Effectiveness of a university on-campus pharmacist directed tobacco cessation program

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BACKGROUND

- Despite a smoking prevalence decline from 2005 to 2014, approximately 40 million adults in the USA are classified as current smokers (16.8%).
- In the USA, tobacco use is currently the number one preventable cause of disease and death, each year leading to greater than 480,000 deaths and $300 billion dollars spent in economic cost related to this behavior.
- Smoking among college-aged students and adult employees is a large problem in the USA. Data published in 2015 shows smoking rates are approximately 16.7% for adults aged 18-24 and 20% for adults aged 25-64.
- Many college and university campuses have instituted tobacco-free policies. According to Americans for Nonsmokers’ Rights, around 1,130 colleges and universities are completely tobacco free in the USA, including cigarettes and smokeless tobacco.
- Studies show pharmacists are beneficial for tobacco cessation by speaking to patients about cessation and providing counseling or information on quit-lines with or without pharmacologic cessation agents. Data on use of pharmacists in ambulatory outpatient clinics in college or university cessation programs is apparently lacking.

OBJECTIVE

- Primary objective: Effectiveness of a university, on-campus pharmacist-led tobacco cessation program on tobacco cessation rates
- Secondary objectives: Tobacco abstinence through one month following treatment period end, medication safety in terms of side effect occurrence, effect of side effects on compliance, occurrence rate and severity of nicotine withdrawal, blood pressure change in the nicotine replacement therapy (NRT) group, change in attitudes and beliefs of participants about tobacco use, the campus-wide ban, and the benefit of utilizing pharmacists in quitting

SETTING AND SAMPLE

- Patient visits take place at ONU HealthWise, an on-campus employee and student health and wellness clinic
- Inclusion: aged > 18; current user of tobacco or tobacco product line extensions; current ONU student, employee, or dependent; agrees to counseling and/or pharmacotherapy
- Exclusion: Pregnancy; fails to meet inclusion criteria

METHODOLOGY

- Patients are recruited by posters, presentations, e-mails, and word-of-mouth. Each signs an informed consent form prior to study inclusion.
- Patients have an initial visit with an ONU HealthWise pharmacist to gather baseline medical data. Information regarding tobacco use history (habits, goals, past cessation attempts, current motivations to quit) is collected (see figure below, left). A tobacco cessation workbook is given and explained to the patient by a pharmacist. A quit date and treatment plan is determined at this visit.
- If NRT is the chosen cessation aid, patients return to the clinic to receive the first month supply prior to the quit date. If a prescription option is chosen, patients are referred to discuss this therapy with their primary care provider.
- Patients are seen face-to-face or contacted via telephone or email on quit day and at 1 week, 4 weeks, 8 weeks, 12 weeks, and end of treatment. Continued abstinence is assessed with follow up at 14 and 30 days following treatment end.
- At each visit tobacco use, reason of use, withdrawal symptoms experienced, and medication side effects experienced will be assessed (see figure below, left).

RESULTS

- Enrollment is ongoing. Since implementation in August: 5 patients have enrolled; 4 have begun treatment
- **N/A if: treatment ongoing, or < 14 days since completion

<table>
<thead>
<tr>
<th>Patient</th>
<th>Tobacco Form</th>
<th>Cessation Aid (+ Counseling)</th>
<th>Treatment Status</th>
<th>Primary Endpoint</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Chewing tobacco</td>
<td>NRT patch</td>
<td>Ongoing</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Cigarettes</td>
<td>NRT patch</td>
<td>Complete</td>
<td>Achieved</td>
</tr>
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<td>Cigarettes</td>
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<td>Achieved</td>
</tr>
<tr>
<td>4</td>
<td>Cigarettes</td>
<td>NRT patch</td>
<td>Complete</td>
<td>Achieved</td>
</tr>
</tbody>
</table>

**REFERENCES**

6. Centers for Disease Control and Prevention. Nonsmokers’ Rights, around 1,130 colleges and universities In the USA are classified as completely tobacco free. According to Americans for Nonsmokers’ Rights, around 1,130 colleges and universities are completely tobacco free in the USA, including cigarettes and smokeless tobacco.

AUTHOR DISCLAIMER

Authors of this project have nothing to disclose.