



OBESITY AND PARTICIPATION IN BREAST SCREENING AMONG WOMEN FROM WESTERN SYDNEY

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Breast cancer is not old news...

- Breast cancer most commonly occurring cancer in women
- Set to rise with increasing incidence
- In 2012 14,610 women diagnosed
- Projected by 2020 17,210
- Seven women die per day in Australia



Background

- Obesity well-established risk factor for post-menopausal breast cancer (Rojas et. al, 2016; James et. al 2015)
- Higher BMI also associated with
 - More aggressive clinical presentations of breast cancer (Ligibel et. al, 2013, Karatas et. al, 2017)
 - Adverse prognostic factor in response to adjuvant chemotherapy (Kawai et. al, 2017)
 - Associated higher breast cancer mortality rates (Taghizadeh et. al, 2015)
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Background

- Screening participation lower in self-reported obese women (Hellman et. al, 2015; Maruther et. al, 2009)
- 79% of Western Sydney population overweight or obese (NHPA, 2013)
- In NSW, Western Sydney has one of the lowest rates of breast screening participation
- ? A proportion of eligible higher-risk women in the area not participating in recommended breast screening





LET'S TALK ABOUT BooBS

Barriers for Older Overweight women to Breast Screening

Aim

 Identify facilitators and barriers to breast screening participation in obese women and (and who live in Western Sydney)





Methods – female participants

- Women 45 80 years from GWS self-identified as obese
- Recruited via social media and local community events
- Participate in qualitative semi-structured interviews via telephone
- Non screeners: Prior screening experiences, possible barriers to attendance at screening and possible facilitators to increase screening participation
- Existing screeners: experiences of screening, factors contributing to a good or bad experience of screening, barriers and facilitators to screening participation

Methods – healthcare stakeholders

- Key healthcare stakeholders (BreastScreen mammographic & marketing staff, WentWest PHN, GPs) across GWS
- Participate in semi-structured face-to-face interviews
- Perceptions on service delivery for obese women and how might impact on breast screening participation
- Mammography staff asked:
 - How obese women may experience mammograms,
 - Factors & circumstances affecting perceptions of the exam
 - Their experiences and perceptions of obese clients



Data analysis

- Interviews digitally recorded and transcribed verbatim
- Data was thematically analysed using Quirkos with codes then themes subsequently identified
- Inter-rater reliability of study analysis tested with 45% of interviews (n=10) coded independently by two investigators, who met to review the coding and address any disagreements



RESULTS

Results

Female participants interviewed	n = 13
Mean age	52
BMI ≥ 30	24 (100%)
Screening history yes/no	5/8
Stakeholders interviewed	n = 10
Female	10 (100%)
Stakeholder categories: Radiographers/clinical staff	5
BreastScreen staff other	3
PHN staff	1
GP	1

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Female Participants

- Low knowledge of:
 - Increased post menopausal risk
 - Importance of early detection
 - Mammographic process
- Reported reduce need to screen
- Fear of pain

9 out of 10 women who develop breast cancer do <u>not</u> have a family history.





Female Participants

- Negative physical experiences during screening risk of adverse events
- Negative psychological experiences low communication on additional images increased anxiety (discourager to further screening themselves and among social circle)
- Participants identified negative perceptions of their body and general self-consciousness affected their attitudes and behaviours amplified when accessing breast screening



'There's also some self-consciousness when you're overweight, actually – to be honest, actually watching your breasts squashed under a plate is – it's about the last thing I'd choose to do

Female participant issues with body image So it is a big thing for me to try and get under control - my saddest part of my whole life has been my weight, so it's been something that's bothered me all the time

I don't ever feel good about my body and I'm reminded about that when I have a breast screen

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Stakeholder Results

- Booking staff and radiographers reluctant to be assertive or approach weight as a health condition - leading to added pressure and stress on radiographers when performing procedures
- Struggling with positioning (WHS)
- Equipment limitations and access issues
- Pressures due to extended screening time



Stakeholder results

- Weight taboo topic
 - Not identified prior to booking
 - Not acknowledged or discussed during the mammogram
- Majority of stakeholders felt size/weight not associated with additional negative feelings or fears towards accessing services
- Task not person focused



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Disconnect between stakeholders and women

would be more

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Number of images taken prolongs screening time for the participant resulting in a negative experience You know, like just a bit – the word's a bit – it's too strong to say a bit brutalised, but that's the word that actually leapt into my mind, like you know was really a bit beaten up, partly physically obviously because of the pain but also emotionally because it was and it is really confronting

'It's more about getting good pictures as opposed to paying attention to what they look like. I don't even look – I know it sounds funny but I don't actually look at what people look like, it's just that we're so focused on doing the pictures and getting a good picture that I just don't pay attention to anything else' (Stakeholder)

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Where to next?



Practice implications?

- Obesity increasingly on the rise may need to be openly identified and addressed during booking/screening process
- Booking process could include questions on weight/breast size prior to appointment so relevant information can be provided e.g. where to attend, appointment length
- Education for radiographers around open discussion of weight during consultation to help patients feel at ease
- WHS policy surrounding the handling of overweight women



Practice implications?

- Open communication if more images might be needed to reduce patient anxiety during the screening process
- Targeted health promotion educating obese women on increased risk and heightened need to screen
- Consideration of images used on health promotion materials





Next steps...

- Establish comprehensive and rigorous understanding of how BMI affects mammographic breastscreening
- Data linkage identifying effect of BMI on longitudinal adherence to mammographic screening among overweight or obese women residing in NSW
- Australian wide population-based survey evaluating relative influence of BMI, in combination with body image, screening experiences and cultural healthcare preferences, on timely mammographic screening participation
- Examination healthcare preferences overweight/obese women
- ? Targeted interventions



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