JMIR Preprints

Accepted for/Published in: Journal of Medical Internet Research
Date Submitted: Jan 29, 2018
Date Accepted: May 8, 2018
Open Peer Review Period: Jan 30, 2018 - Apr 18, 2018
(closed for review but you can still tweet)

Tweet

The final, peer-reviewed published version of this preprint can be found here:
Blended Smoking Cessation Treatment: Exploring Measurement, Levels, and Predictors of Adherence
Siemer L, Brusse-Keizer MG, Postel MG, Ben Allouch S, Patrinopoulos Bougioukas A, Sanderman R, Pieterse ME
Blended Smoking Cessation Treatment: Exploring Measurement, Levels, and Predictors of Adherence
J Med Internet Res 2018;20(8):e246
DOI: 10.2196/jmir.9969
PMID: 30068503
PMCID: 6094087

Blended Smoking Cessation Treatment: Exploring Measurement, Levels, and Predictors of Adherence

Lutz Siemer; Marjolein GJ Brusse-Keizer; Marloes G Postel; Somaya Ben Allouch; Angelos Patrinopoulos Bougioukas; Robbert Sanderman; Marcel E Pieterse

ABSTRACT

Background:

Blended face-to-face and Web-based treatment is a promising way to deliver cognitive behavioral therapy. Since adherence has been shown to be a measure for treatment's acceptability and a determinant for treatment's effectiveness, in this study, we explored adherence to a new blended smoking cessation treatment (BSCT).

Objective:

The objective of our study was to (1) develop an adequate method to measure adherence to BSCT; (2) define an adequate degree of adherence to be used as a threshold for being adherent; (3) estimate adherence to BSCT; and (4) explore the possible predictors of adherence to BSCT.

Methods:

The data of patients (N=75) were analyzed to trace adherence to BSCT delivered at an outpatient smoking cessation clinic. In total, 18 patient activities (eg, using a Web-based smoking diary tool or responding to counselors' messages) were selected to measure adherence; the degree of adherence per patient was compared with quitting success. The minimum degree of adherence of patients who reported abstinence was examined to define a threshold for the detection of adherent patients. The

number of adherent patients was calculated for each of the 18 selected activities; the degree of adherence over the course of the treatment was displayed; and the number of patients who were adherent was analyzed. The relationship between adherence and 33 person-, smoking-, and health-related characteristics was examined.

Results:

The method for measuring adherence was found to be adequate as adherence to BSCT correlated with self-reported abstinence (P=.03). Patients reporting abstinence adhered to at least 61% of BSCT. Adherence declined over the course of the treatment; the percentage of adherent patients per treatment activity ranged from 82% at the start of the treatment to 11%-19% at the final-third of BSCT; applying a 61% threshold, 18% of the patients were classified as adherent. Marital status and social modeling were the best independent predictors of adherence. Patients having a partner had 11-times higher odds of being adherent (OR [odds ratio]=11.3; CI: 1.33-98.99; P=.03). For social modeling, graded from 0 (=partner and friends are not smoking) to 8 (=both partner and nearly all friends are smoking), each unit increase was associated with 28% lower odds of being adherent (OR=0.72; CI: 0.55-0.94; P=.02).

Conclusions:

The current study is the first to explore adherence to a blended face-to-face and Web-based treatment (BSCT) based on a substantial group of patients. It revealed a rather low adherence rate to BSCT. The method for measuring adherence to BSCT could be considered adequate because the expected dose-response relationship between adherence and quitting could be verified. Furthermore, this study revealed that marital status and social modeling were independent predictors of adherence.

ClinicalTrial:

Netherlands Trial Registry NTR5113; http://www.trialregister.nl/trialreg/admin/rctview.asp?TC=5113 (Archived by WebCite at http://www.webcitation.org/71BAPwER8).

Citation

Please cite as:

Siemer L, Brusse-Keizer MG, Postel MG, Ben Allouch S, Patrinopoulos Bougioukas A, Sanderman R, Pieterse ME

Blended Smoking Cessation Treatment: Exploring Measurement, Levels, and Predictors of Adherence

JMIR Preprints. 29/01/2018:9969

DOI: 10.2196/preprints.9969

URL: http://preprints.jmir.org/preprint/9969

PMID: 30068503

PMCID: 6094087

✿ Current Preprint Settings

(as selected by the authors)

1)
Allow access to Preprints when not published (under review or accepted) for
(a) Open peer-review purposes.
(b) Logged-in Users only.
✔
(c) Anybody, anytime.
(d) Nobody.
2)
When a final version is published in a JMIR journal
(a) Allow download.
✔
(b) Show abstract only.
3)
Allow access to Preprints when marked as rejected or withdrawn or lapsed
(a) Logged-in Users only.
✔
(b) Anybody, anytime.
(c) Nobody.

The preprint files are not publicly accessible.

http://www.jmir.org/2018/8/e246

The author of this manuscript has specified that after publication, the preprint (submitted versions) should no longer be available (setting 2b). As a reader, please download and cite the published "Version of Record" instead. →

BACK TO HOME PAGE