## The Value of Research Workers as Navigators in Breast Cancer Management

<u>Čačala, S.R</u>. Farrow, H.A. Stopforth, L. Makhanya S. Grey's Hospital, University of KwaZuluNatal

**Introduction:** In the state service of Area 2 KZN there are no breast nurses or staff trained to assist the breast cancer (BC) patient navigate through their treatment process, so research workers have assisted in this role at Grey's Hospital.

**Aim:** To determine if the assistance by research staff has impacted on bc patients' compliance with chemotherapy (CT) as initial treatment and surgery when indicated.

**Method:** Information was obtained from 2 databases: one retrospective and the other a prospective study. Both were undertaken at Grey's Hospital in Pietermaritzburg. Data was collected on BC patients receiving CT as their initial treatment. Study group 1 (SG1)): BC, patients from 2002-2007, with no research worker involvement. Study group 2 (SG2): BC patients from May 2015-Nov 2018 who received frequent telephonic and clinic contact from research workers. Comparison was made of both groups to assess if research worker contact made a difference to the number of patients completing their CT and undergoing definitive surgery if indicated.

Inclusion: females >18 years with BC receiving CT as first treatment. Exclusion: Male BC breast lymphoma, recurrence, previous contralateral BC or history of other malignancies. Data collected included demographics, stage of BC, completion of CT, patient outcomes and research worker interventions. Statistical analysis using Chi-Square. Both databases have ethical approval.

**Results:** SG1: n=281. Age 25- 89 years, average 52.7; 44 (15.7%) <40 years. Stage 4: 35.6% (100) and stage 3: 64.4% (181). 40.2%, (113), did not complete CT. In 99 (87.6%) the reason was unknown; 41.4% of these were palliative.

SG2: n=154. Age 28-81 years, average 52.6; 26 (16.9%) < 40 years. Stage 4: 47.4% (73) and stage 3: 43.5% (67) had stage 3 disease, 9% (14) had early breast cancer. 13.5% (21) did not complete CT as died (19) and 2 trying alternative treatments. 86.5% completed CT.

Excluding the patients who died before or during treatment and cases where CT aborted; 35.2% of SG1 did not complete chemotherapy compared to only 1.3% of SG2. P<0.001. SG2: 107 interventions were made by researchers for 58 patients (37.7%) who missed their chemotherapy or other hospital appointments. Reasons cited for missed appointments included: transport issues, finances for transport, inability to navigate system, admission to peripheral hospital or being unwell at home, desire to discontinue treatment and family death.

Post CT, adjuvant surgery was performed on 103 /181 (56.9%) initially eligible for surgery in SG1 and 66 /81 (81.5%) stage 2 and 3 women in SG2. P<0.001.

Follow-up in SG2 was 12-43 months; 80 /154 (52%) have demised. None lost to follow-up and 74 (48%) alive. No follow-up or mortality figures available for SG1.

**Conclusion:** BC patients in the state sector often do not attend or complete treatments and are lost to follow-up due to difficulties navigating the health care system. Research workers at Grey's Hospital have been able to reduce/eliminate this problem with active interventions, going beyond their job description to assist this largely rural based group of BC patients.

