



OBESITY AND PARTICIPATION IN BREAST SCREENING AMONG WOMEN FROM WESTERN SYDNEY

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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)

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

Methods – community 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 analysed inductively using Quirkos with codes then themes subsequently identified
- Inter-rater reliability of study analysis tested with 15% of interviews (n=10) coded independently by two investigators, who met to review the coding and address any disagreements

Results

Female participants interviewed	n = 13
Mean age	52
BMI \geq 30	24 (100%)
Screening history yes/no	6/8
Stakeholders interviewed	n = 10
Female	10 (100%)
Stakeholder categories: Radiographers/clinical staff	5
BreastScreen staff other	3
PHN staff	1
GP	1

Stakeholder Results

- Task focussed, positioning (WHS), equipment limitations (access), extended screening time
- Weight taboo - and not identified/discussed during screen or prior to booking
- Not all stakeholders felt size and weight associated with additional negative feelings or fears towards accessing services
- Booking staff and radiographers reluctant to be assertive or approach weight as a health condition - can lead to added pressure and stress on radiographers when performing procedures

Female Participant Results

- ↓ knowledge of increased post menopausal risk/prevention/mammographic process
- Negative physical and psychological experiences during screening
- ↓ communication on additional images increased anxiety - discourager to 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

**Female
participant
issues with
body image**

*I was saying before,
just to experience the
whole thing visually, to
start hating on
yourself about that
whilst in pain and
there's somebody
that's not – this is a
bad experience*

*'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*

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

*yeah, a person handling,
manhandling your breasts
into place, and I'm not sure
every practitioner that I've
met, not every mammogram
that I've met had that, had
that sensitivity. But certainly
you know, the sensitivity for
what it might be like for
women who don't feel – like I
say, women who don't feel
okay about their body*

'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

I have never – yeah, I've never encountered for example an obese woman saying that's the specific reason why she's not coming back, for example (Stakeholder)

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

It's always a taboo subject, weight, isn't it...? Maybe they think they're judged because they are fat because – also overweight because maybe they think society might think that that's not acceptable (Stakeholder)

Look, I honestly don't think that someone who's overweight would be more apprehensive, except if they'd previously had a bad experience somewhere having a mammogram due to their weight problem (Stakeholder)

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

**Disconnect
between
stakeholders
and women**

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 breast screening
- 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 health-care preferences, on timely mammographic screening participation
- Examination healthcare preferences overweight/obese women
- ? Targeted interventions

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