# Opportunities in Breast Cancer Screening (BCS) in India through systems and complexity thinking

Shalu Pandey

Pandey S. Opportunities in Breast Cancer Screening (BCS) in India through systems and complexity thinking. J Cancer Metastasis Res. 2023; 5(2):91-92.

## ABSTRACT

Breast cancer is one of India's most serious health problems, with the number of cases rising year after year. This health concern has surpassed cervical cancer, which was formerly the most common malignancy in the country. Despite the launch of a groundbreaking statewide cancer screening programme in 2016, India recorded 1.8 million new breast cancer diagnoses in 2019 and 90,408 fatalities in 2020, putting the country's health systems under strain. These fatalities were projected to be twice as high as in the US, showing limited participation in these programmes, rendering Indian women more likely to obtain insufficient screening and late diagnosis. Coverage for breast cancer screening is extremely poor among the nation's various health objectives, demanding specific policy considerations. This review focuses on some of the most important difficulties and opportunities for advocating for and implementing systems and complexity thinking in cancer screenings, as well as how a holistic and culture-based approach could improve program participation and coverage. These factors may eventually contribute to improved health outcomes as well as sustainability and resilience in the country's complex sociopolitical eco-system.

Key Words: Breast cancer; Neutrophils metastasis; Metastasis; Neutrophil tumor

#### INTRODUCTION

The concept and implementation of complexity thinking in Breast Cancer Screening (BCS) in India, as well as its potential to contribute to resolving difficulties in the nation's suboptimal health and health care coverage. Despite having 1.6 times fewer incidences of breast cancer, India's predicted number of breast cancer fatalities in 2020 was double that of the US. This could be due to the fact that Indian women are still not screened, resulting in late diagnosis in the country. Despite the fact that the government has had cancer screening programmes in place since 2016, only one in every ten women aged 15 to 49 has ever had a breast check. Furthermore, the survival rates of women with breast cancer are improving.

India has far lower rates than other Asian countries such as China, Thailand, and the Philippines.

## Decision to implement BCS

In 2016, the Indian government introduced a population-based cancer screening programme in which all women over the age of 30 are eligible for regular breast, cervical, and oral cancer screenings.

However, when compared to other health initiatives, such as opportunistic screening programmes, such population-based screening programs are meant to achieve better parity in access. However, a noticeable and extensive gradient of social inequalities in access to such programmes remains [1-4]. This results in unacceptable inequities because disadvantaged populations are the most susceptible and are also excluded from such activities. This also relates to the fact that rich women have access to both public and private screening, whereas less affluent women lag far behind in similar initiatives. According to the most recent data, India has no breast cancer screening coverage. This could also be because, even if women receive screening, it is either not reported correctly or older data in national registries is not updated.

The part that follows will focus on visualizing systems that have direct and indirect effects on breast cancer screening and coverage in India. India's social fabric is exceedingly intricate and significantly complicated, and this is mirrored in the country's health and health care plan. It is vital to understand how India functions as a society, community, or nation when it comes to health systems, specifically

Department of Bio-medical Sciences, University of Delhi, India

Correspondence: Shalu Pandey, Department of Bio-medical Sciences, University of Delhi, India, Email-Shalupandey672@gmailcom Received: 08-May-2023, Manuscript No. Pulcmr-23-6471; Editor assigned: 09-May-2023, PreQC No. Pulcmr-23-6471(PQ); Reviewed: 20-May-2023, QC No. Pulcmr-23-6471(Q); Revised: 24- May-2023, Manuscript No. Pulcmr-23-6471(R); Published: 28- May-2023, DOI: 10.37532/pulcmr-2023.5(2).91-92

**OPENGACCESS** This open-access article is distributed under the terms of the Creative Commons Attribution Non-Commercial License (CC BY-NC) (http://creativecommons.org/licenses/by-nc/4.0/), which permits reuse, distribution and reproduction of the article, provided that the original work is properly cited and the reuse is restricted to noncommercial purposes. For commercial reuse, contact reprints@pulsus.com

### Pandey

breast cancer screening. There are several intervening mechanisms at work, making it even more difficult to achieve a given health objective or priority. It is vital to map and visualise complexity thinking in order to completely comprehend it. In this section, we will present a quick review and Mind-Map of key critical systems that are central to our area of interest, including BCS Coverage [5-7].

The social fabric of India is extremely intricate and highly complicated, and this is reflected in the country's health and health care system. When it comes to health systems, specifically breast cancer screening, it is critical to understand how India functions as a society, community, or nation. There are various intervening factors at work, making achieving a certain health aim or priority even more challenging. To fully appreciate complexity thinking, it is critical to map and depict it. We will offer a fast review and Mind-Map of important critical systems that are central to our field of interest, namely BCS Coverage, in this part.

In order to present the complete narrative of BCS, "the iceberg framework" in systems thinking must be explored. Clearly describing the issue from all three angles: events, patterns, and causes. Furthermore, we commonly assume that everyone participating in BCS (stakeholders, agents, or actors) has the same view of the past or has access to the same knowledge. To ensure that all points of view are represented and solutions are accepted by those who must execute them, it is necessary to delve further into the situation and acquire as much information as possible from all angles. It is vital to engage people from many fields or functional domains when exploring the BCS India to see how distinct their mental models are.

In addition to the previously described aspects, the context or situation of the problem must be considered. As a result, comparable problems in different contexts may be tackled using different or similar ways (what is known or exists, and how can it be improved). There are countless decent policies with good intentions, for example, yet they typically fail because the complexity of the problem is not acknowledged.

One of the most difficult ways to apply is systems thinking. This is most likely due to our inherent tendency as humans to think in a linear fashion. Complex problems, on the other hand, are cyclical and dynamic in nature. In this approach, systems thinking broadens our thinking and assists us in articulating problems in novel and distinct ways, expanding the number of possible solutions. Simultaneously, systems thinking principles make us aware that there are no perfect answers; our decisions will have an impact on other parts of the system. If we anticipate the impact of each trade-off, we can decrease its severity or even use it to our benefit. As a result, systems thinking allows us to make informed decisions.

## CONCLUSION

As a result, systems thinking allows us to make more informed choices. Systems thinking can also be used to provide interesting stories about how a system operates. For example, in our BCS situation in India, the causal loop diagram is an attempt to present this captivating story, in which we can clearly see the various systems involved and their interactions with one another and with other factors. Overall, breast cancer screening is one of the nation of India's complicated challenges, which is currently confronting the double burden of epidemiological transformation. Despite significant improvements over the previous decade, other health priorities continue to drive cancer screening to the sidelines. Despite hopeful methods, medical and technology advancements, modern India is anchored in its cultural heritage, social conventions, and belief system, all of which have an impact on health care, health decisions, and health care involvement, including health screenings. Innovative policy and implementation approaches for improving cancer screening in modern India must incorporate these factors.

#### DATA SHARING AGREEMENT

The data presented in this study are available on request.

#### REFERENCES

- Torre LA, Trabert B, DeSantis CE, et al. Ovarian cancer statistics, 2018. CA: a cancer journal for clinicians. 2018;68(4):284-96.
- Reid BM, Permuth JB, Sellers TA. Epidemiology of ovarian cancer: a review. Cancer biology & medicine. 2017 Feb;14(1):9.
- Gockley A, Melamed A, Bregar AJ, et al. Outcomes of women with high-grade and low-grade advanced-stage serous epithelial ovarian cancer. Obstetrics Gynecology. 2017;129(3):439.
- Malpica A, Deavers MT, Lu K, et al. Grading ovarian serous carcinoma using a two-tier system. American J Surgical Path. 2004;28(4):496-504.
- Thomakos N, Diakosavvas M, Machairiotis N, et al. Rare distant metastatic disease of ovarian and peritoneal carcinomatosis: A review of the literature. Cancers. 2019 Jul 24;11(8):1044.
- Pradeep S, Kim SW, Wu SY, et al. Hematogenous metastasis of ovarian cancer: rethinking mode of spread. Cancer cell. 2014;26(1):77-91.
- Mayer RJ, Berkowitz RS, Griffiths CT. Central nervous system involvement by ovarian carcinoma. A complication of prolonged survival with metastatic disease. Cancer. 1978 Feb;41(2):776-83.