A mixed methods feasibility study of a training intervention.

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Background

Only 9% of UK nurses raise the importance of being physically active with all cancer patients. There is a need for the further education of nurses in delivery of very brief advice (VBA) on physical activity.

A training intervention was designed to improve the capability, opportunity and motivation (COM-B) of nurses towards the behaviour of giving physical activity advice to cancer patients.

Behavioural diagnosis using COM-B

COM-B component	Behavioural diagnosis
Capability – Psychological.	Practitioners need the knowledge of what to say, the skills on how to say it and the memory and attention to remember to give very brief advice. Practitioners need to understand the importance of physical activity for people living with cancer. Lack of guidelines and lack of knowledge is cited as a barrier.
Opportunity – Physical.	Practitioners have limited time and need the resources to hand to signpost on for more support.
Opportunity – Social.	Practitioners need the support of the workplace.
Motivation – Reflective.	Practitioners must believe that this is the right thing to do, that it is within the interests of their patients and have the confidence to deliver advice.
Motivation – Automatic.	Delivery of very brief advice needs to become a habit and a routine part of consultations.

A 60 minute training intervention, delivered either in a face-to-face or online setting, was designed including eight behaviour change techniques (BCT) selected from the Behaviour Change Technique Taxonomy v 1 (BCTTv1). These are:

- Goal setting (behaviour) coupled with commitment (two BCTs).
- Instructions on how to perform the behaviour.
- Salience of consequences.
- Demonstration of the behaviour.
- Credible source.
- Adding objects to the environment.
- Prompts/cues.

Research questions

Is a training intervention designed to improve the capability, opportunity and motivation of nurses to delivery VBA on physical activity to cancer patients acceptable and practicable? What is the best mode of delivery and what is the suggested efficacy of the intervention.

Method

This feasibility study uses a mixed methods approach drawing on the strengths from qualitative and quantitative methodologies.

A purposeful sample of nurses (n=62) were recruited across two delivery arms, face-to-face (n=55) and online (n=7).

The 'capability, opportunity and motivation' of nurses to deliver VBA was measured via questionnaire.

Frequency of delivery of physical activity advice was collected at baseline

with follow-up at 12 weeks.

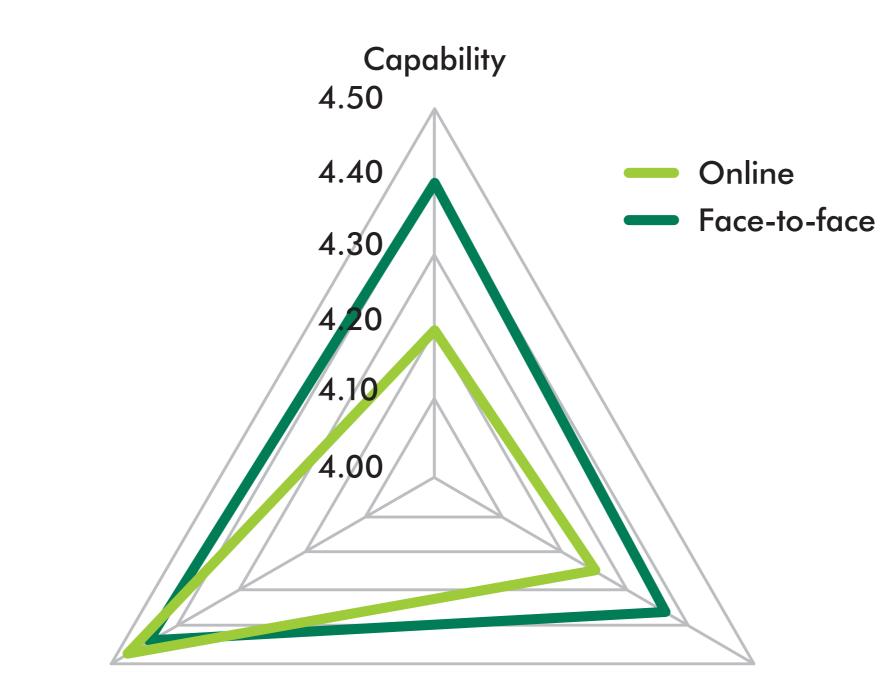
Semi-structured phone interviews (n=9 face-to-face; n=5 online) were completed and analysed thematically.

A cost consequence analysis was undertaken.

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Results

Measured on a Likert scale from 1 to 5, with 1 being strongly disagree and 5 strongly agree, the intervention showed improvements in the capability (4.36 overall; 4.39 face-to-face and 4.18 online), opportunity (4.38 overall; 4.37 face-to-face and 4.24 online) and motivation (4.44 overall; 4.44 face-to-face and 4.48 online) of nurses (Figure 5) towards the delivery of VBA on physical activity.



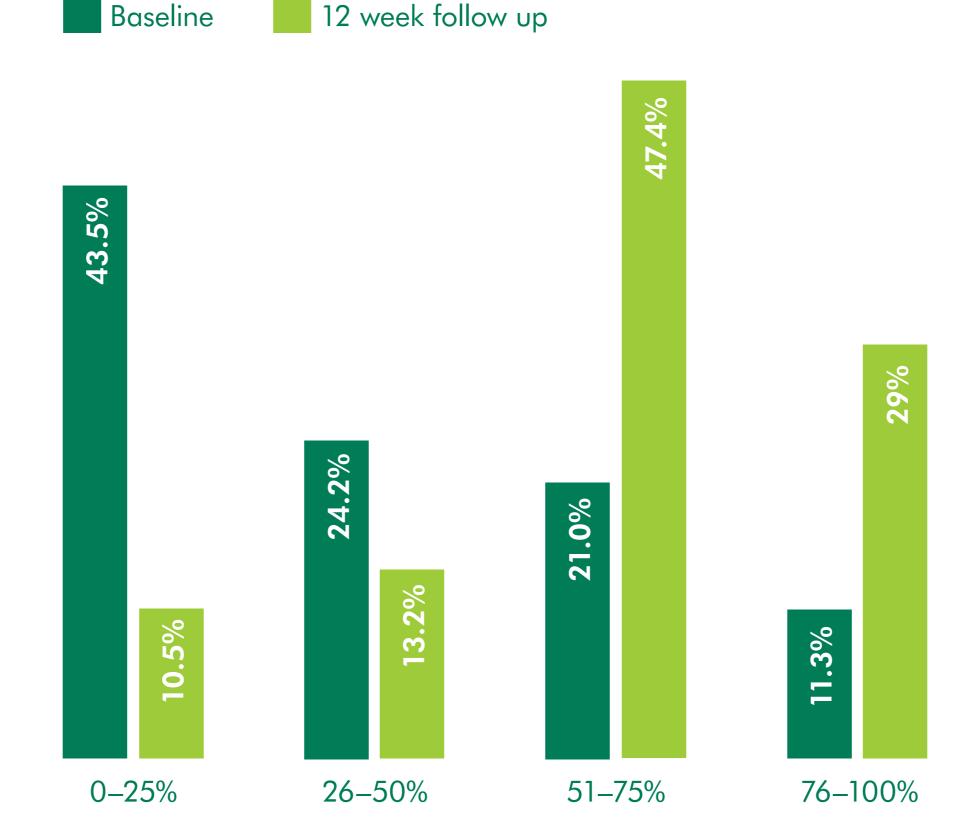
Motivation Opportunity

Five major themes and associated sub-themes emerged for the qualitative data.

Themes identified in the qualitative analysis

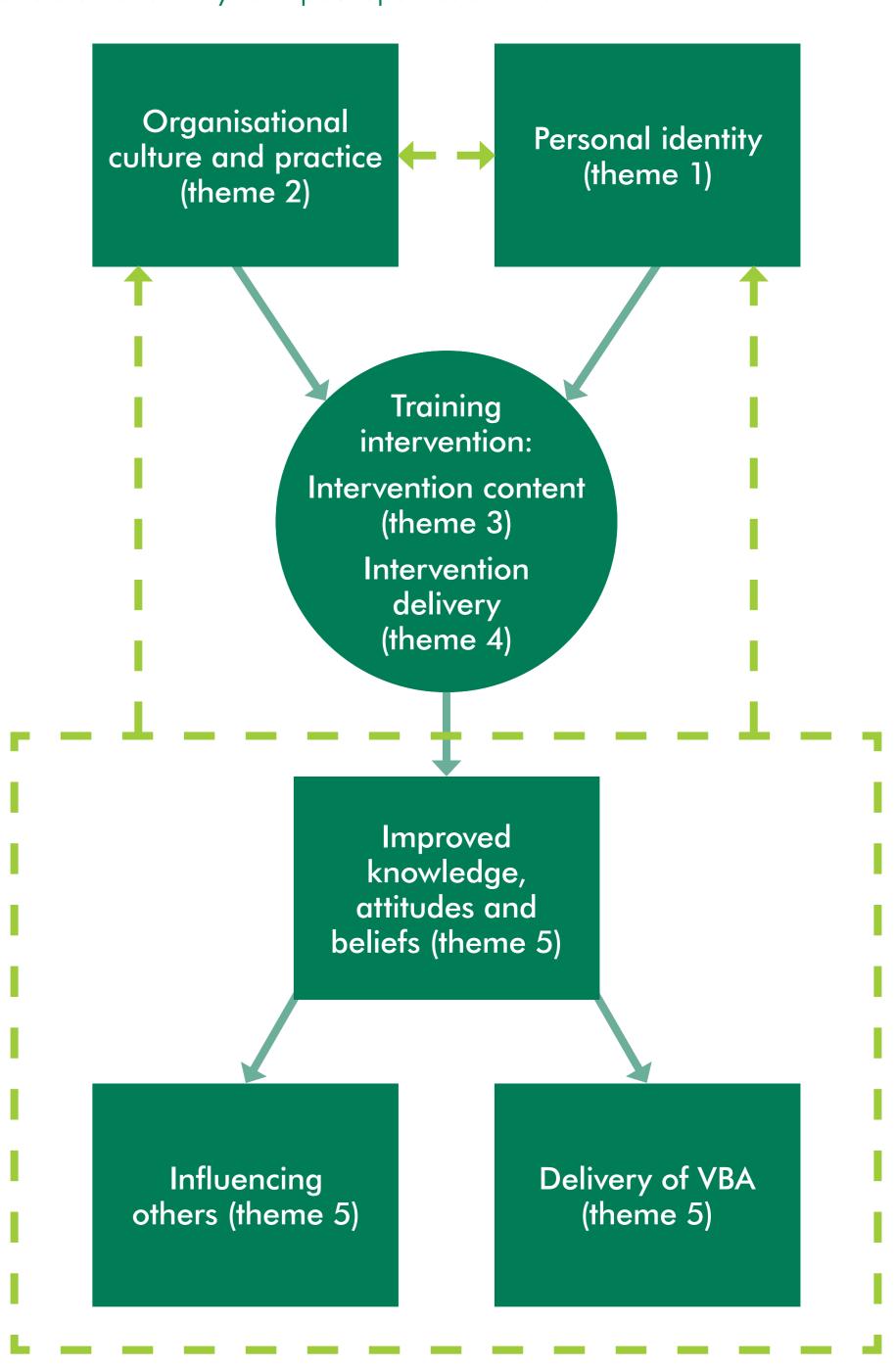
Theme	Sub-theme
1. Personal identify	Prior knowledge and awareness Occupational identify Patient ability and motivations
2. Organisational culture and practice	Job demands Local opportunities Peer behaviour Structure and practice
3. Intervention content	Behaviour change techniques
4. Intervention delivery	Mode of delivery Technical issues Timing Structure and pitch
5. Impact	Individual knowledge, attitudes and beliefs Delivery of VBA Influencing others

A significant improvement was seen in delivery of VBA at 12 weeks (Z=-3.817, p<0.001)



"I discuss physical activity with my patients...."

The themes and sub-themes identified during the qualitative analysis are interrelated and likely to impact upon each other.



Personal identity (Theme 1), organisational culture and practice (Theme 2) impact upon the delivery of VBA and access to training. Only those interested search for, and sign up to, online training explaining the low recruitment figures to the online delivery arm.

Implementation in a face-to-face setting is the preferred choice however, job demands and lack of available training time means that there is a need for an online seminar solution. Delivery in 60 minutes is both practicable and acceptable (Theme 4).

The mixture of BCTs is effective at bringing about a change in practice in delivery of VBA (Theme 3).

The intervention improves the attitudes, knowledge and beliefs of nurses towards physical activity for cancer patients, which in-turn improves their confidence and delivery of VBA (Theme 5). This led to the influencing of other health care professionals, which could result in a change in organisational culture and practice. Further, it may change the personal views of other health care professionals and possibly directly influence their practice should they model the behaviour of those practicing VBA.

The cost of delivery was £33.87 per nurse in the face-to-face delivery and £103.83 per nurse in the online delivery (inflated by the low recruitment numbers).

Conclusion

The intervention is both acceptable and practicable to nurses and it has the potential to increase the frequency of discussion on physical activity to cancer patients. Both modes of delivery should be considered.

This intervention is designed to influence the behaviour of individuals but it has the potential to influence a wider group.

A pilot trial should now be completed to confirm 'does it work?'

Further information

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