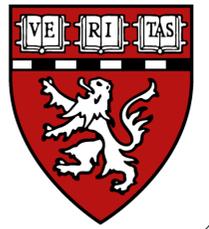


Engagement of “Pre-contemplative” and “Contemplative” individuals with serious mental illness who smoke - analysis of a community health worker intervention for tobacco cessation

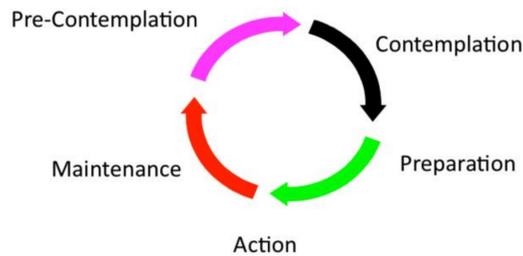


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Background

The “Stages of Change” model is commonly used to guide clinicians in how to approach health behavior change with their patients.



There is concern that use of this model may reduce physician engagement with individuals who are identified as “pre-contemplative” or “contemplative,” particularly those with serious mental illness.

Parent Trial – NCT02845440

In a large PCORI pragmatic trial which enrolled 1165 individuals with serious mental illness (SMI) who smoked **and did not necessarily want to quit**, we found that education to primary care providers and community health worker (CHW) **increased use and efficacy of pharmacotherapy for tobacco use disorder (TUD) and bio-verified tobacco abstinence rates** over education alone or usual care.

CHW were instructed to encourage tobacco cessation and engage individuals in tobacco cessation education *regardless* of the participant’s stage of change. Provider education targeted known biases around engagement of those with SMI in tobacco cessation treatment.

Aim

Here, we sought to explore the effect of “stage of change” on TUD treatment and abstinence outcomes in participants randomized to receive CHW support (n=414).

Methods

- Each participant’s “stage of change” was coded as “precontemplation,” “contemplation,” or “preparation” based on the first visit with a CHW in which smoking was discussed.
- Time to first use of NRT and varenicline, time to first verified 7-day abstinence, and any self-reported quit attempts were analyzed.

Sample characteristics by stage of change

| | Overall | Pre-contemplative | Contemplative | Preparation |
|-------------------------------|-------------|-------------------|---------------|-------------|
| Sample size | 414 | 73 | 58 | 114 |
| Age; M (SD) | 46.9 (13.0) | 49.8 (13.2) | 48.6 (11.9) | 47.4 (11.6) |
| Sex; % Female (n) | 32.6% (135) | 30.1% (22) | 25.9% (15) | 36.0% (41) |
| Race | | | | |
| White; % Yes (n) | 54.1% (224) | 47.9% (35) | 48.3% (28) | 54.4% (62) |
| African American; % Yes (n) | 33.6% (139) | 42.5% (31) | 43.1% (25) | 31.6% (36) |
| Other; % Yes (n) | 12.3% (51) | 9.6% (7) | 8.6% (5) | 14.0% (16) |
| Hispanic/Latino; % Yes (n) | 19.1% (79) | 24.7% (18) | 15.5% (9) | 18.4% (21) |
| Independent living; % Yes (n) | 61.1% (253) | 35.6% (26) | 58.6% (34) | 66.7% (76) |
| Number of tobacco products | | | | |
| per day; M (SD) | 14.8 (9.6) | 14.6 (8.2) | 15.0 (8.7) | 14.2 (10.0) |

Results

- N=414 individuals were randomized to receive CHW support, n=273 consented to meet with a CHW. Of these:
 - 73 were “pre-contemplative”
 - 58 were “contemplative”
 - 114 were classified as in “preparation”
 - 4 had already initiated a quit attempt (“action”), and 24 declined further meetings

Abstinence

Two-year biochemically verified abstinence as defined by an expired CO ≥ 5 parts per million was confirmed in:

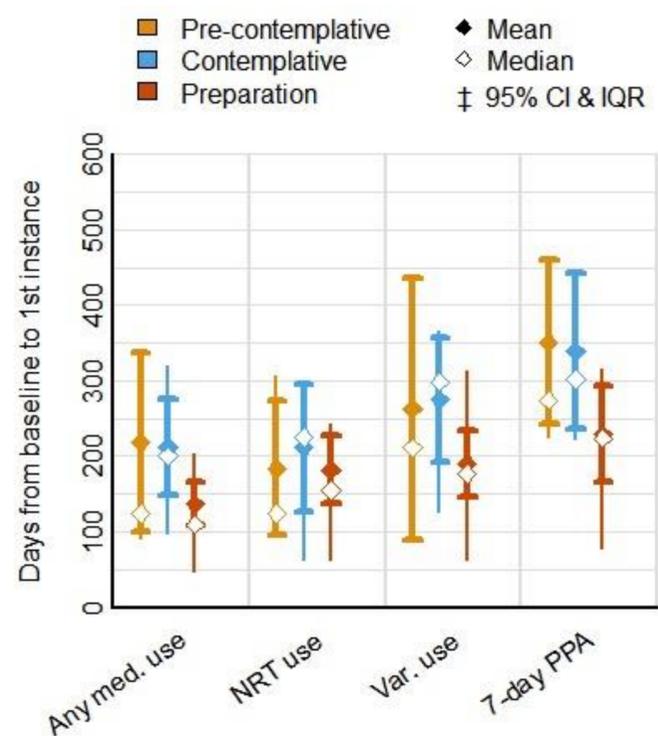
- 7.6% (10/131) of those who were “pre-contemplative” or “contemplative”
- 18.4% (21/114) of individuals in “preparation”

Quit Attempts

Self-reported quit attempts were made by:

- 45% (33/73) of pre-contemplative individuals
- 31% (18/58) of contemplative individuals
- 47% (54/114) of individuals in preparation

Time to TUD medication usage and 7-day abstinence



Conclusions

- In this intervention that emphasized longitudinal engagement with smokers with SMI *regardless of readiness to quit*, **40% of those in pre-contemplative or contemplative stage of change at baseline made a quit attempt, and 7.6% had verified tobacco abstinence at two-years.**
- Active, longitudinal tobacco cessation engagement with a CHW increased abstinence rates in a group of smokers not currently receiving smoking cessation treatment.

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