

"A demographic data of cancer patients from Rural Bengal and importance of implementing genetic counselling"



GC Soham Banerjee, Consultant Genetic Counsellor & Geneticist (PGDM, MSc) 1; MS Subhangi Sarkar, Dietitian (MSc) 2 & Dr Debnarayan Dutta, MD, PhD (Radiation Oncologist) 3; Bengal Cancer Foundation Cancer Hospital, Burdwan, West Bengal

Introduction

- We all know cancer is a condition where there is uncontrollable proliferation of cells into the particular parts of human body and also considered as one of the leading causes of mortality.
- According to the demographic data it has been shown that West Bengal secured the third highest position with an estimated 1.13 lakh new cancer cases (2023).
- The need of early detection and proper management is still lacking especially in the rural parts of Bengal.
- Here, in this study we are trying to represent the data of a cancer hospital from a tier two city of West Bengal.

Aim & Objective

The aim of the study was to evaluate the demographic profile in patients from rural Bengal and the utility of genetic counselling in these patient cohort.

What we need but, now still lacking

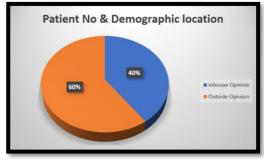
- Molecular profiling is highly required in terms of advance conditions and chemotherapy planning.
- Implementation Genetic Counselling facility in such set-ups plays key roles in patient education, advocacy, proper and early diagnosis along with personalized treatment planning.
- The public awareness is one of the crucial factors in such set-ups, many of the patients belong to below poverty level so the expenses of such cases are really becoming an unavoidable issue.

Hospital	No of Patient	Hospital	No of Patient
AIG, Bangalore	6	Manipal Hospital, Bangalore	3
AMRI, Kolkata	1	Medicare Diagnostic	4
Anderson, Chennai	1	Nauravi Hospital, Vellore	1
Burdwan Medical College	9	Netaji Cancer Hospital, Kolkata	4
Burdwan Scan Centre	1	Ramiah Medical College, Bangalore	1
Dr ABG Path	7	St John's Hospital, Bangalore	1
Dr Lal Path, Mumbai	2	Tata Memorial Hospital, Mumbai	16
Roy & Tribedi, Kolkata	7	Vaidhi Hospital, Bangaore	1
EKO Diag, Kolkata	2	Unipath, Kolkata	4
CMC, Kolkata	1	CMC Vellore	1
Lupin diagnostics	4	Others from Burdwan	21

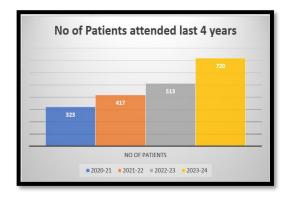
Table 1: Referral hospitals, and place of opinion prior to starting treatment at our facility last three months

*	
Place	No of pt
Bangalore	12
Burdwan	44
Kolkata	33
Durgapur	2
Chennai	4
Mumbai	15
Burdwan	44
Outside opinion	66

Table 2: Patients numbers with the demographic locations attended last month

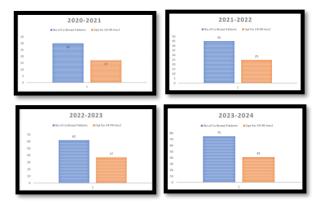


In this pie chart it was represented comparison in between the attended patient of 1st opinionated at outside vs 1st consulted at our hospital (Inhouse)



Year	Total No of Patient	Cancer Breast
2020-21	323	30
2021-22	417	45
2022-23	513	62
2023-24	720	75

Table 3: representing the number of total cancer patients vs Ca breast in last 4 years



These above four column graphs represents the comparative analysis of total count of Ca breast patients vs patients opted for Er-Pr-Her2 testing in last few years

Year	Opted for Er-Pr-Her2 Percentage	Triple negative Beast Cancer Percentage
2020-2021	56%	7%
2021-2022	55%	6%
2022-2023	59%	9%
2023-2024	54%	5%

Concluding Remarks

- We are evaluating the prevalence of genetic profile in breast cancer and lung cancer patients from our centre.
- Only 20% of breast cancer patients had evaluation of ER/PR and Her2neu before implementing Genetic Counselling.
- After Implementing genetic counselling it is increased up-to 55%.
- Targeted therapy was mostly done empirically as maintenance therapy.
- The major barriers are lack of awareness & exclusive expenses for genetic analysis (NGS).
- Genetic analysis and molecular profiling are much needed to in-trigate in insurance schemes and Govt. policies so that people from all background can avail these facilities.
- Implementation of genetic Counselling in such set-ups specially in tier 2 & tier 3 cities are highly required and recommended.

Thank You Team BCF