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Translating and disseminating research findings to stakeholders: The We Can Quit 2 Pilot Trial of Smoking Cessation in Disadvantaged Women

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Share and Learn Seminar No. 4
21st September 2022

Irish Cancer Society | HSE | Edinburgh Napier University | TMRN | The University of Edinburgh

Background

Traditional research dissemination

- reinforces passive relationships among research producers and users
- fails to reach practitioners and policy makers who can translate findings into practice.

Active research dissemination

- A two-way dialogue between researchers and non-academics to disseminate evidence-based interventions using planned strategies
  - incorporation of evidence-based interventions into routine care
  - enable researchers to identify practice and policy priorities, new research, reducing evidence to practice gap
- Engagement of different types of stakeholders - patients, practitioners and policy makers is at the centre.

The We Can Quit intervention

We Can Quit (WCQ) - a community-based stop smoking programme developed in Ireland tailored to SED women

- **Socio-Ecological Model**
- **Community-based Participatory Research (CBPR)**

Core components:

- **Group-based support** once a week for 12 weeks, delivered by trained lay Community Facilitators (CFs):
- **Access to Nicotine Replacement Therapy (NRT)**
- Individual one-to-one text support between sessions.

We Can Quit2 trial

Two-arm, community-based pilot cluster randomised controlled trial (RCT)[1,2] in four matched pairs of SED districts in Ireland with embedded process evaluation

Main objective - to evaluate the **feasibility and acceptability** of WCQ and trial processes

Recruitment – four consecutive waves

Comparison – one to one smoking cessation service by Health Service Executive

Engagement of non-academic stakeholders through establishing community-organised Local Advisory Groups (LAGs) central to all phases of the RCT, from design to implementation.

We Can Quit2 trial – Knowledge Exchange Activities

Knowledge Exchange

- **interactive interchange of knowledge between research users and research producers used to disseminate scientific evidence.**

Secondary Objective of WCQ2

- **to develop strategies to optimise the recruitment and dissemination of findings to trial stakeholders to inform knowledge exchange and future research.**
  - **KE Activities**
    - Academic publications
    - Accessible policy brief
    - Knowledge Exchange workshop.

Peer-Delivery of a Gender-Specific Smoking Cessation Intervention for Women Living in Disadvantaged Communities in Ireland We Can Quit2 (WCQ2)—A Pilot Cluster Randomized Controlled Trial

Catherine B Hayes, MD ✉, Jenny Patterson, PhD, Stefania Castello, PhD, Emma Burke, MSc, Nicola O'Connell, PhD, Catherine D Darker, PhD, Linda Bauld, PhD, Joanne Vance, MSc, Aurelia Ciblis, PhD, Fiona Dobbie, MA ... Show more

Nicotine & Tobacco Research, Volume 24, Issue 4, April 2022, Pages 564–573, https://doi.org/10.1093/ntr/ntab242

International Journal of *Environmental Research and Public Health*

MDPI

Article

The We Can Quit2 Smoking Cessation Trial: Knowledge Exchange and Dissemination Following a Community-Based Participatory Research Approach

Stefania Castello [1], Catherine Darker [1], Joanne Vance [2], Nadine Dougall [3], Linda Bauld [4] and Catherine B. Hayes [1,*]

O'Connell *et al. Systematic Reviews* (2022) 11:111
https://doi.org/10.1186/s13643-022-01922-7

Systematic Reviews

Darker *et al. BMC Public Health* (2022) 22:1528
https://doi.org/10.1186/s12889-022-13957-5

BMC Public Health

RESEARCH Open Access

A process evaluation of 'We Can Quit': a community-based smoking cessation intervention targeting women from areas of socio-disadvantage in Ireland

Catherine D. Darker[1*], Emma Burke[1], Stefania Castello[1], Karin O'Sullivan[1], Nicola O'Connell[1], Joanne Vance[2], Caitriona Reynolds[2], Aine Buggy[3], Nadine Dougall[4], Kirsty Loudon[5], Pauline Williams[6], Fiona Dobbie[7], Linda Bauld[7] and Catherine B. Hayes[1]

RESEARCH Open Access

The effectiveness of smoking cessation interventions for socio-economically disadvantaged women: a systematic review and meta-analysis

Nicola O'Connell[1*], Emma Burke[1], Fiona Dobbie[2], Nadine Dougall[3], David Mockler[4], Catherine Darker[1], Joanne Vance[5], Steven Bernstein[6], Hazel Gilbert[7], Linda Bauld[2] and Catherine B. Hayes[1]

Darker *et al. Pilot and Feasibility Studies* (2022) 8:19
https://doi.org/10.1186/s40814-022-00969-6

Pilot and Feasibility Studies

RESEARCH Open Access

An application of PRECIS-2 to evaluate trial design in a pilot cluster randomised controlled trial of a community-based smoking cessation intervention for women living in disadvantaged areas of Ireland

Catherine Darker[1†], Kirsty Loudon[2†], Nicola O'Connell[1], Stefania Castello[1], Emma Burke[1], Joanne Vance[3], Caitriona Reynolds[3], Aine Buggy[4], Nadine Dougall[5], Pauline Williams[1,6], Fiona Dobbie[7], Linda Bauld[7] and Catherine B. Hayes[1*]

We Can Quit2 trial – Policy Brief

Plain English summary

- trial methodology
- main findings and recommendations.

Distribution

- local stakeholders involved in the conduct of WCQ2
- key regional and national practitioners and policy makers in Ireland with an interest in tobacco control.

We Can Quit2: Results of a pilot cluster randomized controlled trial of a community-based intervention on smoking cessation for women living in disadvantaged areas of Ireland

Castello S,[1] Darker C,[1] Vance J,[2] Buckley E,[3] Reynolds C,[3] Buggy A,[3] O'Hagan K,[2] Cronin N,[4] Dougall N,[5] Devane D,[6] Bauld, L,[7] Hayes CB[1].
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Health consequences of smoking tobacco

Tobacco use is the leading cause of preventable death worldwide and is a causal factor for many chronic diseases and types of cancer. Ireland ranks second highest for smoking-related causes of death in the EU.

Strongly linked to smoking, lung cancer is now the most common cause of death for women in Ireland, having surpassed breast cancer rates. These health consequences of smoking tobacco impact more in low socio-economic status (SES) groups. This reflects the need to find more effective ways to engage women smokers in smoking cessation services.

In response to this, the Irish Cancer Society (ICS) in collaboration with the National Women's Council Ireland, the Institute of Public Health and the Health Service Executive (HSE) in Ireland developed We Can Quit (WCQ). It is a community-based stop smoking programme specifically designed for women living in socio-economic disadvantaged areas in Ireland.

Key components of the WCQ programme

- ⇒ Group-based support once a week for 12 weeks, delivered by Community Facilitators (CFs): lay trained women living or working in target areas.
- ⇒ Access to NRT without charge for all participants who wish to take it.
- ⇒ Individual one-to-one text support between sessions.

Our Study: the We Can Quit2 pilot trial (study)

The **We Can Quit2** trial **tested if it was feasible (possible) to recruit eight community districts (four matched pairs) to a stop smoking trial**; if we could recruit **194 women in total (48-49 women in each matched pair of districts)**; if we could **randomly assign** one district in each matched pair (24-25 women) to the WCQ programme and one to the face to face smoking cessation services (usual care) provided by the HSE when recruitment was complete; and if we had **2/3 of the women who were recruited to the study remaining at the end of the programme.** We examined **if the process of being involved in a trial was acceptable to the women and the CFs and what they thought of the WCQ programme itself.** Based on our findings, **we recommend that a full effectiveness trial** comparing quit rates in the two groups is needed.

What did we do?

- ⇒ We recruited districts (four clusters) defined as socio-economically disadvantaged according to the National Deprivation Index (Pobal), which were geographically proximal and with available one-to-one smoking cessation services provided by the HSE.
- ⇒ We set up Local Advisory Groups (LAGs) involving local area Partnerships, the HSE, ICS representatives, community development organisations, pharmacies and GPs. They actively engaged local stakeholders to recruit women, and assisted in planning the trial in each pair of districts.
- ⇒ We tested the recruitment plan, using an iterative process over four waves.
- ⇒ Members of the LAGs contacted eligible women through social media, word-of-mouth, community stands, and leaflets/posters.
- ⇒ We applied inclusion criteria which included a target of 50% medical cardholders. We allocated (randomised) women into one of two trial arms: intervention (the WCQ programme) or control (usual one-to-one HSE smoking cessation service).
- ⇒ At the end of the 12-week intervention and at 6 months, we administered questionnaires to collect the following data from women in both arms: eligibility and recruitment rates; engagement with smoking cessation services and attendance rates; data completion and retention rates. Acceptability of the trial processes and of the WCQ programme was determined mainly at interview with participants and CFs. We also obtained data on smoking abstinence and physical and mental health.

This trial was funded by the Health Research Board Ireland under the Definitive Interventions and feasibility Awards DIFA-2017-048.

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Our findings

Successful recruitment of districts and participants

We successfully recruited four pairs of districts and 125 of the 208 eligible women consented to participate. In the final wave we achieved the recruitment target of 49 women.

Characteristics of women in the study

Socio-demographic: The average age was 48 years old. Almost half were not in a paid employment and had only primary/no formal education. Two-thirds were medical cardholders.

Smoking habits: Women smoked on average 18 cigarettes a day. Habit or addiction were the most frequent reasons given for smoking. They were very determined to quit. Most intervention women smoked for over 25 years.

Engagement, attendance and retention

- Engagement (i.e. having attended at least one session and set a quit date) was a 12% higher in intervention women.
- Women who quit smoking in each group attended over twice as many sessions than those women who continued smoking.
- Approximately half of recruited women provided follow-up data at 12 weeks and/or 6 months.

Trial processes and the WCQ programme are acceptable

- Interview data indicated that trial processes including randomisation and data collection were acceptable. Although all forms were literacy proofed, literacy was cited as a problem.
- Most women in intervention group used NRT, and patches were the most used NRT type. Removing cost as a barrier for using NRT was welcome. Women recalled positive reinforcement, peer learning and motivation derived from group support as highly helpful strategies. They highlighted the support from the community pharmacist for their quit attempt.
- The CFs delivered the session content as planned. They remarked the big volume of paperwork to fill after each session under trial conditions.

"I don't write very well. So, what we were doing was em [XX] would help us with the filling out so you don't feel embarrassed... it is embarrassing when they're asking us to fill in stuff which I can't do..." (P13)

"... it's encouragement and listening to their stories and to be able to say I can take that on board, and you end up saying 'I can do that as well'" (P03)

"...given it was the research programme and everything, there was lots of extra stuff to do..." (CF02)

"It was great, yeah, yeah, I found it fantastic" [NRT without cost] (P49)

Other findings

Although not set up to test this in a small pilot trial, we observed that more WCQ women had stopped smoking at the end of the programme and smoked fewer cigarettes per day than women attending usual care. WCQ women also reported having better physical health at 12 weeks and improved mental health at 6 months. These findings need to be tested in a larger trial before we can be certain that they are true.

Conclusions

- We successfully reached low SES women to the study through the work of the LAGs and community mobilisation, so recruitment of women to a community based smoking cessation trial was feasible but challenging.
- Women engaged well with their assigned programme. Removing the cost barrier to NRT access was a success factor of the WCQ intervention. Keeping women in the study (retention) benefited them, however retention rates were lower than expected. These issues and literacy issues need to be addressed in the future trial designed to test cost-effectiveness.

Recommendations for policy and future research

Ensuring successful recruitment in a future trial

- Dedicate more planning time for intervention set-up and development in each district.
- Engage a representative of the CHO Primary Care Team/Network in the LAGs.
- Resource a local coordinator to support recruitment in communities.
- Work on a referral system to make easier for GPs and healthcare workers to register potential participants.

Improving participants' retention

- Implement an intervention boost a month after programme end, and calls by delivery personnel to maintain contact with and support participants during and after the programme.

Addressing literacy issues

- Offer assistance to complete all forms from the first contact with any potential participant.
- Include videos to explain consent and all contents/measures.
- Increase training for CFs on strategies to support women dealing with these difficulties.

Removing barriers to NRT use/access

- Make NRT universally available free of charge to participants in all HSE recognised smoking cessation programmes. Remove administrative barriers to access NRT treatment for current medical cardholders. This would encourage participation and lead to better/increased smoking abstinence rates in disadvantaged areas.

We Can Quit2 trial – KE workshop

Single online workshop Nov 2020

- stakeholders' views on trial findings and the experiences of being involved in research – feedback loop
- Implications for policy and practice
  - All received policy brief

Predefined topics

- key improvements to enhance community engagement, participant recruitment and retention to inform design of a potential future definitive trial
- key policy and practice priorities arising from the WCQ2 research.

Separate anonymous online questionnaire

Analysis

- Field notes and questionnaire responses

Invitees (n=176)

- LAG members
- research partners
- HSE, ICS representatives
- programme delivery personnel (community facilitators and HSE smoking cessation officers)
- local area partnerships, community development organisations
- community pharmacies, GPs, primary care centres
- regional and national policy makers and
- non-governmental organisations interested in tobacco control policies.

Results - Workshop Participants

Attendees (n=41)	Involved in trial planning and/or delivery	Description
HSE and ICS representatives (n=7)	Yes	• Delivery partners involved in setting up Local Advisory Groups and delivery of the recruitment in each trial district. • HSE representatives who were experts in smoking cessation and trained the trial programme delivery personnel.
Programme delivery personnel (n=9)	Yes	• Community facilitators and HSE Smoking Cessation Officers who delivered trial interventions. They were also involved in retention during intervention delivery.
Local Advisory Group members (n=18)	Yes	• Representatives from Community development organisations, Local Area Partnerships, Primary Care workers who were involved in trial planning and in promotion and delivery of the recruitment strategy. • Local Authority representatives from the cities and counties in which the trial took place, who were involved in planning trial delivery.
Regional Policy Makers (n=3)	No	• HSE Community Health Officers, Primary Care Development and Health Promotion representatives from trial areas.
National Policy Makers (n=4)	No	• Representatives from the tobacco and cancer prevention national programmes • Representative from a voluntary organisation working to reduce tobacco use and related disease • Representative from a public education charity interested in addressing inequalities.

Results – Themes and subthemes

Predetermined theme	Subthemes
Community engagement and participant recruitment	➢ Increase the research set -up time to build trust relationships with community stakeholders ➢ Variety of methods to recruit participants ➢ Increase Engagement of GPs and primary care workers ➢ Participants' low literacy in interpreting research information
Retention	➢ Reasons for discontinuing with the research ➢ Tools for encouraging attendance during programme delivery ➢ Planned support after intervention delivery to reinforce quit attempts and improve the collection of data at 6 months ➢ Participants' low literacy – programme materials
Policy priorities arising from the research	➢ Barriers to access NRT ➢ Smoking cessation interventions in SED groups

Retention

Reasons for participants' dropout (barriers)

- Feelings of not being ready or able to quit
- Fear of admitting the need for help to quit smoking
- Women's families and social environment may be a source of stress or represent complex realities that can hinder participation.
  - Lack of support
  - family members' smoking behaviour
- Low literacy

Solutions

- **Strategies to encourage attendance**
  - Avoiding summer holidays /winter nights
  - 'Introduction night' with former WCQ participants
  - Dedicated week with participants' families and friends during programme delivery
- **Strategies to encourage sustainability**
  - keeping in contact with women by text or email 1-3 months after intervention delivery
  - Encouraging joining other community programmes
- **Strategies for low literacy**
  - Replacing some material with short videos
  - More resources for Community Facilitators

Policy Priorities

NRT

- Cost and
- administrative barriers to access NRT.

W4–CF 2: *… one of the ladies said sure 'I can't even get an appointment; it takes 3 weeks to get an appointment'…*

W4–CF 1: *And then when the pharmacists confronted the ladies about the prescription they …felt em they were being put under a bit of pressure to get the prescription off their doctor and they were stressing over it .*

Prioritise funding

- Need to prioritise funding for smoking cessation interventions tailored to lower socioeconomic groups, based in community settings.

Improve Literacy

W1–P0040: *I can't spell for diamonds, so I found it difficult if I was to write in it (journal)*

Conclusions

- **Dissemination Workshop successfully engaged a mix of community and statutory stakeholders representing different voices and perspectives**
- **It provided a final feedback loop with key trial stakeholders as a part of a longer community engagement process which included multiple interactions during the trial process with our PPI and community organisation.**
- **Joint reflection among non-academic stakeholders and researchers facilitated new insights and a deeper understanding of local women's needs to allow them to fully participate in a smoking cessation trial and engage with smoking cessation services**
- **Trial team gleaned a set of practical strategies to enhance the design of future research implementation**
- **Dedicated additional time to build relationships with local stakeholders with a tacit knowledge of their local context and connecting with existing social prescribing networks, were key recommendations**
- **Despite the low response rate, the online approach was a successful medium for stakeholder engagement.**

Impact

- **Dissemination of results following the CBPR approach encouraged the joint reflection of community, statutory and academic stakeholders on new research findings**
- **It increased understanding of barriers and facilitators to SED women's engagement in a smoking cessation intervention, and assisted in developing recommendations and outlining policy priorities which can be implemented in practice**
- **We expect our findings to be generalisable to the development of other community-based behavioural change interventions in lower SED groups**
- **WCQ has now been included as a programme under the national Healthy Ireland Strategic Action Plan 2021-2025 to address health inequalities**
- **The findings may be used to optimise the design of definitive RCTs to test the effectiveness of these interventions, and to enhance their sustainability thus contributing to a reduction of health inequalities**

Acknowledgements

- Workshop participants
- PPI
- Local Area Advisory Groups
- Local Community Organisations
- Participants and Community Facilitators in the We Can Quit2 trial
- Irish Cancer Society Coordinators
- HSE Smoking Cessation Officers and Tobacco Control Programme
- Welcome Clinical Research Facility

Funders: Health Research Board Ireland, Definitive Interventions and Feasibility Awards, DIFA-2017-048.

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Thank You

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