

Talking About Risk in the Context of GEnomic Tests (TARGET) Evaluation of an educational programme



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Background: Risk of recurrence scores (RSs) from gene expression profiling (GEP) tests such as Oncotype*DX*® and EndoPredict® are being used increasingly alongside clinico-pathologic features to help determine the likely benefit of adjuvant chemotherapy in early stage breast cancer. Health literacy and numeracy skills in the general population are often poor, thus explaining risk and uncertainty can be confusing especially when set against a backdrop of fear and anxiety. As Health Care Professionals (HCPs) find these types of conversations with patients challenging, we developed and evaluated the TARGET educational programme.

Materials

- we produced training materials to increase knowledge acquisition, skills development & personal awareness
- these elements have been shown to improve competence & confidence, pre-requisites for transfer of skills into a clinical setting ^[1, 2]
- following a review of risk literature and discussions with key

Figures 1-3: Forest Plots show odds ratios [OR] (95% CI) of improved scores



HCPs/clinical scientists, we filmed 7 scenarios split into 4 modules



Module 1: The GEP landscape science underpinning GEP tests



Module 3 OncotypeDX® low, intermediate & high risk scenarios



Module 2: EndoPredict® low & high risk scenarios



Module 4: OncotypeDX® 2 further scenarios after theTAILORx results ^[3]

Figure 2: Patient simulator assessment



Odds ratio

TARGET Evaluation Workshops Comprised

- 2 hour didactic interactive lecture on risk with exercises on numeracy, frequency & intolerance of uncertainty
- facilitated group discussion about the scenarios
- 8 hour workshops across 2 days accredited 9 CPD points

Methods

Pre & post workshop

Participants

- completed 9 item self-confidence questionnaires
- discussed risk scores with patient simulators (recorded)
- self-rated presence/absence of 17 key informational areas

Patient simulators

- completed the same checklist of 17 key areas
- different patients/scenarios used at pre & post assessments

Experienced researchers

assessed recordings (blinded to time point) (objective results)



Table 1: Participants' confidence sig. increased

How confident are you when discussing	Pre course	Post course	P value
prognosis in general with patients with EBC	6.97	7.98	<.001
EndoPredict or OncotypeDx RSs	5.85	7.69	<.001
analogies to explain risk of recurrence in pts with EBC	5.35	7.35	<.001
low risk scores	6.58	8.26	<.001
intermediate risk scores	5.28	7.31	<.001
high risk scores	6.48	8.17	<.001
RS scores with pts from low socio-educational background	5.65	7.63	<.001
RS scores with pts from high socio-educational background	5.94	7.71	<.001
RS scores with anxious pts	5.55	7.42	<.001

Hypotheses:-

- participants' communication skills when discussing GEP test results would improve i.e. competence would be better
- self-efficacy would be enhanced i.e. participants would feel more confident when conducting these interviews

Results

65 UK HCPs (56 clinicians, 9 nurses) participated in 7 workshops

References

1. Fallowfield et al (2003)Enduring impact of communication skills training: results of a 12-month follow-up. BJC 89:1445-1449

2. Jenkins V, Fallowfield L. (2002) Can communication skills training alter physicians' beliefs and behaviour in clinics? JCO 20 (3) 765-769

3. Sparano JA, et al. (2018) TAILORx: Phase III trial of chemoendocrine therapy versus endocrine therapy alone in hormone receptor positive, HER2-negative, node negative breast cancer and an intermediate prognosis 21 gene recurrence score. JCO 36:18suppl, LBA1-LBA1

Conclusion

The short, intensive TARGET workshops significantly improved HCPs' competence & confidence communicating GEP results, which is likely to transfer into the clinical setting assisting patient decision-making about chemotherapy

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