care.

இந்த பிரிவில் பங்கெடுப்பவர்களுக்கு கிடைக்கக்கூடிய புற்றுநோய் மற்றும் அதற்குரிய ஸ்கிரீனிங் சம்பந்தப்பட்ட தகவல்களை ஆதாரங்கள் மீதான கேள்விகள் இருக்கின்றன. இதில் தரமான பராமரிப்பை பெறுவதற்கான பங்கெடுப்பவரின் இருப்பும் திறனும் குறித்த கேள்விகளும் இருக்கிறது.

Sources of Information about Cancer, Screening Access & Quality of Care புற்றுநோய், ஸ்கிரீனிங் அணுகல் மற்றும் பராமரிப்புத் தரம் குறித்த தகவல் ஆதாரங்கள்			
701A	Have you ever received information from any health providers about cervical or breast cancer? இதுவரைக்கும் கர்ப்பை வாய் இல்லனா மார்பக புற்றுநோய் பத்தி எந்தபொரு சுகாதார பணியாளர் கிட்ட இருந்தும் உங்களுக்கு தகவல் கிடைச்சிருக்கா?	(1) Yes, for both cervical and breast cancer ஆமா, கர்ப்பை வாய் மற்றும் மார்பக புற்றுநோய் இரண்டுக்கும் (2) Yes, only Cervical Cancer ஆமா, கர்ப்பை வாய் புற்றுநோய் மட்டும் (3) Yes, only Breast Cancer ஆமா, மார்பக புற்றுநோய் மட்டும் (4) No இல்ல	If yes go to 702A If no go to 703A
702A	From where did you receive the information? அந்த தகவல் எங்கிருந்து கிடைச்சது?	(1) Asha worker/VHN/Anganwadi worker ஆஷா பணியாளர் / கிராம சுகாதார செவிலியர்/ அங்கன்வாடி பணியாளர் (2) Govt hospital அரசு மருத்துவமனை (3) Private health facility தனியார் சுகாதார நிலையம் (4) Medical Shop மருந்துக்கடை (5) Traditional healers பாரம்பரிய மருத்துவர்கள் (சுகப்படுத்தும் நபர்கள்) (6) Nearby health facility	

		பக்கத்திலுள்ள சுகாதார நிலையம் (7) Media (TV, newspaper, etc) (தொலைக்காட்சி, வானொலி, செய்தித்தாள், பத்திரிகை) (888) Others (specify) மற்றவை (சொல்லவும்)	
703A	Have you been looking for information about cervical or breast cancer? கர்ப்பை வாய் இல்ல மார்பக புற்றுநோய் பத்தி ஏதாவது தகவல நீங்க எதிர்பார்க்கிறீர்களா?	(1) Yes, for both cervical and breast cancer ஆமா, கர்ப்பை வாய் மற்றும் மார்பக புற்றுநோய் இரண்டுக்கும் (2) Yes, only Cervical Cancer ஆமா, கர்ப்பை வாய் புற்றுநோய் மட்டும் (3) Yes, only Breast Cancer ஆமா, மார்பக புற்றுநோய் மட்டும் (4) No இல்ல	If yes go to 704A Skip to 705A if no
704A	From where have you searched for the information? (Circle all that apply) எங்கிருந்து நீங்க தகவல தேடிப்பார்த்தீங்க? (பொருந்துற எல்லாத்தையும் வட்டமிடுங்க)	(1) TV தொலைக்காட்சி (2) Radio வானொலி (3) Health professionals சுகாதார பணியாளர்கள் (4) News papers செய்தித்தாள் (5) Magazine பத்திரிகை (6) Internet இன்டர்நெட் (888) Others (specify) மற்றவை (சொல்லுங்க)	
705A	How many times have you been screened for Breast Cancer in your lifetime? உங்கள் வாழ்நாள்ல நீங்க எத்தன முறை மார்பக புற்றுநோய்க்கான பரிசோதனைய செஞ்சிக்கிட்டீங்க?	(1) 1 (2) 2-3 (3) 4-5 (4) 5 and above 5 மற்றும் அதற்கு மேல	
706A	Where did you get screened each time? Record correct option number against ஒவ்வொரு முறையும் நீங்க எந்த இடத்துல பரிசோதனை செஞ்சிக்கிட்டீங்க? கீழ இருக்கிற தேர்வுக்கு எதிரா சரியான பதில பதிவு செய்ங்க. Self-Screening at home வீட்டிலேயே சுய பரிசோதனை Screening by ANM or Midwife at home	First time [] Second time [] Third time [] Fourth time [] Fifth time [] Rest of the times []	

	<p>வீட்டிலேயே மருத்துவச்சி மூலமா பரிசோதனை Screening by nurse or doctor at local clinic/PHC உள்ளூர் சிகிச்சை மையம் / பொது சுகாதார மையத்துல இருக்கிற மருத்துவர் இல்லனா செவிலியர் (நர்ஸ்) மூலமா பரிசோதனை Screening at general Government Hospital or Private Hospital அரசு பொது மருத்துவமனை இல்லனா தனியார் மருத்துவமனை பரிசோதனை Cancer specialty hospital புற்றுநோய் சிறப்பு மருத்துவமனை Screening at a workshop/cancer awareness drive புற்றுநோய் பணிமனை / புற்றுநோய் விழிப்புணர்வு முகாமில் பரிசோதனை Other (Specify) மற்றவை (சொல்லுங்க)</p>		
707A	<p>What was your immediate reason for going in for the breast cancer screening? மார்பக புற்றுநோய் பரிசோதனைக்கு நீங்க போறதுக்கு அப்போதைக்கு இருந்து காரணம் என்ன?</p>	<p>Instructed at health centre சுகாதார மையத்தில் அறிவுறுத்தப்பட்டுள்ளது (2) Lump/ abnormal discharge புடைப்பு / இயல்புக்கு அப்பாற்பட்டு பால் வடிதல் (3) Similar cancer in a relative சொந்தக்காரர்களில் ஒருவருக்கு அதைப்போலவே இருந்த புற்றுநோய் (4) Newspaper article/media report செய்தித்தாள் கட்டுரை / ஊடக அறிக்கை (5) Invitation by health worker சுகாதார பணியாளரின் அழைப்பு (888) other மற்றவை</p>	
708A	<p>If approached by a community health worker, would you take up the offer to get examined for Breast cancer, at the local PHC? (grading from 1 to 4, with one being definitely not to 4 being definitely yes)</p>	<p>(1) Definitely not கண்டிப்பா இல்ல (2) Probably not ஒருவேளை இல்ல (3) probably yes ஒருவேளை ஆமா (4) Definitely yes கண்டிப்பா ஆமா</p>	

	ஒருவேளை சமுதாய சுகாதார பணியாளர் உங்கள் அணுகியிருந்தா, உள்ளூர் பொது சுகாதார மையத்துக்கு மார்பக புற்றுநோய் பரிசோதனை செய்ய நீங்க போயிருப்பீங்களா? (1 -ல இருந்து 4 வரைக்கும் மதிப்பிடுங்க, இதுல 1 அப்படின்னா கண்டிப்பா இல்ல, 4 அப்படின்னா கண்டிப்பா ஆமா)		
709A	Why/Why not? ஏன்/ஏன் இல்ல?		
710A	Has anyone ever recommended for you to be tested or screened for cervical cancer? இதுவரைக்கும் யாராவது உங்க கிட்ட கர்ப்பை வாய் இல்லனா மார்பக புற்றுநோய் சம்பந்தப்பட்ட பரிசோதனை செய்ய சொல்லி இருக்காங்களா?	(0) No இல்ல (1) Yes ஆமா	If no go to 712A
711A	Who recommended it for you? யாரு அப்படி சொன்னது?	(1) Spouse கணவர் (2) Colleague சக பணியாளர் (3) Neighbour பக்கத்து வீட்டுக்காரங்க (4) ASHA/Health worker ஆஷா/சுகாதார பணியாளர் (5) Relatives சொந்தக்காரங்க (888) Others (specify) மற்றவை (சொல்லவும்)	
713A	How many times have you been screened for Cervical Cancer in your lifetime? உங்க வாழ்க்கையில் இதுவரைக்கும் எத்தனை முறை நீங்க கர்ப்பை வாய் புற்றுநோய்க்கான பரிசோதனைய செஞ்சிக்கிட்டீங்க?	(1) 1 (2) 2-3 (3) 4-5 (4) 5 and above 5 மற்றும் அதுக்கு மேல	

<p>714A</p>	<p>Where did you get screened each time? Record correct option number against</p> <p>ஒவ்வொரு முறையும் நீங்க எந்த இடத்துல பரிசோதனை செஞ்சிக்கிட்டீங்க? கீழ இருக்கிற தேர்வுக்கு எதிரா சரியான பதில பதிவு செய்ங்க.</p> <p>Self-Screening at home வீட்டிலேயே சுயமா பரிசோதனை செய்தல்</p> <p>Screening by ANM or Midwife at home வீட்டிலேயே மருத்துவச்சி மூலமா பரிசோதனை</p> <p>Screening by nurse or doctor at local clinic/PHC உள்நூர் சிகிச்சை மையம் / பொது சுகாதார மையத்துல இருக்கிற மருத்துவர் இல்லனா செவிலியர் (நர்ஸ்) மூலமா பரிசோதனை</p> <p>Screening at general Government Hospital or Private Hospital அரசு பொது மருத்துவமனை இல்லனா தனியார் மருத்துவமனை பரிசோதனை</p> <p>Cancer specialty hospital புற்றுநோய் சிறப்பு மருத்துவமனை</p> <p>Screening at a workshop/cancer awareness drive புற்றுநோய் பணிமனை / புற்றுநோய் விழிப்புணர்வு முகாமில் பரிசோதனை</p> <p>Other (Specify) மற்றவை (சொல்லுங்க)</p>	<p>First time [] முதல் முறை</p> <p>Second time [] இரண்டாம் முறை []</p> <p>Third time [] மூன்றாம் முறை []</p> <p>Fourth time [] நான்காம் முறை []</p> <p>Fifth time [] ஐந்தாம் முறை []</p> <p>Rest of the times [] பாக்கி முறை []</p>	
<p>715A</p>	<p>If approached by a community health worker, would you take up the offer of taking a swab for testing for cervical cancer at the local PHC? (Grading from 1 to 4, with one being definitely not to 4 being definitely yes)</p> <p>ஒருவேளை சமுதாய சுகாதார பணியாளர் உங்கள அணுகியிருந்தா, கர்ப்பை வாய் புற்றுநோய் பரிசோதனைக்காக உள்நூர் பொது சுகாதார மையத்துல</p>	<p>(1) Definitely not கண்டிப்பா இல்ல</p> <p>(2) Probably not ஒருவேளை இல்ல</p> <p>(3) probably yes ஒருவேளை ஆமா</p> <p>(4) Definitely yes கண்டிப்பா ஆமா</p>	

	கொடுக்கப்பட்ட ஸ்வாபநீங்க வாங்கியிருப்பீங்களா? (1 -ல இருந்து 4 வரைக்கும் மதிப்பிடுங்க, இதுல 1 அப்படின்னா கண்டிப்பா இல்ல, 4 அப்படின்னா கண்டிப்பா ஆமா)		
716A	Why/Why not? ஏன்/ஏன் இல்ல?		
717A	What was your immediate reason for going in for the cervical cancer screening கர்ப்பை வாய் புற்றுநோய் பரிசோதனைக்கு நீங்க போறதுக்கு அப்போதைக்கு இருந்து காரணம் என்ன?	Instructed at health centre சுகாதார மையத்தில் அறிவுறுத்தப்பட்டுள்ளது (2) Abnormal discharge இயல்புக்கு அப்பாற்பட்டு பால் வடிதல் (3) Similar cancer in a relative சொந்தக்காரர்களில் ஒருவருக்கு அதைப்போலவே இருந்த புற்றுநோய் (4) Newspaper article/media report செய்தித்தாள் கட்டுரை / ஊடக அறிக்கை (5) Invitation by health worker சுகாதார பணியாளரின் அழைப்பு (888) other மற்றவை	
718A	How far was the screening center from your house? (Enter numerical value) பரிசோதனை மையம் உங்க வீட்டுல இருந்து எவ்வளவு தூரத்துல இருக்கு? (நம்பரா உள்ளீடு செய்க)	1) 1-5 km 1-5 கி.மீ. (2) 5-10 km 5-10 கி.மீ. (3) 10-15 km 10-15 கி.மீ. (4) 15-20 km 15-20 கி.மீ. (5) 20+ km 20+ கி.மீ. 999 I do not know	
719A	How much are the following a barrier for you in order to get screening done (1-10), followed by: பரிசோதனை செய்றதுக்கு பின்னாடி வர காரியம் எல்லாம் எந்தளவுக்கு ஒரு முட்டுக்கட்டையா இருக்கு (1-10) -க்குள்ள மதிப்பிடுங்க:	Permission from husband () கணவரோட அனுமதி () Care for children in my absence () நான் வீட்டுல இல்லாத சமயத்துல குழந்தைய பாத்துக்கறது () Permission from in laws () கணவர் குடும்பத்தாரோட அனுமதி () Cost of travel ()	

		<p>போக்குவரத்து செலவு ()</p> <p>Distance to the hospital ()</p> <p>மருத்துவமனையோட தூரம் ()</p> <p>Making time from duties at home()</p> <p>வீட்டு வேலைக்கு மத்தியில் நேரம் எடுக்கிறது ()</p> <p>Overcoming fear and shame ()</p> <p>அசிங்கத்தையும் பயத்தை மேற்கொள்றது ()</p> <p>Leave from work ()</p> <p>வீட்டுல இருந்து வெளியில் வரது ()</p> <p>Any other ()</p> <p>வேற ஏதாவது ()</p>	
720A	<p>Did you overcome the barrier in order to make the decision for coming to the screening</p> <p>பரிசோதனைக்கு வரதுக்கான முடிவெடுக்கிறதுல இருக்கிற முட்டுக்கட்டைய மேற்கொண்டீங்களா?</p>	<p>(0) No இல்ல</p> <p>(1) Yes ஆமா</p>	
721A	<p>Who would/did accompany you to the screening</p> <p>பரிசோதனைக்கு உங்க கூட யார் வந்தாங்க / வருவாங்க?</p>	<p>(1) Father அப்பா</p> <p>(2) Husband கணவர்</p> <p>(3) Son மகன்</p> <p>(4) Mother அம்மா</p> <p>(5) Daughter மகள்</p> <p>(6) Daughter in law மருமகள்</p> <p>(7) Friend நண்பர்</p> <p>(8) Health worker சுகாதார பணியாளர்</p> <p>(9) Neighbour பக்கத்து வீட்டுக்காரங்க</p> <p>(10) No one யாரும் வரல</p>	
<p>Screening experience</p> <p>பரிசோதனை அனுபவம்</p>			
722A	<p>How did your family react when you said you had the screening scheduled/done</p> <p>நீங்க பரிசோதனைக்கு போகனும்னு / போயிட்டு வந்தேன்னு சொன்னப்ப உங்க குடும்ப உறுப்பினர்கள் அத எப்படி எடுத்துக்கிட்டாங்க?</p>	<p>Positive நல்ல முறையா,</p> <p>Neutral, நடுநிலை</p> <p>Negative நல்லா இல்ல</p> <p>888. Other (specify) () மற்றவை (சொல்லுங்க)</p>	

723A	<p>Will they/did they allow you to take the screening/get another screening done? (grading from 1 to 4, with one being definitely not to 4 being definitely yes)</p> <p>பரிசோதனையை செஞ்சிக்க / அடுத்த பரிசோதனையை செய்ய உங்க குடும்பத்தார் உங்கள் அனுமதிப்பாங்களா?</p>	<p>1) Definitely not கண்டிப்பா இல்ல (2) Probably not ஒருவேளை இல்ல (3) probably yes ஒருவேளை ஆமா (4) Definitely yes கண்டிப்பா ஆமா</p>	
724A	<p>How would you describe your screening experience? For each of the following, kindly specify your agreement/disagreement with the statement (With 1- disagree, 2-probably disagree, 3-probably agree and 4-agree) உங்க பரிசோதனை அனுபவத்த நீங்க எப்படி விவரிப்பீங்க? பின்னாடி வர ஒவ்வொரு விஷயத்துக்கு நீங்க ஒத்து போவீங்களா இல்லையானு சொல்லுங்க (1 - ஒத்துப்போகல, 2 - அநேகமா ஒத்துப்போகல, 3 - அநேகமா ஒத்துப்போறேன், 4 - ஒத்துப்போறேன்)</p>	<p>Positive, doctor/nurse explained everything to me and were approachable () நல்ல முறையா, மருத்துவர் / செவிலியர் என்னால அணுக முடிஞ்சது, அதோட அவங்க எல்லாத்தையும் எனக்கு விளக்கி சொன்னாங்க () I was uncomfortable but it was ok () எனக்கு அசௌகரியமா இருந்தது, ஆனாலும் பரவாயில்லை () 3. Uncomfortable, it was strange for me to have someone examining my body parts so closely () அசௌகரியமா இருந்தது, யாரோ ஒருத்தர் என்னோட உடம்ப ரொம்ப பக்கத்துல இருந்து பரிசோதனை செய்றது எனக்கு என்னமோ மாதிரி இருந்தது () 4. Negative, I had to stop it midway because it was very uncomfortable () நல்லா இல்ல, எனக்கு அசௌகரியமா இருந்ததால பரிசோதனையை பாதியிலேயே நிறுத்த வேண்டியிருந்தது () 5. Other (specify) () மற்றவை (சொல்லுங்க) ()</p>	
725A	<p>How much would you rate your experience with the staff during screening? (1-10) பரிசோதனை நடக்கும் போது கூட இருந்த பணியாளர்கள் கூட உங்களுக்கு ஏற்பட்ட அனுபவத்த நீங்க எப்படி மதிப்பிடுவீங்க? (1-10)</p>		

726A	<p>For each of the following, kindly specify your agreement/disagreement with the statement (With 1- disagree, 2-probably disagree, 3-probably agree and 4-agree)</p> <p>பின்னாடி வர ஒவ்வொரு விஷயத்துக்கு நீங்க ஒத்து போவீங்களா இல்லையானு சொல்லுங்க (1 - ஒத்துப்போகல, 2 - அநேகமா ஒத்துப்போகல, 3 - அநேகமா ஒத்துப்போறேன், 4 - ஒத்துப்போறேன்)</p>	<p>The staff were very gentle and polite ()</p> <p>ஊழியர் கனிவாவும் மரியாதையாவும் நடந்துக்கிட்டாங்க ()</p> <p>The staff made me comfortable ()</p> <p>ஊழியர் என்ன சௌகரியமா இருக்க சொஞ்சாங்க ()</p> <p>The staff explained the procedure to me ()</p> <p>ஊழியர் செயல்முறைய எனக்கு விளக்கி சொன்னாங்க ()</p> <p>The staff clarified any doubts I had ()</p> <p>எனக்கிருந்த எல்லா சந்தேகத்தையும் ஊழியர் நிவிர்த்தி சொஞ்சாங்க</p>	
728A	<p>What can be done to make the screening experience better? For each of the following, kindly specify your agreement/disagreement with the statement (With 1- disagree, 2-probably disagree, 3-probably agree and 4-agree)</p> <p>பரிசோதனை அனுபவத்தை இன்னும் சிறப்பானதா மாத்த என்ன செய்யலாம்?</p> <p>பின்னாடி வர ஒவ்வொரு விஷயத்துக்கு நீங்க ஒத்து போவீங்களா இல்லையானு சொல்லுங்க (1 - ஒத்துப்போகல, 2 - அநேகமா ஒத்துப்போகல, 3 - அநேகமா ஒத்துப்போறேன், 4 - ஒத்துப்போறேன்)</p>	<p>To have a female doctor/nurse do the screening ()</p> <p>பரிசோதனை செய்ய பெண் மருத்துவர் / செவிலியர் இருக்கனும் ()</p> <p>To make available more information about screening method ()</p> <p>பரிசோதனை முறைய பத்தி இன்னும் அதிகமான தகவல் கிடைக்க செய்யனும் ()</p> <p>Doctor/nurse must listen more to the person who is being screened. ()</p> <p>பரிசோதனை செஞ்சிக்கிறவர் சொல்றத மருத்துவர்/செவிலியர் கட்டாயம் கேட்கனும். ()</p> <p>Making comfortable during procedure ()</p> <p>செயல்முறையப்ப சௌகரியமா உணர் செய்றது ()</p> <p>Short waiting time/queue ()</p> <p>குறுகிய கால காத்திருப்பு நேரம் / வரிசை ()</p> <p>Others (Specify) ()</p> <p>மற்றவை (சொல்லுங்க) ()</p>	
729A	<p>Would you get screened again at your local PHC</p> <p>உங்கள் உள்ளூர் பொது சுகாதார மையத்தில் மீண்டும் பரிசோதனை செய்து கொள்வீர்களா?</p>	<p>(0) No இல்ல (1) Yes ஆமா</p>	
730A	<p>Why/Why not? ஏன்/ஏன் இல்ல?</p>		

731A	<p>If you were going to access screening what are your perceptions about your experience / when you went in to get screened how would you rate the following aspects on 1 to 10</p> <p>ஒருவேளை நீங்க பரிசோதனை செய்ய போறீங்கனா, உங்களோட அனுபவத்த பத்தி உங்களுக்கு என்ன எண்ணம் இருக்கும் / நீங்க பரிசோதனை செஞ்சிக்க போனீங்கனா பின்னாடி வர விஷயத்த நீங்க 1 - ல இருந்து 10 -க்குள்ள எப்படி மதிப்பீடு செய்வீங்க.</p>	<p>Cleanliness () சுகாதாரம் () Welcoming attitude of staff () ஊழிகர்களோட வரவேற்பு மனோபாவம் () Warmth () இனிமை () Providing sufficient information on procedure () செயல்முறை பத்தி போதுமான தகவல் கொடுக்கிறது () Making comfortable during procedure () செயல்முறையப்ப செயலகரியமா உணர் செய்றது () Privacy () அந்தரங்கம் () Feeling shame and embarrassment () அசிங்கமாவும் எரிச்சலாவும் உணர்றது () Quality of the test () பரிசோதனை தரம் () Correctness of the result () சரியான பரிசோதனை முடிவு () Discomfort and pain () அசௌகரியம் மற்றும் வலி () Short waiting time/queue () குறுகிய கால காத்திருப்பு நேரம் / வரிசை ()</p>	
732A	<p>Would you get screened again if the distance was தூரம் இருந்தால் மீண்டும் திரையிடப்படுவீர்களா?</p>	<p>(1) 1-5 km 1-5 கி.மீ. (2) 5-10 km 5-10 கி.மீ. (3) 10-15 km 10-15 கி.மீ. (4) 15-20 km 15-20 கி.மீ. (5) 20+ km 20+ கி.மீ. 999 I do not know</p>	
733A	<p>Would you get screened again if the time taken for the entire process was முழு செயல்முறைக்கும் எடுத்துக் கொள்ளப்பட்ட நேரம் இருந்தால், நீங்கள் மீண்டும் திரையிடப்படுவீர்களா?</p>	<p>(1) ½ to 1 hour ½ மணிநேரத்துல இருந்து 1 மணிநேரம் (2) 1-2 hours 1 மணிநேரத்துல இருந்து 2 மணிநேரம் (3) 2-4 hours 2 மணிநேரத்துல இருந்து 4 மணிநேரம் (4) 4 hours+ 4+ மணிநேரம் I do not know</p>	
734A	<p>Would you get screened again if it cost upto அது வரை செலவாகும் என்றால் நீங்கள்</p>	<p>(1) 0- 500 (2) 500-1000 (3) 1000-2000 (4) 2000-4000 (5) 4000+</p>	

	மீண்டும் திரையிடப்படுவீர்களா?	(888) Others (please specify) (999)I do not know	
--	-------------------------------	---	--

AFFECT

பாதிப்பு

SECTION 8

பிரிவு 8

The Section has questions that will help understand how respondents perceive cancers' severity and their susceptibility of the disease and related perceptions on the need and benefits of screening.

புற்றுநோயின் தீவிரத்தையும் பங்கெடுப்பவர்கள் அந்நோய்க்கு உட்படுவதையும் அவர்கள் எப்படி நினைக்கிறார்கள் என்பதையும் மற்றும் புற்றுநோய் பரிசோதனையின் தேவை மற்றும் பயன்கள் சார்ந்த எதிர்பார்ப்புகளையும் புரிந்துக்கொள்வதற்கான கேள்விகள் இப்பிரிவில் உள்ளன.

Perceived Susceptibility and Perceived Severity எதிர்பார்க்கப்படும் நோய்க்குட்படுதல் மற்றும் எதிர்பார்க்கப்படும் தீவிரத்தன்மை			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
801A	Cervical or breast cancer is a deadly disease. கர்ப்பை வாய் இல்ல மார்பக புற்றுநோய் ஒரு உயிர்கொல்லி நோய்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
802A	Cervical or breast cancer is an infection that can be transmitted sexually. கர்ப்பை வாய் இல்லனா மார்பக புற்றுநோய் பாலியல் ரீதியா பரவுற ஒரு தொற்று நோய்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
807A	Getting a Screening makes me feel good because it means that I take care of my health மருத்துவ பரிசோதனை செஞ்சிக்கிறது எனக்கு நல்லா இருக்கு, ஏன்னா அப்படி செய்து என்னோட ஆரோக்கியத்துல கவனம் செலுத்துறா மாதிரி இருக்கு.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
808A	I do not know at what age it is necessary to have a screening test எந்த வயசுல மருத்துவ பரிசோதனை செய்யனும்னு எனக்கு தெரியல.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree	

		உறுதியாக ஒத்துக்க முடியாது	
809A	The screening can save my life மருத்தவ பரிசோதனை என்னோட உயிர காப்பாத்தும்.	Strongly agree உறுதியாக ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியாக ஒத்துக்க முடியாது	
810A	I do not know how often I need to get a screening Test எத்தனை முறை மருத்துவ பரிசோதனையை செஞ்சிக்கனும்னு எனக்கு தெரியல.	Strongly agree உறுதியாக ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியாக ஒத்துக்க முடியாது	
813A	On a scale of 0 to 100 how likely is any woman your age to develop breast cancer in the next 10 years அடுத்த 10 வருஷத்துல உங்க வயசு இருக்கிற ஒரு பெண்ணுக்கு மார்பக புற்றுநோய் வர எந்தளவு வாய்ப்பிருக்குனு 0 -ல இருந்து 100 குள்ள இருக்கிற அளவுக்கோளூல சொல்லுங்க.		
814A	On a scale of 0 to 100 how likely are you to develop breast cancer in the next 10 years அடுத்த 10 வருஷத்துல உங்களுக்கு மார்பக புற்றுநோய் வர எந்தளவு வாய்ப்பிருக்குனு 0 -ல இருந்து 100 குள்ள இருக்கிற அளவுக்கோளூல சொல்லுங்க.		

815A	On a scale of 0 to 100 how likely is any woman your age to develop cervical cancer in the next 10 years அடுத்த 10 வருஷத்துல உங்க வயசு இருக்கிற ஒரு பெண்ணுக்கு கர்ப்பை வாய் புற்றுநோய் வர எந்தளவு வாய்ப்பிருக்குனு 0 -ல இருந்து 100 குள்ள இருக்கிற அளவுக்கோளுல சொல்லுங்க.		
816A	On a scale of 0 to 100 how likely are you to develop cervical cancer in the next 10 years அடுத்த 10 வருஷத்துல உங்களுக்கு கர்ப்பை வாய் புற்றுநோய் வர எந்தளவு வாய்ப்பிருக்குனு 0 -ல இருந்து 100 குள்ள இருக்கிற அளவுக்கோளுல சொல்லுங்க.		

NORMS

நெறிமுறைகள்

SECTION 9

பிரிவு 9

These have questions about personal and societal beliefs about cancer and efficacy of screening.

இந்த பிரிவில் புற்றுநோய் மற்றும் மருத்துவ பரிசோதனையின் ஆற்றல் குறித்த தனிப்பட்ட மற்றும் சமூக நம்பிக்கைகள் சார்ந்த கேள்விகள் இருக்கின்றன

Social and personal norms சமூகம் மற்றும் தனிநபர் நெறிமுறைகள்: கர்ப்பை வாய் புற்றுநோய்			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
Breast Cancer மார்பக புற்றுநோய்			
916A	Out of 10 women in your community who are eligible to participate in screening, how many do you think participate on average in the breast cancer screening test? உங்க சமூகத்துல இருக்கிற 10 பெண்கள்ல எத்தன பேர் பரிசோதனைக்கு தகுதியானவங்க. மார்பக புற்றுநோய் பரிசோதனையில் சராசரியா எத்தன பேர் பங்கெடுப்பாங்கனு நீங்க நினைக்கிறீங்க?	Answer from 0-10 0 -ல இருந்து 10 -க்குள்ள பதில்	If 0 skip to 918
917A	Given that women screen at different kinds of facilities, of these (quote the number given), how many would go to PHC and how many to others? பல மருத்துவமனைகள்ல பெண்கள் பரிசோதனை செய்யற பட்சத்துல, அவங்கள்ல எத்தன பேர் (எண்ணிக்கையில் சொல்லுங்க) பொது சுகாதார மையத்துக்கு போவாங்க, எத்தன பேர் மத்த இடத்துக்கு போவாங்க?	PHC: பொது சுகாதார மையம்: Others: மற்றவை:	

922A	Screening can detect problems in the breast before they become cancer மார்பக பரிசோதனை செய்வதால் அதுல இருக்கிற பிரச்சனை புற்றுநோயா மாறுவதற்கு முன்னாடியே கண்டுபிடிக்க முடியும்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
923A	Most people with breast cancer have no visible signs or symptoms மார்பக புற்றுநோய் இருக்கிற நிறைய பெண்களுக்கு வெளிப்படையான அறிகுறியோ அடையாளமோ தெரியறதில்ல	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
924A	Women who do not have lumps on breast do not need a screening and cannot develop breast cancer மார்புல புடைப்பு எதுவும் இல்லாத பெண்களுக்கு பரிசோதனையே தேவையில்ல, அதோட அவங்களுக்கு மார்பக புற்றுநோயும் வராது.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
925A	A woman should get a screening at least once every 3 years குறைஞ்சது 3 வருஷத்துக்கு ஒரு தடவையாவது பெண்கள் மருத்துவ பரிசோதனை செஞ்சிக்கனும்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	

Cervical Cancer

கர்ப்பை வாய் புற்றுநோய்

926A	Out of 10 women in your community who are eligible to participate in screening, how many do you think participate on average in the cervical cancer screening test? உங்க சமூகத்துல தகுதியா இருக்கிற 10 பெண்கள்ல எத்தன பேர் கர்ப்பை வாய் புற்றுநோய் பரிசோதனையில சராசரியா பங்கெடுப்பாங்கனு நீங்க நினைக்கிறீங்க?	Answer from 0-10 0- ல இருந்து 10 -க்குள்ள பதில்	If 0 skip to 928A
927A	Given that women screen at different kinds of facilities, of these (quote the number given), how many would go to PHC and how many to others? பல மருத்துவமனைகள்ல பெண்கள் பரிசோதனை செய்வ பட்சத்துல, அவங்கள்ல எத்தன பேர் (எண்ணிக்கையில் சொல்லுங்க) பொது சுகாதார மையத்துக்கு போவாங்க, எத்தன பேர் மத்த இடத்துக்கு போவாங்க?	PHC: பொது சுகாதார மையம்: Others: மற்றவை:	
932A	Screening can detect problems before they become cervical cancer பரிசோதனை செய்வதால் கர்ப்பை வாய் புற்றுநோய் வரதுக்கு முன்னாடியே பிரச்சனைய கண்டுபிடிக்க முடியும்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree	

		உறுதியா ஒத்துக்க முடியாது	
933A	Most people with cervical have no visible signs or symptoms கர்ப்பை வாய் புற்றுநோய் இருக்கிற நிறைய பெண்களுக்கு வெளிப்படையான அறிகுறியோ அடையாளமோ தெரியாததில்ல	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
934A	Women who have gone through menopause do not need a screening வீட்டுக்கு தூரமான பெண்களுக்கு பரிசோதனை தேவையில்லை	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
935A	A woman should get a screening at least once every 3 years குறைஞ்சது 3 வருஷத்துக்கு ஒரு தடவையாவது பெண்கள் மருத்துவ பரிசோதனை செஞ்சிக்கனும்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	

Questionnaire for TNHSRP Operational Research Program

TNHSRP இயக்க செயல்முறை திட்டத்திற்கான கேள்விப்பட்டியல்
IFMR Lead- Tool B- For non-screened women
IFMR லீட் - கருவி B - ஸ்க்ரீன் செய்யப்படாத பெண்களுக்கு

SECTION 0

பிரிவு 0

Identifiers அடையாளம் காணும் தகவல்			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
001B	Name பெயர்		
002B	Town/Village நகரம்/கிராமம்		
003B	Nearest PHC/Govt Hospital அருகாமை பொது சுகாதார மையம் / அரசு மருத்துவமனை		

SECTION I

பிரிவு I

Seeks to understand the background of the respondents including maternal parity
சுகப்பிரசவம் உள்ளிட்ட பங்கேற்பாளரின் பின்புலத்தை புரிந்துகொள்ள முயலுதல்

Socio-demographic Characteristics Of The Respondents			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip

101B	What is your Age? உங்க வயசு என்ன?	[] years [] வயசு	
102B	Are you currently married? நீங்க திருமணம் ஆனவரா?	(1) Married திருமணம் ஆனவர் (2) Single தனியாக வாழ்பவர் (3) Divorced விவாகரத்து ஆனவர் (4) Widowed விதவை (5) Separated பிரிந்து வாழ்பவர்	
103B	What is your religion? நீங்க எந்த மதத்த சேர்ந்தவர்?	(1) Hindu இந்து (2) Muslim முஸ்லீம் (3) Christian கிறிஸ்தவர் (888) Others (specify) மற்றது (சொல்லுங்க)	
104B	Which category does your caste belong to? நீங்க எந்த ஜாதிய சேர்ந்தவர்?	(1) SC (Adi dravida, Arunthathiyar, Pallar, Kadaiyar, Paraiyar) SC (ஆதி திராவிடர், அருந்ததியர், பல்லர், கடையர், பரையர்) (2) ST பழங்குடியினர்/மலைவாழ் மக்கள் (3) OBC இதர பிற்படுத்தப்பட்ட பிரிவினர் (4) General பொதுப்பிரிவினர் (5) No caste ஜாதி எதுவும் இல்லை (777) Refused to answer பதில் சொல்ல மறுத்துவிட்டார் (888) Other (Specify): _____ மற்றது (சொல்லுங்க) : _____	
105B	What is the highest standard of education that you have completed? நீங்க எதுவரைக்கும் படிச்சிருக்கீங்க?	(0) Never enrolled / did not pass even 1st grade பள்ளிக்கூடத்துக்கே போனதில்லை / முதல் வகுப்பு கூட பாஸ் பன்னலை (1) 1st grade முதல் வகுப்பு (2) 2nd grade இரண்டாம் வகுப்பு (3) 3rd grade மூன்றாம் வகுப்பு (4) 4th grade நான்காம் வகுப்பு (5) 5th grade ஐந்தாம் வகுப்பு (6) 6th grade ஆறாம் வகுப்பு (7) 7th grade ஏழாம் வகுப்பு (8) 8th grade எட்டாம் வகுப்பு (9) 9th grade ஒன்பதாம் வகுப்பு (10) 10th grade பத்தாம் வகுப்பு (11) 11th grade பதினொன்றாம் வகுப்பு (12) 12th grade பன்னிரெண்டாம் வகுப்பு (13) Graduate degree not completed பட்டப்படிப்பு முடிக்கலை	

		(14) Graduate degree completed பட்டப்படிப்பு முடிச்சிருக்கு (15) Higher Education (Post-graduate/ PhD) மேற்படிப்பு (முதுகலை படிப்பு/முனைவர் பட்டம்) (16) Diploma/ITI பட்டய படிப்பு / ஐடிஐ (-999) Don't know தெரியாது	
106B	What is your main occupation? உங்க முக்கிய தொழில் என்ன?	(0) Do not work to earn any income/Housewife சம்பாதிக்கிற வேலை எதுவும் செய்யல / வீட்டு எஜமானி (1) Cultivation விவசாயம் (2) Farm Labour விவசாய கூலி (3) Non-farm labour விவசாயம் சாராத கூலி (4) Household industry குடிசைத்தொழில் (5) Self-employment (auto rickshaw driver, shop) சுய தொழில் (ஆட்டோ ஓட்டுநர், கடை) (6) Government / Private salaried job அரசாங்க / தனியார் வேலை (சம்பளத்திற்கு) (7) Professional business (engineer, lawyer, doctor, etc.) வர்த்தக தொழில் (பொறியாளர், வக்கீல், டாக்டர், முதலியவை) (8) Rental income வாடகை வருமானம் (9) Investments /interest from savings முதலீடு / சேமிப்பு வட்டி வருமானம் (10) Pension ஓய்வூதியம் (888) Other மற்றவை	
109B	Family monthly income (salary, farming, trade, rental etc) குடும்பத்தோட மாச வருமானம் (சம்பளம், விவசாயம், வியாபாரம், வாடகை முதலியவை)	(1) 0 to 2,50,000 (2) 2,50,000 to 5,00,000 (3) 5,00,000 to 7,50,000 (4) 7,50,000 to 10,00,000 (5) 10,00,000 and above 10,00,000 மற்றும் அதற்கு மேல	
110B	Have you given birth? உங்களுக்கு குழந்தைங்க இருக்காங்களா?	(0) No இல்ல (1) Yes ஆமா	If no, skip to next section
111B	How many children do you have உங்களுக்கு எத்தன குழந்தைங்க இருக்காங்க	[] No [] பேரு	
112B	Your age when you first got pregnant நீங்க எந்த வயசுல முதல் முறையா கர்பம் தரிச்சீங்க	[] Births [] வயசு	

Section 2

பிரிவு 2

Basic Awareness of Breast and Cervical cancer மாற்பக புற்றுநோய் மற்றும் கர்ப்பப்பை வாய் புற்றுநோய் பற்றிய அடிப்படை விழிப்புணர்வு			
S.N	Questions	Response and Coding	Skip
வ.எண்	கேள்வி	பதில் மற்றும் குறியீடு	
201B	Have you heard of the term breast cancer?	(0) No	

	மார்பக புற்றுநோய் அப்படிங்கற வார்த்தைய இதுவரைக்கும் நீங்க கேள்விப்பட்டிருக்கீங்களா?	இல்ல (1) Yes ஆமா	
202B	Are you aware that there are tests to screen for breast cancer? மார்பக புற்றுநோய் கண்டுபிடிக்கிறதுக்கு நிறைய சோதனை எல்லாம் இருக்கு அப்படிங்கிற விஷயம் உங்களுக்கு தெரியுமா?	(0) No இல்ல (1) Yes ஆமா	
203B	What are the tests? அந்த சோதனைகள் என்னென்ன?	(1) Self examination சுய பரிசோதனை (2) Professional/clinical examination தொழில்சார் / மருத்துவ பரிசோதனை (3) mammogram மாமோகிராம் (888) Other மற்றவை (-999) I don't know தெரியாது	
204B	Do you think you are eligible for screening for breast cancer? மார்பக புற்றுநோய்க்கான பரிசோதனை செய்ய உங்களுக்கு தகுதி இருக்குனு நீங்க நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா	
205B	Why/Why not? ஏன்/ஏன் இல்லை?		
206B	Have you been screened for breast cancer? இதுவரைக்கும் மார்பக புற்றுநோய் கண்டுபிடிக்கிறதுக்கான சோதனை செஞ்சிருக்கீங்களா?	(0) No இல்ல (1) Yes ஆமா	
207B	Have you heard of the term cervical cancer? கர்ப்பப்பை வாய் புற்றுநோய் என்ற வார்த்தையை நீங்கள் கேள்விப்பட்டிருக்கிறீர்களா?	(0) No இல்ல (1) Yes ஆமா	
208B	Are you aware that there are tests to screen for cervical cancer? கர்ப்பப்பை வாய் புற்றுநோய் கண்டுபிடிக்கிறதுக்கு நிறைய சோதனை எல்லாம் இருக்கு அப்படிங்கிற விஷயம் உங்களுக்கு தெரியுமா?	(0) No இல்ல (1) Yes ஆமா	
209B	What are the tests? அந்த சோதனைகள் என்னென்ன?	(1) Vaginal examination யோனி/பெண்ணுருப்பு பரிசோதனை (2) Swab/Smear examination ஸ்வாப்/ஸ்மியர் பரிசோதனை (888) Others (please specify) மற்றவை (999) I don't know தெரியாது	
210B	Do you think you are eligible for screening for cervical cancer? கர்ப்பப்பை வாய் புற்றுநோய்க்கான பரிசோதனை செய்ய உங்களுக்கு தகுதி இருக்குனு நீங்க நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா	
211B	Why/Why not? ஏன்/ஏன் இல்லை?		
212B	Have you been screened for cervical cancer? இதுவரைக்கும் கர்ப்பப்பை வாய் புற்றுநோய் கண்டுபிடிக்கிறதுக்கான சோதனை செஞ்சிருக்கீங்களா?	(0) No இல்ல (1) Yes ஆமா	

SECTION 3

பிரிவு 3

This section will understand how respondents access routine healthcare

இந்த பிரிவுல பங்கெடுக்கிறவங்க தங்களோட உடல் ஆரோக்கியத்த எப்படி வழக்கமா பராமரிக்கிறாங்கனு புரிஞ்சிப்போம்.

Access to Healthcare and Information about Screening	உடல் ஆரோக்கிய பராமரிப்பு மற்றும் ஸ்கிரீனிங் சம்பந்தப்பட்ட தகவல்
--	---

IFMR Study report: Operational Research Programme of the Tamil Nadu Health System Reform Programme (TNHSRP)

S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
301B	How many times in a year do you visit a doctor for your own health concerns? உங்க உடம்ப பாத்துக்க வருத்துல எத்தன முறை நீங்க வைத்தியர்/டாக்டர் போய் பார்ப்பீங்க?	Number (0-20) எண்ணிக்கை (0-20)	
303B	Where do you usually go for regular medical care? வழக்கமான மருத்துவ பராமரிப்புக்கு இயல்பா நீங்க எங்க போவீங்க?	(1) I don't go for regular medical care வழக்கமான மருத்துவ பராமரிப்புக்கு நான் போறதே இல்ல (2) A government hospital - PHC/CHC அரசு மருத்துவமனை - பொது சுகாதார மையம் / சமுதாய சுகாதார மையம் (3) Government hospital - medical college or district hospital அரசு மருத்துவமனை - மருத்துவ கல்லூரி இல்ல மாவட்ட மருத்துவமனை (4) A private physician தனியார் மருத்துவர் (5) A private hospital outpatient department or clinic தனியார் மருத்துவமனை புறநோயாளி பிரிவு இல்ல சிகிச்சை மையம் (888) Other (Specify) மற்றவை (சொல்லுங்க)	
304B	In general, how do you pay for your health care? பொதுவுல, உங்க மருத்துவ செலவுக்கு நீங்க எப்படி பணம் கொடுப்பீங்க?	(1) I visit government hospitals and there are no charges நான் அரசாங்க மருத்துவமனைக்கு போவேன், அங்க கட்டணம் எதுவும் இல்ல (2) I or my family pay for it ourselves நானோ என் குடும்பமோ அந்த செலவே நாங்களே செய்வோம் (3) We have private health insurance எங்க கிட்ட தனியார் மருத்துவ காப்பீடு இருக்கு (4) We have Chief Ministers Health insurance program எங்க கிட்ட முதலமைச்சர் மருத்துவ காப்பீடு இருக்கு (888) Others (Specify) மற்றவை (சொல்லுங்க)	
305B	Do you seek medical help from a licensed professional when you are ill? உங்களுக்கு உடம்பு சரியில்லனா உரிமம் வெச்சிருக்கிற ஒரு மருத்துவர் கிட்ட தான் போவீங்களா?	(1) Never எப்பவுமே கிடையாது (2) Sometimes சில நேரத்துல (3) Often எப்பவாவது (4) Always எப்பவுமே	

306B	Do you trust Doctors and Nurses with providing you the correct information about your health? மருத்துவரும் (டாக்டர்) செவிலியரும் (நர்ஸ்) உங்க ஆரோக்கியத்த பத்தி சரியான தகவல தான் சொல்லாங்கனு நீங்க நம்புறீங்களா?	(1) Never எப்பவுமே கிடையாது (2) Sometimes, சில நேரத்துல (3) Often எப்பவாவது (4) Always எப்பவுமே	
307B	Do you discuss your health regularly with your family? உங்க குடும்பத்தோட சேர்ந்து நீங்க உங்க ஆரோக்கியத்த பத்தி விவாதிப்பீங்களா?	(1) Never எப்பவுமே கிடையாது (2) Sometimes, சில நேரத்துல (3) Often எப்பவாவது (4) Always எப்பவுமே	
311B	Did you get vaccinated for COVID-19? கோவிட்-19 தடுப்பூசி போட்டுக்கிட்டீங்களா?	(0) No இல்ல (1) Yes ஆமா	If yes, go to 313B
312B	Why did you not get vaccinated for covid-19? கோவிட்-19 தடுப்பூசி நீங்க எதுக்காக போட்டுக்கல?	(1) Non-availability of vaccine தடுப்பூசி கிடைக்கல (2) Non-eligibility ஊசி போட்டுக்க எனக்கு தகுதியில்ல (3) Fear of vaccine side effects தடுப்பூசியால ஏதாவது பக்க விளைவு ஏற்படுங்கிற பயம் (4) Doubts on usefulness of vaccine தடுப்பூசி அவசியமானு ஒரு சந்தேகம் (888) Other மற்றவை	
313B	Have your children been vaccinated for Polio (if the respondent is married). உங்க குழந்தைகளுக்கு , போலியோ தடுப்பு மருத்து போட்டீங்களா? (பங்கெடுக்கிறவருக்கு திருணம் ஆகியிருந்தா மட்டும் இந்த கேள்விய கேளுங்க)	(0) No இல்ல (1) Yes ஆமா	If yes go to 401B
314B	Why aren't they vaccinated? ஏன் தடுப்பு மருந்து போடல?	(1) Non-availability of vaccine தடுப்பு மருந்து கிடைக்கல (2) Non-eligibility மருந்து போட்டுக்க குழந்தைக்கு தகுதி இல்ல (3) Fear of vaccine side effects தடுப்பு மருந்தால ஏதாவது பக்க விளைவு ஏற்படுங்கிற பயம் (4) Doubts on usefulness of vaccine தடுப்பு மருந்து அவசியமானு ஒரு சந்தேகம் (888) Other மற்றவை	

SECTION 4 Women's autonomy in healthcare decisions

பிரிவு 4 ஆரோக்கியம் சார்ந்த முடிவுகளில் பெண்களின் சுயாதிகாரம்

S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
401B	Who decides on your healthcare decisions? உங்க ஆரோக்கியம் சம்பந்தமா யார் முடிவெடுப்பாங்க?	(1) Respondent பங்கெடுக்கிறவர் (1) Respondent and partner together பங்கெடுக்கிறவரும் அவரது துணையும் சேர்ந்து (1) Respondent and someone else together பங்கெடுக்கிறவரும் வேற ஒருத்தரும் சேர்ந்து (0) partner alone துணை மட்டும் தனியா (0) someone else வேற ஒருத்தர் (0) Other மற்றவர்	
402B	Who decides on large household purchases? குடும்பத்துல பெருசா ஏதாவது வாங்கனும்னா யார் முடிவெடுப்பாங்க?	(1) Respondent பங்கெடுக்கிறவர் (1) Respondent and partner together பங்கெடுக்கிறவரும் அவரது துணையும் சேர்ந்து (1) Respondent and someone else together பங்கெடுக்கிறவரும் வேற ஒருத்தரும் சேர்ந்து (0) partner alone துணை மட்டும் தனியா (0) someone else வேற ஒருத்தர் (0) Other மற்றவர்	

SECTION 5

பிரிவு 5

Perception and understanding of the respondents on breast cancer will be understood. Basic awareness of the respondents on screening is gauged.

மார்பக புற்றுநோயை சரியாக புரிந்துக்கொள்வதற்கு பங்கெடுப்பவர்களுக்கு இருக்கும் எண்ணமும் புரிதலும். ஸ்கிரீனிங் பற்றி பங்கெடுப்பவர்களுக்கு இருக்கும் அடிப்படை விழிப்புணர்வை அளவிடுதல்.

Perception of Benefits of Cancer and Breast cancer Screening புற்றுநோய் மற்றும் மார்பக புற்றுநோயை சார்ந்த ஸ்கிரீனிங்கின் பயன்கள் குறித்த எண்ணம்			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
501B	Which condition do you think increases the chance of having breast cancer for women? (Circle all that apply) பெண்களுக்கு மார்பக புற்றுநோய் ஏற்படுற வாய்ப்ப அதிகரிக்கிற சந்தர்ப்பம்னு நீங்க எத நினைக்கிறீங்க? (பொருந்துற எல்லாத்தையும் வட்டமிடுங்க)	(1) Giving birth and breastfeeding குழந்தையை பெற்று பாலுட்டுதல் (2) Using deodorants and artificial substances near/on breast மார்பகத்திற்கு பக்கத்திலோ / மீதோ வாசனை திரவியங்கள் மற்றும் செயற்றை பொருட்களை பயன்படுத்துதல் (3) Women who have family history of breast cancer மார்பக புற்றுநோய் குடும்ப வரலாறு உள்ள பெண்கள் (4) Women who are older in age வயதில் மூத்த பெண்கள் (999) I do not know எனக்கு தெரியாது (888) Others (Specify) மற்றவை (சொல்லுங்க)	

502B	Which group of women do you think should get screening for breast cancer? மார்பக புற்றுநோய் சமபந்தமா எந்தப் பிரிவு பெண்களை பரிசோதித்து பார்க்கலும்னு நீங்க நினைக்கிறீங்க?	(1) Women who have pain, or lumps in the breast மார்பகத்துல புடைப்போ இல்ல வலியோ இருக்கிற பெண்கள் (2) Women who have given birth குழந்தை பெற்றெடுத்துள்ள பெண்கள் (3) Women who have family history of breast cancer மார்பக புற்றுநோய் குடும்ப வரலாறு உள்ள பெண்கள் (4) All women அனைத்து பெண்களும் (5) (4) Women who are older in age வயதில் மூத்த பெண்கள் (999) I do not know எனக்கு தெரியாது (888) Others (Specify) மற்றவை (குறிப்பிடவும்)	
503B	What are the signs and symptoms are of breast cancer? (Circle all that they mention) மார்பக புற்றுநோயோட அறிகுறிகள் என்ன? (பங்கெடுக்கிறவர் கூறும் அனைத்து பதிலையும் வட்டமிடவும்)	(1) Lumps on breast மார்பகத்தில் புடைப்பு (2) Pain in breast, nipple area மார்பகம், முலைக்காம்பில் வலி (3) Nipple discharge முலைக்காம்பில் பால் வடிதல் (4) Skin irritation, itching சரும எரிச்சல், அரிப்பு (5) Flaky skin or rashes on nipple செதில் போன்ற சருமத்தில் அல்லது முலைக்காம்பில் அழற்சி (888) Others மற்றவை (999) I do not know எனக்கு தெரியாது	
504B	Do you think that breast cancer is preventable? மார்பக புற்றுநோய் தடுக்க முடியும்னு நீங்க நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா (999) Don't know தெரியாது	If yes go to 505B If no go to 506B
505B	How do you think it is prevented? (Circle all that apply) அத எப்படி தடுக்க முடியும்னு நீங்க நினைக்கிறீங்க? (பொருந்துற எல்லாவற்றையும் வட்டமிடவும்)	(1) Early detection and treatment ஆரம்பத்திலேயே கண்டறிந்து சிகிச்சை அளித்தல் (2) Vaccination தடுப்பூசி / மருந்து (3) Risk reduction அபாயத்தை குறைத்தல் (888) Others (please specify) மற்றவை (999) Do not know தெரியாது	
506B	Do you think that breast cancer has a cure once it has been diagnosed? கண்டறிந்த உடனேயே மார்பக புற்றுநோய் குணப்படுத்த முடியும்னு நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா	
507B	How much do you think a breast cancer screening using a clinical examination cost in a similar hospital in the private setup இதைப்போலவே இருக்கிற ஒரு தனியார் மருத்துவமனையில் இந்த மார்பக புற்றுநோய் ஸ்கிரீனிங் செய்யற மருத்துவ பரிசோதனைக்கு என்ன செலவாகும்னு நீங்க நினைக்கிறீங்க?	1)0- 500 (2) 500-1000 (3) 1000-2000 (4) 2000-4000 (5) 4000+ (888) Others (specify) (999) I do not know எனக்கு தெரியாது	

508B			
------	--	--	--

Section 6

பிரிவு 6

Perception and understanding of the respondents on cervical cancer will be understood. Basic awareness of the respondents on screening is gauged.

கர்ப்பை வாய் புற்றுநோயை சரியாக புரிந்துக்கொள்வதற்கு பங்கெடுப்பவர்களுக்கு இருக்கும் எண்ணமும் புரிதலும். ஸ்கிரீனிங் பற்றி பங்கெடுப்பவர்களுக்கு இருக்கும் அடிப்படை விழிப்புணர்வை அளவிடுதல்.

Perception of Benefits of Cancer and Cervical Cancer Screening புற்றுநோய் மற்றும் கர்ப்பை வாய் புற்றுநோயை சார்ந்த ஸ்கிரீனிங்கின் பயன்கள் குறித்த எண்ணம்			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
601B	What are the causes for cervical cancer (circle answers given by the respondent) கர்ப்பை புற்றுநோய்க்கு என்ன காரணம் (பங்கெடுக்கிறவர் சொல்ற பதில் எல்லாம் வட்டமிட்டு காட்டுங்க)	(1) Infection with HPV HPV தொற்று (2) Having a weakened immunity குறைவான நோய் எதிர்ப்பு சக்தி இருக்கிறது (3) Starting to have sex before age 17 17 வயசுக்கு முன்னாடியே தாம்பத்தியத்துல ஈடுபடுறது (4) Use of oral contraceptive pills கர்ப்பத்தடை மாத்திரை சாப்பிடுறது (5) Having many children பல குழந்தைகள் பெத்துக்கிறது (6) Having STI before முன்னாடிய பால்வினை நோய்கள் இருக்கிறது (7) Multiple sexual partners பல பேர் கூட தாம்பத்திய உறவு வெச்சுக்கிறது (8) Not using condom during sex தாம்பத்திய உறவு அப்ப காண்டம் பயன்படுத்தாம இருக்கிறது (9) Smoking புகை பிடிக்கிறது (10) Family history of cervical or breast cancer கர்ப்பை வாய் இல்ல மார்பக புற்றுநோய் குடும்பத்துல வேற யாருக்காவது இருந்தா (999) I do not know எனக்கு தெரியாது (888) Others (Specify) மற்றவை (சொல்லுங்க)	
602B	Do you think that early detection of cervical cancer is helpful? கர்ப்பை வாய் புற்றுநோய் முன்கூட்டியே கண்டுபிடிக்கிறது உதவியா இருக்கும்னு நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா (999) I do not know எனக்கு தெரியாது	If yes go to 603B If no go to 604B
603B	What do you think is the advantage? இதுல என்ன அனுகூலம்னு நினைக்கிறீங்க?	(1) To prevent தடுத்தல் (2) To control கட்டுப்படுத்துதல் (888) Others specify	

		மற்றவை (சொல்லுங்க) (999) I do not know எனக்கு தெரியாது	
604B	Do you think that one time screening for cervical cancer is enough? கர்ப்பை வாய் புற்றுநோய் ஒரு தடவ பரிசோதிச்சு பார்த்து போதுமா?	(0) No இல்ல (1) Yes ஆமா (999) I do not know எனக்கு தெரியாது	
605B	Which group of women do you think should get screening for cervical cancer? கர்ப்பை வாய் புற்றுநோய் சம்பந்தமா எந்தப் பிரிவு பெண்களை பரிசோதித்து பார்க்கலாம்னு நீங்க நினைக்கிறீங்க?	Women with gynecological problems only குழந்தை பிறப்பு சம்பந்தப்பட்ட பிரச்சனை உள்ள பெண்கள் Pregnant women only கருத்தரித்துள்ள பெண்கள் மட்டும் All women of child bearing age குழந்தை பெற்றுக்கொள்ளும் வயதுள்ள பெண்கள் Sexually active women only தாம்பத்திய உறவில் ஈடுபடும் பெண்கள் மட்டும் Women with family history of cancer only குடும்ப புற்றுநோய் வரலாறு உள்ள பெண்கள் மட்டும் 6. Women who are older in age வயதில் மூத்த பெண்கள் (888) Others (Specify) மற்றவை (குறிப்பிடவும்) (999) Do not know தெரியாது	
606B	What are the common signs and symptoms of cervical cancer? (Circle all responses given by respondent) கர்ப்பை வாய் புற்றுநோய்க்கான பொதுவான அறிகுறிகள் என்ன? (பங்கெடுக்கிறவர் கூறும் அனைத்து பதிலையும் வட்டமிடவும்)	Vaginal bleeding பெண்ணுருப்பில் உதிரப்போக்கு Vaginal discharge வெள்ளைப்படுதல் Pain during sex தாம்பத்திய உறவின் போது வலி ஏற்படுதல் Pelvic pain இடுப்பு வலி (888) Others (Specify) மற்றவை (குறிப்பிடவும்) (999) I do not know எனக்கு தெரியாது	
607B	Do you think that cervical cancer is preventable? கர்ப்பை வாய் புற்றுநோய் தடுக்க முடியுமென்று நினைக்கிறீங்களா?	(0) No இல்ல (1) Yes ஆமா	If yes go to 608B If no go to 609B
608B	How do you think it is prevented? (Circle all that apply) அத எப்படி தடுக்க முடியுமென்று நினைக்கிறீங்க? (பொருந்துற எல்லா பதிலையும் வட்டமிடவும்)	Early detection and treatment முன்கூட்டியே கண்டறிந்து சிகிச்சை அளித்தல் Vaccination தடுப்பூசி / மருந்து Risk reduction அபாயத்தை குறைத்தல்(999) Do not know தெரியாது	

609B	Do you think that cervical cancer has a cure once it has been diagnosed? கண்டறிந்த உடனேயே கர்ப்பை வாய் புற்றுநோய் குணப்படுத்த முடியுமென்று நினைக்கிறீர்களா?	(0) No இல்ல (1) Yes ஆமா (999) Do not know தெரியாது	
610B	Are you aware that there is free screening at PHCs? பொது சுகாதார மையத்துல இலவசமா பரிசோதனை செய்றாங்கனு உங்களுக்கு தெரியுமா?	(0) No இல்ல (1) Yes ஆமா	
611B	How much do you think a cervical cancer screening using a clinical examination cost in a similar hospital in the private setup இதைப்போலவே இருக்கிற ஒரு தனியார் மருத்துவமனையில் இந்த கர்ப்பை வாய் புற்றுநோய் ஸ்கிரீனிங் செய்யற மருத்துவ பரிசோதனைக்கு என்ன செலவாகும்னு நீங்க நினைக்கிறீங்க?	1)0- 500 (2) 500-1000 (3) 1000-2000 (4) 2000-4000 (5) 4000+ (888) Others (specify) (999) I do not know எனக்கு தெரியாது	
612B			

EXTERNAL FACTORS

வெளிப்புற காரணிகள்

SECTION 7

பிரிவு 7

This section contains questions on sources of information about cancer and screening available to the respondents. It also has questions about availability and the respondent's ability to access quality care. இந்த பிரிவில் பங்கெடுப்பவர்களுக்கு கிடைக்கக்கூடிய புற்றுநோய் மற்றும் அதற்குரிய ஸ்கிரீனிங் சம்பந்தப்பட்ட தகவல்களை ஆதாரங்கள் மீதான கேள்விகள் இருக்கின்றன. இதில் தரமான பராமரிப்பை பெறுவதற்கான பங்கெடுப்பவரின் இருப்பும் திறனும் குறித்த கேள்விகளும் இருக்கிறது.

Sources of Information about Cancer, Screening Access & Quality of Care புற்றுநோய், ஸ்கிரீனிங் அணுகல் மற்றும் பராமரிப்புத் தரம் குறித்த தகவல் ஆதாரங்கள்			
701B	Have you ever received information from any health providers about cervical or breast cancer? இதுவரைக்கும் கர்ப்பை வாய் இல்லனா மார்க்பு புற்றுநோய் பத்தி எந்தபொரு சுகாதார பணியாளர் கிட்ட இருந்தும் உங்களுக்கு தகவல் கிடைச்சிருக்கா?	(1) Yes, for both cervical and breast cancer ஆமா, கர்ப்பை வாய் மற்றும் மார்க்பு புற்றுநோய் இரண்டுக்கும் (2) Yes, only Cervical Cancer ஆமா, கர்ப்பை வாய் புற்றுநோய் மட்டும் (3) Yes, only Breast Cancer ஆமா, மார்க்பு புற்றுநோய் மட்டும் (4) No	If yes go to 702B If no go to 703B section
702B	From where did you receive the information? அந்த தகவல் எங்கிருந்து கிடைச்சது?	Asha worker/VHN/Anganwadi worker ஆஷா பணியாளர் /கிராம சுகாதார செவிலியர்/ அங்கன்வாடி பணியாளர் Govt hospital அரசு மருத்துவமனை Private health facility தனியார் சுகாதார நிலையம் Medical Shop மருந்துக்கடை Traditional healers பாரம்பரிய மருத்துவர்கள் (சுகப்படுத்தும் நபர்கள்) Nearby health facility	

		பக்கத்திலுள்ள சுகாதார நிலையம் (7) Media (TV, newspaper, etc) (தொலைக்காட்சி, வானொலி, செய்தித்தாள், பத்திரிகை) 888 Others (specify) மற்றவை (சொல்லவும்)	
703B	Have you been looking for information about cervical or breast cancer? கர்ப்பை வாய் இல்ல மார்பக புற்றுநோய் பத்தி ஏதாவது தகவல் நீங்க எதிர்பார்க்கிறீர்களா?	Yes, for both cervical and breast cancer ஆமா, கர்ப்பை வாய் மற்றும் மார்பக புற்றுநோய் இரண்டுக்கும் Yes, only Cervical Cancer ஆமா, கர்ப்பை வாய் புற்றுநோய் மட்டும் Yes, only Breast Cancer ஆமா, மார்பக புற்றுநோய் மட்டும் No இல்ல	If yes go to 704B If no go to 705B
704B	From where have you searched for the information? (Circle all that apply) எங்கிருந்து நீங்க தகவல் தேடிப்பார்த்தீங்க? (பொருந்துற எல்லாத்தையும் வட்டமிடுங்க)	TV தொலைக்காட்சி Radio வானொலி Health professionals சுகாதார பணியாளர்கள் News papers செய்தித்தாள் Magazine பத்திரிகை Internet இன்டர்நெட் 888. Others (specify) மற்றவை (சொல்லுங்க)	
708B	If approached by a community health worker, would you take up the offer to get examined for Breast cancer, at the local PHC? (grading from 1 to 4, with one being definitely not to 4 being definitely yes) ஒருவேளை சமுதாய சுகாதார பணியாளர் உங்கள அணுகியிருந்தா, உள்ளூர் பொது சுகாதார மையத்துக்கு மார்பக புற்றுநோய் பரிசோதனை செய்ய நீங்க போயிருப்பீங்களா? (1 -ல இருந்து 4 வரைக்கும் மதிப்பிடுங்க, இதுல 1 அப்படின்னா கண்டிப்பா இல்ல, 4 அப்படின்னா கண்டிப்பா ஆமா)	(1) Definitely not கண்டிப்பா இல்ல (2) Probably not ஒருவேளை இல்ல (3) probably yes ஒருவேளை ஆமா (4) Definitely yes கண்டிப்பா ஆமா	
709B	Why/Why not? ஏன்/ஏன் இல்ல?		
715B	If approached by a community health worker, would you take up the offer of taking a swab for testing for cervical cancer at the local PHC? (grading from 1 to 4, with one being definitely not to 4 being definitely yes) ஒருவேளை சமுதாய சுகாதார பணியாளர் உங்கள அணுகியிருந்தா, கர்ப்பை வாய் புற்றுநோய் பரிசோதனைக்காக உள்ளூர் பொது சுகாதார மையத்துல கொடுக்கப்பட்ட ஸ்வாப் நீங்க வாங்கியிருப்பீங்களா? (1 -ல இருந்து 4 வரைக்கும் மதிப்பிடுங்க, இதுல 1 அப்படின்னா கண்டிப்பா இல்ல, 4 அப்படின்னா கண்டிப்பா ஆமா)	(1) Definitely not கண்டிப்பா இல்ல (2) Probably not ஒருவேளை இல்ல (3) probably yes ஒருவேளை ஆமா (4) Definitely yes கண்டிப்பா ஆமா	

716B	Why/Why not? ஏன்/ஏன் இல்ல?		
732B	Would you get screened if the distance was ஒருவேளை பரிசோதனை மைய தூரம் இதுக்குள்ள இருந்தா நீங்க பரிசோதனைக்கு போவீங்களா,	(1) 1-5 km 1-5 கி.மீ. (2) 5-10 km 5-10 கி.மீ. (3) 10-15 km 10-15 கி.மீ. (4) 15-20 km 15-20 கி.மீ. (5) 20+ km 20+ கி.மீ. (888) Others (specify) (999) I do not know எனக்கு தெரியாது	
733B	Would you get screened if the time taken for the entire process was பரிசோதனைய முடிக்க ஆகுற நேரம் மொத்தமா இவ்வளவு இருந்தா நீங்க பரிசோதனை செஞ்சிப்பீங்களா,	(1) ½ to 1 hour ½ மணிநேரத்துல இருந்து 1 மணிநேரம் (2) 1-2 hours 1 மணிநேரத்துல இருந்து 2 மணிநேரம் (3) 2-4 hours 2 மணிநேரத்துல இருந்து 4 மணிநேரம் (4) 4 hours+ 4+ மணிநேரம் (888) Others (specify) (999) I do not know எனக்கு தெரியாது	
734B	Would you get screened if it cost upto செலவு இவ்வளவு இருந்தா நீங்க பரிசோதனை செஞ்சிப்பீங்களா,	(1) 0- 500 (2) 500-1000 (3) 1000-2000 (4) 2000-4000 (5) 4000+ (888) Others (specify) (999) I do not know எனக்கு தெரியாது	
735B	What is the reason for not being for screened for breast cancer? மார்பக புற்றுநோய்க்கான பரிசோதனைய செஞ்சிக்காம இருக்க என்ன காரணம்?	(1) Not at risk அந்த ஆபத்து எனக்கு இல்ல (2) Have not heard of the disease இந்த நோய பத்தி கேள்வி பட்டதே இல்ல (3) Family won't allow குடும்பத்துல யாரும் அனுமதிக்க மாட்டாங்க (4) Not in the age group/ I am too old அந்த வயசு பிரிவுல நான் இல்ல / எனக்கு ரொம்பவே வயசாகிடிச்சி (5) I don't have time எங்கிட்ட நேரம் இல்ல (6) I can't leave home because there is no one else at home வீட்டுல வேற யாரும் இல்லாததால என்னால வெளிய வர முடியாது (7) Household work வீட்டுவேலை இருக்கு (8) Financial problem-was an expensive procedure	

		<p>பொருளாதார பிரச்சனை - இது செலவு அதிகமா இருக்கிற ஒரு விஷயம் (9) Service is not available nearby பக்கத்துல எங்கேயும் இதுக்கான வசதி இல்ல Screening center too far பரிசோதனை மையம் ரொம்ப தூரத்துல இருக்கு (10) Lack of female staff at nearest facility பக்கத்துல இருக்கிற மருத்துவமனையில பெண் வேலையாட்கள் யாரும் இல்ல (11) Afraid of getting positive result நோய் இருக்குனு ரிப்போர்ட் வரும்னு பயமா இருக்கு (12) I am working நான் வேலைக்கு போயிட்டு இருக்கேன் (13) It is not important இது அந்தளவுக்கு முக்கியம் கிடையாது (14) Not aware of screening test பரிசோதனை பத்தி எனக்கு தெரியாது (888) other (specify) மற்றது</p>	
736B	<p>Do you think you would like to get screened for Breast cancer? மார்பக புற்றுநோய்க்கான பரிசோதனைய செஞ்சிக்கனும்னு நீங்க நினைக்கிறீங்களா?</p>	<p>(0) No இல்ல (1) Yes ஆமா</p>	
737B	<p>What is the reason for not getting screened for cervical cancer? கர்ப்பை வாய் புற்றுநோய்க்கான பரிசோதனைய செய்யாம இருக்கிறதுக்கு என்ன காரணம்?</p>	<p>(1) Not at risk அந்த ஆபத்து எனக்கு இல்ல (2) Have not heard of the disease இந்த நோய் பத்தி கேள்வி பட்டதே இல்ல (3) Family won't allow குடும்பத்துல யாரும் அனுமதிக்க மாட்டாங்க (4) Not in the age group/ I am too old அந்த வயசு பிரிவுல நான் இல்ல / எனக்கு ரொம்பவே வயசாகிடிச்சி (5) I don't have time எங்கிட்ட நேரம் இல்ல (6) I can't leave home because there is no one else at home வீட்டுல வேற யாரும் இல்லாததால என்னால வெளிய வர முடியாது (7) Household work வீட்டுவேலை இருக்கு (8) Financial problem-was an expensive procedure பொருளாதார பிரச்சனை - இது செலவு அதிகமா இருக்கிற ஒரு விஷயம் (9) Service is not available nearby பக்கத்துல எங்கேயும் இதுக்கான வசதி இல்ல (10) Lack of female staff at nearest facility</p>	

		பக்கத்துல இருக்கிற மருத்துவமனையில பெண் வேலையாட்கள் யாரும் இல்ல (11) Afraid of getting positive result நோய் இருக்குனு ரிப்போர்ட் வரும்னு பயமா இருக்கு (12) I am working நான் வேலைக்கு போயிட்டு இருக்கேன் (13) It is not important இது அந்தளவுக்கு முக்கியம் கிடையாது (14) Not aware of screening test பரிசோதனை பத்தி எனக்கு தெரியாது (888) other (specify) மற்றது	
738B	Would you like to get screened for cervical cancer? கர்ப்பை வாய் புற்றுநோய்க்கான பரிசோதனைய செஞ்சிக்க உங்களுக்கு விருப்பமா?	(0) No இல்ல (1) Yes ஆமா	If yes go to 739B If no go to 740B
739B	Where would you prefer to get the screening done for Cervical Cancer? கர்ப்பை வாய் புற்றுநோய்க்கான பரிசோதனைய நீங்க எங்க செஞ்சிக்க விரும்புவீங்க?	(1) A government hospital - PHC/CHC அரசு மருத்துவமனை - பொது சுகாதார மையம் / சமுதாய சுகாதார மையம் (2) Government testing Camp அரசாங்க பரிசோதனை முகாம் (3) Government hospital - medical college or district hospital அரசு மருத்துவமனை - மருத்துவ கல்லூரி இல்ல மாவட்ட மருத்துவமனை (4) A private physician தனியார் மருத்துவர் (5) A private hospital outpatient department or clinic தனியார் மருத்துவமனை புறநோயாளி பிரிவு இல்ல சிகிச்சை மையம் (888) Other (Specify) மற்றவை (சொல்லுங்க)	
740B	How sure are you that you can ask your primary care doctor / VHN / ANM Nurse for a referral to get a screening? பரிசோதனை செஞ்சிக்க ஏதாவது ஒரு இடத்த சொல்ல சொல்லி உங்க முதன்மை பராமரிப்பு மருத்துவர் / கிராம சுகாதார செவிலியர் / மருத்துவச்சி கிட்ட கேட்க நீங்க எந்தளவுக்கு உறுதியா இருக்கீங்க?	(1) I can easily and openly ask என்னால சுலபமாவும் வெளிப்படையாவும் கேட்க முடியும் (2) I can ask only secretly என்னால இரகசியமா மட்டும் தான் கேட்க முடியும் (3) I cannot ask them என்னால அவங்க கிட்ட கேட்க முடியாது (88) Others (Specify) மற்றவை (சொல்லுங்க)	
741B	Can you discuss about having a screening with your doctor/nurse even if (s)he does not bring it up? அவங்க எதுவும் உங்களுக்கு சொல்ல அப்படின்னாலும் உங்க மருத்துவர்/செவிலியர் கிட்ட நீங்க பரிசோதனைய பத்தி பேச முடியுமா?	(0) No இல்ல (1) Yes ஆமா (999) Not Sure நிச்சயமா சொல்ல முடியல	

742B	If you get an appointment for screening, will your family allow you to go? பரிசோதனை செஞ்சிக்க உங்களுக்கு நேரம் கிடைச்சாலும் அதுக்கு போக உங்க குடும்பத்துல இருக்கிறவங்க அனுமதிப்பாங்களா?	(0) No இல்ல (1) Yes ஆமா (999) Not Sure நிச்சயமா சொல்ல முடியல	
743B	Will you get the screening if doctor tells you, it will be painful? ஒருவேளை உங்க மருத்துவர் பரிசோதனை செஞ்சிக்கிறது ரொம்பவே வலியா இருக்கும்னு சொன்னா, நீங்க பரிசோதனைக்கு போவீங்களா?	(0) No இல்ல (1) Yes ஆமா (999) Not Sure நிச்சயமா சொல்ல முடியல	

AFFECT

பாதிப்பு

SECTION 8

பிரிவு 8

The Section has questions that will help understand how respondents perceive cancers' severity and their susceptibility of the disease and related perceptions on the need and benefits of screening.

புற்றுநோயின் தீவிரத்தையும் பங்கெடுப்பவர்கள் அந்நோய்க்கு உட்படுவதையும் அவர்கள் எப்படி நினைக்கிறார்கள் என்பதையும் மற்றும் புற்றுநோய் பரிசோதனையின் தேவை மற்றும் பயன்கள் சார்ந்த எதிர்பார்ப்புகளையும் புரிந்துக்கொள்வதற்கான கேள்விகள் இப்பிரிவில் உள்ளன.

Perceived Susceptibility and Perceived Severity எதிர்பார்க்கப்படும் நோய்க்குட்படுதல் மற்றும் எதிர்பார்க்கப்படும் தீவிரத்தன்மை			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
801B	Cervical or breast cancer is a deadly disease. கர்ப்பை வாய் இல்லனா மார்பக புற்றுநோய் மரணத்த தர ஒரு வியாதி.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
802B	Cervical or breast cancer is an infection that can be transmitted sexually. கர்ப்பை வாய் இல்லனா மார்பக புற்றுநோய் பாலியல் ரீதியா பரவுற ஒரு தொற்று நோய்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
807B			
808B	I do not know at what age it is necessary to have a screening test எந்த வயசுல மருத்துவ பரிசோதனை செய்யனும்னு எனக்கு தெரியல.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral	

		எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
809B	The screening can save my life மருத்தவ பரிசோதன என்னோட உயிர காப்பாத்தும்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
810B	I do not know how often I need to get a screening Test எத்தன முறை மருத்துவ பரிசோதனைய செஞ்சிக்கனும்னு எனக்கு தெரியல.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
817B	I am not aware of cervical or breast cancer, I can't have it. கர்ப்பை வாய் புற்றுநோய் இல்லனா மார்க்பக புற்றுநோய பத்தி எனக்கு தெரியாது, அது எனக்கு வராது.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
818B	I do not have time to get a screening test பரிசோதனை செஞ்சிக்க எனக்கு நேரமில்ல	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	

819B	I have not taken the screening test because they treat me badly in the health care center மருத்துவமனையில் என்ன ரொம்ப மோசமா நடத்தறதால நான் பரிசோதனைய செஞ்சிக்கல.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
820B	I have not taken a screening test because when I go, I need to wait a long time to be seen பரிசோதனை செஞ்சிக்க போனா ரொம்ப நேரம் காத்திருக்க வேண்டியிருக்கு அதனால நான் பரிசோதனைய செஞ்சிக்கல.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
821B	I have not taken the screening test because I am afraid to find out if I have cancer எனக்கு புற்றுநோய் இருக்குமானு தெரிஞ்சிக்கா எனக்கு ரொம்ப பயமா இருந்ததால நான் பரிசோதனைய செஞ்சிக்கல.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
822B	I have not taken the screening test because the health care center is only open during hours when I cannot go நான் வேலையா இருக்கிற நேரத்துல தான் மருத்துவமனையும் வேலை செய்யுது, இதனால தான் என்னால பரிசோதனை செஞ்சிக்க முடியல.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
823B	I have not taken the screening test because I am embarrassed to have a genital exam பெண்ணுருப்பு பரிசோதனை செஞ்சிக்க எனக்கு எரிச்சலா இருக்கு, அதனால தான் நான் பரிசோதனைய செஞ்சிக்கல.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
824B	I have not taken a screening test because it is difficult to get an appointment	Strongly agree	

எனக்கு அப்பாய்ன்மென்ட் கிடைக்கவே சிரமமா இருக்கு அதனால் தான் பரிசோதனை செஞ்சிக்கல	உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது
---	---

NORMS

நெறிமுறைகள்

SECTION 9

பிரிவு 9

These have questions about personal and societal beliefs about cancer and efficacy of screening.

இந்த பிரிவில் புற்றுநோய் மற்றும் மருத்துவ பரிசோதனையின் ஆற்றல் குறித்த தனிப்பட்ட மற்றும் சமூக நம்பிக்கைகள் சார்ந்த கேள்விகள் இருக்கின்றன

Social and personal norms			
சமூகம் மற்றும் தனிநபர் நெறிமுறைகள்: கர்ப்பை வாய் புற்றுநோய்			
S.N வ.எண்	Questions கேள்வி	Response and Coding பதில் மற்றும் குறியீடு	Skip
Breast Cancer மார்பக புற்றுநோய்			
916B	Out of 10 women in your community who are eligible to participate in screening, how many do you think participate on average in the breast cancer screening test? உங்க சமூகத்துல தகுதியா இருக்கிற 10 பெண்கள்ல எத்தன பேர் மார்பக புற்றுநோய் பரிசோதனையில சராசரியா பங்கெடுப்பாங்கனு நீங்க நினைக்கிறீங்க?	Answer from 0-10 0 -ல இருந்து 10 - க்குள்ள பதில்	If 0 skip to 918B
917B	Given that women screen at different kinds of facilities, of these (quote the number given), how many would go to PHC and how many to others?	PHC: பொது சுகாதார மையம்: Others: மற்றவை:	
922B	Screening can detect problems in the breast before they become cancer மார்பக பரிசோதனை செய்றதால அதுல இருக்கிற பிரச்சனை புற்றுநோயா மாறுவதற்கு முன்னடியே கண்டுபிடிக்க முடியும்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
923B	Most people with breast cancer have no visible signs or symptoms மார்பக புற்றுநோய் இருக்கிற நிறைய பெண்களுக்கு வெளிப்படையான அறிகுறியோ அடையாளமோ தெரியறதில்ல	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree	

		உறுதியா ஒத்துக்க முடியாது	
924B	Women who do not have lumps on breast do not need a screening and cannot develop breast cancer மார்புல புடைப்பு எதுவும் இல்லாத பெண்களுக்கு பரிசோதனையே தேவையில்லை, அதோட அவங்களுக்கு மார்பக புற்றுநோயும் வராது.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
925B	A woman should get a screening at least once every 3 years குறைஞ்சது 3 வருஷத்துக்கு ஒரு தடவையாவது பெண்கள் மருத்துவ பரிசோதனை செஞ்சிக்கனும்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
Cervical Cancer கர்ப்பை வாய் புற்றுநோய்			
926B	Out of 10 women in your community who are eligible to participate in screening, how many do you think participate on average in the cervical cancer screening test? உங்க சமூகத்துல தகுதியா இருக்கிற 10 பெண்கள்ல எத்தன பேர் கர்ப்பை வாய் புற்றுநோய் பரிசோதனையில சராசரியா பங்கெடுப்பாங்கனு நீங்க நினைக்கிறீங்க?	Answer from 0-10 0- ல இருந்து 10 - க்குள்ள பதில்	If 0 skip to 928B
927B	Given that women screen at different kinds of facilities, of these (quote the number given), how many would go to PHC and how many to others? பல மருத்துவமனைகள்ல பெண்கள் பரிசோதனை செய்ற பட்சத்துல, அவங்கள்ல எத்தன பேர் (எண்ணிக்கையில் சொல்லுங்க) பொது சுகாதார மையத்துக்கு போவாங்க, எத்தன பேர் மத்த இடத்துக்கு போவாங்க?	PHC: பொது சுகாதார மையம்: Others: மற்றவை:	
932B	Screening can detect problems before they become cervical cancer பரிசோதனை செய்றதால கர்ப்பை வாய் புற்றுநோய் வரதுக்கு முன்னடியே பிரச்சனைய கண்டுபிடிக்க முடியும்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
933B	Most people with cervical have no visible signs or symptoms கர்ப்பை வாய் புற்றுநோய் இருக்கிற நிறைய பெண்களுக்கு வெளிப்படையான அறிகுறியோ அடையாளமோ தெரியறதில்லை	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral	

		எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
934B	Women who have gone through menopause do not need a screening வீட்டுக்கு தூரமான பெண்களுக்கு பரிசோதனை தேவையில்லை	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	
935B	A woman should get a screening at least once every 3 years குறைஞ்சது 3 வருஷத்துக்கு ஒரு தடவையாவது பெண்கள் மருத்துவ பரிசோதனை செஞ்சிக்கனும்.	Strongly agree உறுதியா ஒத்துக்கிறேன் Agree ஒத்துக்கிறேன் Neutral எதுவுமே சொல்ல முடியாது Disagree ஒத்துக்க முடியாது Strongly Disagree உறுதியா ஒத்துக்க முடியாது	



LEAD, an action-oriented research centre of IFMR Society (a not-for-profit society registered under the Societies Act), leverages the power of research, innovation and co-creation to solve complex and pressing challenges in development. LEAD has strategic

IFMR Study report: Operational Research Programme of the Tamil Nadu Health System Reform Programme (TNHSRP)

oversight and brand support from Krea University (sponsored by IFMR Society) to enable synergies between academia and the research centre.

www.ifmrlead.org