Relationship between age, gender, perceived susceptability, benefit, and self-efficacy among at-risk tobacco users for smoking cessation prevention: A correlational study

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BACKGROUND

Cigarette smoking is associated with significant health problems, accounting for approximately 480,000 deaths annually in the United States (US), according to the Centers for Disease Control and Prevention (CDC), in 2022. Also, approximately 41,000 deaths resulted from second-hand smoking exposure in the US. Different types of smoking-related diseases include dental plaques and gum diseases, lung cancer, and chronic obstructive pulmonary disease (CDC, 2022). Other conditions include weight loss, elevated blood pressure, and coronary artery disease (CDC, 2022). Tobacco addiction is recognized as a severe disorder; the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5 Text Revision (TR); American Psychiatric Association, 2022) describes 11 criteria to diagnose tobacco use disorder. At least two criteria must be present for possible addiction in the prior 12 months when diagnosed with tobacco disorder.

PURPOSE

The study aims to determine whether there is any relationship between age, gender, perceived susceptibility, benefit, and self-efficacy among at-risk tobacco users for smoking cessation prevention.

RESEARCH QUESTION

Is there any relationship between age, gender, perceived susceptibility, benefit, and self-efficacy among at-risk tobacco users for smoking cessation prevention?

THEORETICAL FRAMEWORK

The study will use the "5-A" framework intervention for smoking cessation prevention as a theoretical framework. The framework intervention can be effective in helping individuals quit smoking by using the following concepts: "ask, advise, assess, assist, and arrange" (US Preventive Services Task Force., 2020). First, ask about smoking use that encourages screening for tobacco use in all adults aged ≥18 years. Second, advise adults to quit using explicit personalized messages linked to their health goals of smoking cessation. Third, assess previous attempts and barriers to quitting smoking, history of smoking, and willingness to quit. Finally, assist adults when they quit smoking, provide information about pharmacotherapy, and arrange counseling therapy sessions (Cadet, 2018).

METHOD

The study design is quantitative correlational, non-experimental research involving numerical measurement of variables to investigate if any relationship exists between them. The inclusion criteria are smokers aged 18 and up, able to provide consent, and reported a smoking history for at least one year. IRB approval will be obtained before conducting the research.

INSTRUMENT

The Health Belief Model (HBM) questionnaire will be used for data collection (Kueh, Rahim & Rashid, 2022). Thirty-four questions will be used with a 5-point Likert scale ranging from '1=strongly disagree' to '5=strongly agree'. The tool has two sections (Kueh, Rahim & Rashid, 2022). The first section consists of 30 items and has the following six subcategories representing the six constructs of the health belief model—perceived susceptibility (five items), perceived seriousness (five items), perceived benefits (four items), perceived barriers (six items), cues to action (five items), and self-efficacy (five items) (Kueh, Rahim & Rashid, 2022). The second section of the HBM has four items that describe behavioral health intention.

HBM VALIDITY AND RELIABILITY

A panel of 10 experts assessed the content validity of the HBM questionnaire (Kueh, Rahim & Rashid, 2022). Ten smokers evaluated the face validity of the HBM questionnaire to determine whether it looked and read like the construct intended to measure (Kueh, Rahim & Rashid, 2022). The HBM questionnaire construct validity was also analyzed through exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The study reported that 100 and 171 smokers participated in phases 1 and 2 for the EFA (Kueh, Rahim & Rashid, 2022). Internal consistency for reliability was measured using Cronbach's alpha coefficients ranging from 0.705 to 0.864 and 0.838 to 0.889 in phases 1 and 2, respectively (Kueh, Rahim & Rashid, 2022).

IMPLICATIONS TO NURSING PRACTICE, RESEARCH, EDUCATION

1. For nursing practice, using the "5-A" framework intervention for smoking cessation is crucial to help with smoking cessation and prevention, which includes "ask, advise, assess, assist, and arrange" (US Preventive Services Task Force, 2020).
2. Assess previous attempts and barriers to quitting smoking, history of smoking, and willingness to quit (Cadet 2018, 2019).
3. More quantitative and qualitative stud**ies** can be **investigated on** motivating at-risk tobacco users on smoking cessation prevention.
4. Nurses can educate smokers on pharmacotherapy options, including nicotine replacement therapy (NRT), sustained-release bupropion, and varenicline.

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