

L. CULTURALLY SENSITIVE SMOKING CESSATION INTERVENTION PROGRAM REDESIGN FOR ARAB-AMERICAN YOUTH

Ibrahim Al-Faouri, PhD; Virginia Hill Rice, PhD, RN;
Linda Weglicki, PhD, RN; Anahid Kulwicki, DNSc, RN;
Hikmet Jamil, MD, PhD; Omar Baker, PhD, RN;
Hasan Al-Omran, PhD, RN; Mona Dakroub, BA

OBJECTIVES

The purpose of this project was to redesign and tailor the Project Toward No Tobacco Use (Project TNT) smoking cessation program to make it culturally and ethnically sensitive for Arab-American youth in high schools and community healthcare facilities and to add health promotion and tobacco use prevention elements.¹ The specific aims of this project were to: 1) redesign Project TNT based on the Kemp Instructional Design Plan to be culturally sensitive for Arab-American youth^{2,3}; 2) add health promotion and tobacco use prevention elements; 3) develop an Arabic version of the revised program; and 4) develop a program guide for health educators on the instructional resources used in this project.

BACKGROUND

Project TNT was built to address the primary causes of tobacco use among teens by building self-esteem, self-efficacy, social support, and the development of skills to resist tobacco use. Also the program focuses on knowing factors of addiction, health risks, avoiding marketing by tobacco companies, family/peer pressure, stress management, means to overcome the barriers to non-tobacco use, and developing a healthy lifestyle.⁴ Most of these elements are included in the Arab-American Tobacco Use–Intervention (AATU-I), along with the integration of Arab-American cultural competence elements, and health promotion and tobacco use prevention content.

Cultural competence is an essential part of the instructional design process and is very important in designing health promotion programs. Campinha-Bacote defines cultural competence as “the process in which the nurse continuously strives to achieve the ability and availability to effectively work within the cultural context of a client individual, family, or community.”⁵ Cultural competence in health promotion programs can reduce barriers to learning and improves health and health education outcomes. Culture is a vital factor in both how health educators present educational materials and how learners respond to the educational methods and contents. Culture is determined not only by ethnicity, but by factors such as age, gender, sexual orientation, and socioeconomic status. Kulwicki and Rice found that cultural attitudes and behaviors, family and peer influence,⁶ and patterns of smoking are significant factors that should be taken into consideration when designing smoking cessation programs.

Kemp noted, “Individuals from minority cultural groups may need to experience more than routine teaching procedures.”² The following considerations need to be employed with minority cultural learners²:

- Provide incentives for the learner.
- Provide group activities.
- Employ more audio-visual contents.
- Provide more culturally specific examples.
- Allow more time than usual for study.

Studies have shown that school-based tobacco use intervention/preven-

From the College of Nursing (IA, VR, LW, OB, HA, MD) and the Department of Family Medicine (HJ), Wayne State University, Detroit; Wayne County Department of Health and Wellness Promotion, Detroit (AK); Community Health & Research Center, ACCESS, Dearborn (HJ); Michigan.

tion programs, based on the model of identifying social influences and cultural factors on tobacco use among youth can teach skills to resist such influences and significantly reduce and/or delay adolescent smoking.

CONCEPTUAL FRAMEWORK

Instructional design is a systematic planning-using-learning theory to ensure quality and measurable outcomes. It is the whole process of assessment of learning needs and goals and the development of a delivery system to meet those needs. It includes four essential parts: learners, methods, objectives, and evaluation.

An instructional design model is the use of systematic guidelines that instructional designers follow in order to create a program or teaching materials.^{2,3} Kemp's instructional design plan was selected to guide the redesign process of AATU-I because it is a systemic and nonlinear model and encourages designers to intervene in all areas as appropriate. The oval shape of the model implies that the design and development process is a continuous cycle that requires constant planning, design, development, assessment, and evaluation to ensure effective instruction. In addition, formative and summative evaluations allow for changes in the content or treatment of the elements at any time during the development cycle. The idea is to improve any weaknesses in the program as they are discovered to better ensure that learners will be able to accomplish the program objectives at a satisfactory level.

Kemp's instructional design plan is composed of nine elements in a logical, clockwise sequence encircled with revision and summative/formative evaluation. In the middle of the nine elements are the learning needs. However, the starting point and order in which the instructional designer addresses the individual elements is not predeter-

mined. Designers may enter the circle at any point and use the model's flexibility to suit their own needs. Elements not connected with lines or arrows indicate a linear, sequential order. All programs or projects may not require use of all elements.

Revision and feedback loops allow the designer to make changes in the content or treatment at any time during the development of instructional plans. The process is ongoing. The idea is to improve weak parts of the program, as they are discovered, to better ensure that learners will be able to achieve the instructional objectives at a satisfactory level within reasonable time and cost.

Formative evaluation allows the designer to collect data and information to improve the program while it is still being developed. Summative evaluation is designed for use after an instructional program has been implemented to determine overall effectiveness and make future recommendations. How each of these elements was used in the refinement and tailoring of the Arab-American Tobacco Use-Intervention for youths is described below.

PROCEDURES

Learning Needs Priorities and Constrains

Burton and Merrill divided needs assessment into six categories (Normative Needs, Comparative Needs, Felt Needs, Expressed Needs, Anticipated or Future Needs, and Critical Incident Needs).¹ In the Arab-American Tobacco Use (AATU) project, the 'felt and expressed needs' of both health educators and the Arab-American students guided changes. Health educators in the AATU project noted a gap between their presentations made during the previous school year sessions and a desired performance level. They also indicated that the material being presented was more attractive and motivational for the students.

Students mentioned to health educators that they like to see more video clips and interactive involvement. Health educators met on a weekly basis to review all of the materials in the teaching sessions in light of the feedback received from the students and their teachers. Also, a group of students who were new immigrants who still had some language differences were asked to present their understanding of the content and materials being presented in English. A need to have a full Arabic version was determined.

Topic-Job Task Purposes

Project TNT,⁴ the precursor of AATU-I that was designed to target the primary causes of tobacco use among adolescents, had been shown to be effective in non-Arab cultural groups. The AATU-I project consists of weekly 40-minute sessions with a health educator using small group discussion and overhead transparencies for more than four weeks. Trained bilingual health educators delivered the intervention in a small group or classroom of no more than 20 students. The goal of the redesigning process was to make the intervention program more culturally appropriate for Arab-American youth, with special attention to their linguistic issues and meanings, and to make the program more attractive for them by introducing audiovisual multimedia materials.

Learner Characteristics

This program is directed to the youth who self-identify as Arab-American who agree to provide profile research data, particularly 9th graders. Arab-American immigrants, descended from the Arabs of the Middle East, share a similar cultural identity, basic values, traditions, religion, and language. The majority are poor, undereducated, and live in extended families; most of them are from low to middle class. Offering cigarettes in the Arabic culture to guests and friends is considered a kind of hospitality and display of

respect. This practice is culturally counterproductive in light of the terrible health hazards of tobacco use.

Subject Content and Task Analysis

Program topic contents will be the same video clips, but more visual and audio effects that are appropriate for adolescents will be used. The sequence of the content has been changed to help students develop a non-tobacco use agenda.

Learning Objectives

Objectives for the whole program and objectives for each session were revised in light of the modifications in the topics and contents. The majority of objectives are mainly to affect cognition and reduce negative effects.

Teaching/Learning Activities

In order to achieve the maximum success in this intervention program, learning activities were revised and redesigned to include the following: PowerPoint presentations using visual animations and audio effects, multimedia educational materials such as video clips, role playing, a case study (Mona's case), simulations (Smoky Suzy), and models (gross mouth).

Instructional Resources

New use of laptop computers, LCD Projectors, Narjeel, Smoky Suzy doll, gross mouth model, cigarettes, lighter, speakers, etc were our instructional resources.

Support Services

Budget, facilities, and materials are all provided from the AATU research project.

Learning Evaluation

The effectiveness of the instructional process was evaluated through the class interaction, feedback from the teachers, and measures filled out by students in the last session of the intervention program. Student evaluation of the program includes items that directly measure the extent to which the program was helpful on a scale from 0 to 10, and also measure how helpful the classes were in stopping tobacco use. Other questions ask for students' suggestions on how to improve the program.

Pretesting

Pretesting is mainly performed to provide learners with expectations about the topic and the materials that will be presented. Health educators did not give students any kind of paper test; instead they explained the objectives in the beginning of the program and at the beginning of each session. Also they encouraged the students to discuss what they already knew about tobacco.

CONCLUSION

One of the primary goals of the instructional design process was to design effective and efficient instructions that produced reliable results each time it was presented to the learner.² A well-designed instructional strategy prompts and motivates the learner to actively make the connections between what the learner already knows and the new information being presented.

The primary goals of this project were met successfully. We developed a culturally sensitive multimedia PowerPoint Arab-American Tobacco Use-In-

tervention program (AATU-I) in English and in Arabic. A printed manual for the instructional resources and how to use the equipment was developed and used by the health educators. Both the English and Arabic versions of the program were revised and evaluated during instructional development and application to make the necessary changes. It was finally piloted with 9th graders in two local high schools with very positive evaluations. Implementation and evaluation of its effectiveness is ongoing.

ACKNOWLEDGMENT

This intervention was developed, in part, with data from a study funded by a grant from the National Institute for Child Health and Human Development (NICHD), grant number RO1 HD37498, Virginia Hill Rice, principal investigator.

REFERENCES

1. Burton JK, Merrill PF. Need assessment: goal, needs, and priorities. In: Briggs LJ, Gustafson KL, Tillman MH, eds. *Instructional Design: Principles and Applications*. 2nd ed. Englewood Cliffs, NJ: Educational Technology Publications; 1991:17-43.
2. Kemp JE, Morrison GR, Ross SM. *Designing Effective Instruction*. 2nd ed. Upper Saddle River, NJ: Prentice-Hall; 1996.
3. Kemp JE. *Designing Effective Instruction*. 3rd ed. New York, NY: John Wiley & Sons, Inc; 2001.
4. Dent CW, Sussman S, Stacy AW, et al. Two-year behavioral outcomes of Project Toward No Tobacco Use. *J Consult Clin Psychol*. 1995; 63(4):676-677.
5. Campinha-Bacote J. *The Process of Cultural Competence in the Delivery of Healthcare Services: A Culturally Competent Model of Care*. Cincinnati, Ohio: Transcultural C.A.R.E. Associates; 1998.
6. Kulwicksi A, Rice V. Arab-American adolescent perceptions and experiences with smoking. *Public Health Nurs*. 2003;20(3):177-183.