Exploring the ‘Teachable Moment’: Logic Model for an Alcohol Brief Intervention in Breast Screening and Symptomatic Breast Clinics

Dutey-Magni, P.; Copson, E.; McCann, M.;† Sinclair, J.

Affiliations
* University of Southampton
† University of Glasgow

Context
Annually, mammography screening and breast cancer clinics are attended by approximately 2.3 million women in England. These stressful health events have for the wide majority no further medical implications, but they are a missed opportunity to address women’s concerns and to promote healthy lifestyles. Our recent pilot study conducted in Southampton showed that under 20% of women attending symptomatic breast clinics identify alcohol as a risk factor for breast cancer. Breast cancer and alcohol use are both widespread in the UK population, so that the overall avoidable burden of disease is very large compared to rarer forms of cancer with higher alcohol dose-responses. In England, the most recent review estimates that between 11 and 15% of all breast cancers are attributable to alcohol, updating a more conservative UK estimate of 6.4%.

Digital alcohol brief interventions
A previous pilot study concluded that a digital mode of delivery was acceptable to both staff and patients. Current evidence suggests that alcohol digital interventions are no less effective than face-to-face interventions. Trials point to an average reduction by 24 g [CI: -31; -16 g] in weekly alcohol consumption.

Goals
Research has yet to examine the potential of breast health encounters to be used as a ‘teachable moment’ for alcohol prevention. An early phase study set in breast cancer clinics at University Hospital Southampton will assess women’s information needs regarding effects of alcohol on cancer risk, requirements in terms of personalised feedback, and the potential to turn alcohol awareness into a long-term intrinsic motivation to reduce alcohol consumption.

Acknowledgments
The design of this logic model has been supported by the NIHR Southampton Biomedical Research Centre. The intervention will be developed thanks to an MRC Public Health Intervention Development Grant starting in 2017.

---

**Figure 1. Target population: health care contacts in 2013/14**

- 17,961 (0.9%) diagnosed with cancer
- 252,559 women referred with suspected cancer in 2013/14 in England
- 2,079,271 women attending NHS Breast Cancer Screening in 2013/14 in England

**Figure 2. Diagram of the logic model**

- Situation
- Inputs
- Outputs
- Outcomes

**Clinical behaviour**
- Health care staff intervention on health promotion is insufficient (high organisational costs of continuous staff training)

**Population health**
- Ineligible to: psychiatric breast cancer clinic - NHS breast screening

**Psychological processes**
- Low alcohol literacy (units, sensible drinking levels)
- Poor public understanding of effects of alcohol on cancer risks
- Want good reliable information on cancer risks, especially modifiable risk factors
- Low motivation to change

**Digital interface with prevention modules**
- Teachable moment: emotional response - making sense of a health event
- Increased readiness to learn
- Relatives experience the teachable moment by proxy
- Increased self-awareness around drinking
- Improved social cohesion: increased alcohol awareness in relatives
- Better population attitudes regarding benefits of not drinking

---


The authors have no conflicts of interest to report.