Title:
Tribal College Students’ Access to and Use of Mobile Communication and Technology for Health Information

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Session Title:
Smoking Cessation Interventions
Slot:
Q 15: Sunday, 30 July 2017: 3:30 PM-4:15 PM
Scheduled Time:
3:50 PM

Keywords:
Text messaging, Tribal communities and tobacco cessation

References:


Abstract Summary:
Cellphones and personal computers have become popular mechanisms for delivering and monitoring health information and education, including the delivery of tobacco-cessation education and support. This study documented the availability and use of mobile communication and technology by tribal college students in Montana.

Learning Activity:

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<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<tr>
<td>Examine availability of mobile communications and technology for health education and information in urban and rural communities worldwide.</td>
<td>Availability of mobile communications and technology in urban and rural communities.</td>
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<td>Assess trends in the use of mobile communications and technology to address health education and promotion in rural settings worldwide.</td>
<td>Mobile communications technology has become a popular mechanism for delivery of health information. Successful models for using text messaging for tobacco cessation</td>
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exist. Limited data about the availability of cell phones and technology access OR the acceptability of electronic media for health promotion in tribal communities.

| Describe factors which limit access to technology in rural tribal communities. | Availability of equipment, transmitter towers, power sources Cost of equipment |
| Assess the feasibility of implementing a tobacco cessation program using text messaging in targeted tribal populations. | Report the availability and use of technology by location, age, gender. Report participant tobacco use practices. Report participant interest in and willingness to use technology for health education and information. |

Abstract Text:

**Purpose:** The purpose of this study was to assess the availability and use of cell phones for health education and promotion purposes in two tribal college communities in Montana. The study was completed in preparation for an intervention study examining the effectiveness of a text message delivered tobacco cessation program for tribal college students. The text messaging program was a modification of a successful program developed and implemented in New Zealand (Rodgers et al., 2005). Mobile communications technology is increasingly used for health education and promotion and as a mechanism to support healthy activities. In 2014 it was reported that 90% of the population in the U.S. have cell phones (“Mobile Technology Fact Sheet,” 2014). Undergraduate college students in the U.S. are among the most “connected” worldwide, with 92% owning personal laptops and/or cell phones and 98% having internet access (Smith, Rainie, & Zickuhr, 2011). There is limited data about the availability of cell phones and networks in Indian Country and the acceptability of electronic media for health promotion purposes by American Indian college students.

**Methods:** This project was designed as a descriptive study. The research universities and tribal colleges' Institutional Review Boards determined to study to be exempt. The inclusion criteria were that participants had to be self-reported American Indian, at least a part time student at the TCU and 18 years of age or greater. The twenty two multiple choice questions queried respondents regarding their access to, use of, and preferences regarding cell phone use for health education and promotion purposes. Participants were recruited at the tribal college by student workers and researchers. Participants were given $10 after completion of the survey. 200 paper/pencil surveys were gathered from two tribal college sites.

**Results:** Approximately 36% of tribal college students reported smoking. The mean age for tobacco use initiation was 15.7 years, with a range of 8 – 30 years. 98% of students had access to a computer, although less than 60% had access every day. 91% had a cell phone, but not all had unlimited text. Half of the respondents stated they would be interested in participating in a smoking cessation study using cell phones. Variations in characteristics of students and responses was assessed by RUCA code and statistically significant differences identified. Results of the surveys were reviewed and approved by tribal college presidents.

**Conclusion:** Tobacco use in rural and tribal communities continues to be high, making the development of tobacco cessation strategies that can effectively reach rural populations a priority. Students at tribal colleges in rural settings had less access to mobile communications and technology than students in universities and community colleges. Internet and cellphone use and access varies based on system infrastructure and community placement. Effective development and deployment of health education and promotion requires knowledge of the access to and acceptability of content by priority users.