EFFECTIVENESS OF MEDICATION FOR SMOKERS IN THE ‘REAL WORLD’ – FINDINGS FROM A FIELD STUDY
CHMITORZ, A., GRADL, S. & KRÖGER, C. B.

BACKGROUND AND AIM

Background:
In clinical trials, it was found that medication for smoking cessation treatment enhances abstinence rates. For example, 23.4 to 26.5 % for nicotine patch, 19 to 26.1 % for nicotine gum, 26.7 % for nicotine nasal spray, 24.2 % for bupropion, and 33.2 % for varenicline (Fiore et al., 2008). Fiore et al. (2008) reported higher abstinence rates for smokers receiving a combination of medication and counselling (22.1 %), compared to counselling alone (14.6 %).

In a cross-sectional study, Pierce and Gilpin (2002) found that NRT use does not improve abstinence rates outside clinical settings. However, it was reported in recent longitudinal survey data that NRT use increases abstinence rates in the ‘real world’ (OR 2.1) (West & Zhou, 2007).

Aim: To examine the effectiveness of the combination of counselling and medication for smoking cessation vs. counselling alone outside clinical trials.

PROCEDURE AND SAMPLE

Study design:
- **Experimental group (n = 101)**: Received counselling and medication
- **Control group (n = 102)**: Received counselling alone

Sample description:

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Reference group B</th>
<th>SE</th>
<th>CI</th>
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<tbody>
<tr>
<td>NRT use</td>
<td>No</td>
<td>-1.37</td>
<td>.307</td>
<td>.48 - 1.59</td>
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<tr>
<td>Control variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>FTND score</td>
<td></td>
<td>-.053</td>
<td>.072</td>
<td>.82 - 1.09</td>
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</table>

Regression analysis for NRT use predicting abstinence adjusted for FTND score.

Intervention:

- Both the experimental and the control group attended a cognitive-behavioural-based smoking cessation programme which included:
  - Methods to enhance motivation, self-control, self-management, skills training, lectures on smoking and smoking cessation, relapse prevention methods, positive enhancement and imagination methods.
  - After 4 sessions, smokers stop smoking on a determined quit day.
  - Two telephone booster-sessions
  - The subjects were matched by gender, level of nicotine dependence, and age, in order to improve the applicability and quality of the study (Rajaee-makers, Koffberg, Posthuma, van Hout, van Engeland & Matthey, 2008).

Matching procedure:
Subjects were matched by gender, level of nicotine dependence, and age, in order to improve the applicability and quality of the study (Rajaee-makers, Koffberg, Posthuma, van Hout, van Engeland & Matthey, 2008).

Research design:

A longitudinal design was applied in order to investigate long-term effects. The subjects were assessed at:
- **t0**: Beginning of the programme
- **t1**: Last session
- **t2**: Six months after the last session

RESULTS

To avoid distortion of results due to high levels of variance caused by different therapeutic mechanisms of nonnicotine medication and NRT, users of bupropion (n = 1) and varenicline (n = 10) were excluded from the analyses.

Abstinence rates of NRT users and control group at t2

Regression analysis for NRT use predicting abstinence adjusted for FTND score

Adjusting for FTND score, NRT use does not predict abstinence at the 6-month follow-up.

In combination with a cognitive-behavioural based smoking cessation programme NRT use does not predict abstinence at the 6-month follow-up.

DISCUSSION

We investigated the effectiveness of counselling and medication for smoking cessation vs. counselling alone outside clinical trials.

In a ‘real world’ setting, medication for smoking cessation in addition to counselling seems to be less effective.

An explanation for this result might be that outside clinical trials, users of nicotine products do not adhere to the package insert and recommendations given for NRT use as they do in controlled and supervised clinical settings (Pierce & Gilpin, 2002).

Limitations:
Small sample size
No biochemical verification was carried out

REFERENCES


CONTACT:
Andrea Chmitorz & Sabine Gradl PhD
IFT München
Münchner Straße 14
D-80334 München
a.chmitorz@gmx.de
s.gradl@ift.de