

Perceptions of control in health behaviors and outcomes: Cultural considerations

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Abstract

This study investigated the citizens of Kazakhstan's reported perceptions of control over their own health. Research shows that different populations demonstrate variance in health beliefs and attributions of health behaviors (Vaughn et al., 2009). If the public does not see health outcomes as within their control, current efforts in health promotion will not produce changes in behavior towards healthier lifestyles.

Surveys were distributed in 10 marketplaces in Astana, Kazakhstan. Surveys included demographic information, health behaviors such as alcohol and tobacco use, exercise, and diet. We included the multidimensional health locus of control scales (MHLC) as the primary measure to determine levels of perceived control (Wallston, et al., 1978; Wallston, 2005).

Mean scores on the MHLC subscales were [Possible Range: 6 – 36]: Internal: 29.699 (+ 0.64); Chance: 20.817 (+ 0.849)]; and Powerful Others: 23.723 (+ 0.766). While the results of this study revealed high scores in internal control, it also revealed high scores in the perception that health is in the hands of others such as medical providers. Such scores are different than Western European cultural groups and similar to South Asian cultural groups, revealing cultural influences on health and behaviors.

The scores from this study are significant in that the MHLC subscales are not at odds with one another from the perspective of our participants. Further investigation is

warranted regarding attributions of illness, behavior and health in addition to the relationship between the public and the health care system.

Introduction

This pilot study investigated the cultural influence on how much the citizens of Kazakhstan feel they have control over their own health. Efforts in health promotion build on the assumption that the public sees their current and future health status as a related to or as a result of their health choices and behaviors. Health promotion relies on the practice that through information and persuasive messages the public can make changes to their lifestyles and behaviors to improve their health outcomes (Edberg, 2007).

However, the strategies of promotion involving information dissemination or even social appeal are cultural constructs that assume particular beliefs and perceptions about individual responsibility and control regarding outcomes. Research shows that different populations demonstrate variance in health beliefs and attributions of health behaviors (Vaughn et al., 2009; Steptoe and Wardle, 2001; Wrightson and Wardle, 2010). Variance occurs among cultural groups regarding health behaviors and causes of illness (Lundell et al., 2013). Furthermore, political histories of health care systems contribute to cultural perceptions of roles and responsibilities regarding health care professionals and the public (Bond and Beresford, 2003).

Health behaviors and beliefs have been studied extensively in the West, but in post-Soviet countries this phenomenon is in need of further attention (Perlman et al., 2003; Bobak et al., 2000). The post-Soviet Republic of Kazakhstan, in addition to undergoing significant changes in its health care model, is also beginning to develop efforts in public health promotion through its creation of a Center for Healthy Lifestyles. In addition to holding events, this center has recently been producing health messages and advertisements for public consumption. Health promotion that is built on the cultural beliefs and attitudes of one cultural group is not suited for another cultural group which, through historical and contemporary influences, has different views regarding health, behavior, and control. In this case, if the public does not see health outcomes as within

their control, current efforts in health promotion will not produce changes in behavior towards healthier lifestyles.

One established measure of perceived health locus of control is the multidimensional health locus of control scales (MHLC). The MHLC were developed by Wallston and colleagues (1978) to assess participants' reports of how much control they perceive they have over their health. The MHLC contains three subscales: internal (whether you feel that you have control over your own health), chance (whether you feel your health is due to luck, fate, or chance), and powerful others (whether you feel that powerful individuals, such as physicians or other health professionals, control your health).

Q1: What are the perceptions of the general public of Kazakhstan regarding control over their health?

Q2: Are the levels of the MHLC subscales correlated with particular health behaviors?

Methodology

To begin investigating how culture influences the perceptions of control and responsibility in health in Kazakhstan, surveys were distributed in nine marketplaces in Astana, Kazakhstan. Surveys included demographic information, health behaviors such as alcohol and tobacco use, exercise, and diet. We included the multidimensional health locus of control scales (MHLC) as the primary measure to determine levels of perceived control (Wallston, et al., 1978; Wallston, 2005).

Students from the communication course *Science, Health and Social Influence* participated in the collection of survey data for this study. After covering the scales as part of course material, students were trained how to approach participants and handle the distribution and collection of surveys. Twenty-seven students were divided into groups of three to create nine groups. Each group was assigned a popular marketplace in Astana. The nine marketplaces in Astana were chosen so as to cover the different areas of the city. On a weekend during common shopping times, students approached every third passerby as a potential participant. Records of not only completed surveys but on how many people were approached and their response were also kept.

Results

The mean scores on the MHLC subscales were [Possible Range: 6 – 36]: Internal: 29.699 (+ 0.64); Chance: 20.817 (+ 0.849)]; and Powerful Others: 23.723 (+ 0.766). While the results of this study revealed high scores in the public's sense of personal control over their own health, it also revealed high scores in the perception that health is in the hands of others such as medical providers as well as a result of chance or fate.

Most health behaviors were not significantly related to any of the reported MHLC subscales. However, we found one significant finding with tobacco smoking and the Powerful Others subscale. 12% of participants (24.2% of men) reported daily tobacco smoking; 10.3% (14.2% of men) reported non-daily tobacco smoking; and 76.6% (60% of men) reported that they did not smoke tobacco products. Tobacco smoking was negatively correlated (-.174) with the Powerful Others subscale.

Discussion

Such MHLC scores are different than American and Western European cultural groups, but they are similar to South Asian cultural groups, revealing possible cultural influences on perceptions of health and health behaviors. The subscales, developed in a Western cultural setting, often find that those reporting a high level of internal control report lower scores in control residing in external areas such as chance or powerful others. However, as Steptoe and Wardle (2001) found in their study of Eastern Europeans and Wrightson and Wardle (1997) found in their study comparing White Europeans with South Asian and Afro-Caribbean, these subscales are not always at odds with one another in other cultural groups.

Our pilot study revealed that this also might be the case with the public of Kazakhstan. While these participants reported high levels of internal control, they also reported high levels of control coming from powerful others. Some possible explanations of this perception include the influence of the Soviet model of health care that focused on treatment of disease rather than on health and prevention. Health care was (and largely still is) provided by the State and, therefore, was the responsibility of the State. While healthy lifestyles are now being promoted and the public may even be reporting a sense

of control over their own health through their lifestyle, the perception that health still resides in the hands of powerful others such as health care providers may cause the powerful others subscale score to be high as well.

The significant negative correlation between tobacco use and the powerful others subscale also deserves further investigation. Those who are using tobacco are less likely to perceive health care providers as influencing their health, while those who perceive health care providers as having some control over their health are less likely to use tobacco. Possible explanations for this phenomenon include anti-tobacco messages from health care providers as well as those participants who are generally more health conscious and avoid tobacco also see their health care providers regularly.

There are several limitations to this pilot study regarding the sample as well as the methodology. The participants are not a truly representative sample of the city or the country for that matter. Furthermore, their reported perceptions and health behaviors are not reflective of countrywide statistics regarding tobacco and alcohol use as well as diet and exercise. The influence of social desirability is likely which also further adds to the knowledge gained from this pilot study. In order for social desirability to influence participants' answers regarding health behaviors, the participants must possess a decent knowledge of what a healthy lifestyle is. Therefore, though their health behaviors may not be as healthy as reported, they may have more knowledge of healthy behaviors and possibly why they are desirable than was previously anticipated.

Conclusion

The scores from this study are revealing in that the MHLC subscales are not at odds with one another from the perspective of our participants. Further investigation is warranted regarding attributions of illness, behavior and health in addition to the relationship between the public and the health care system to understand this particular population's view of health and illness and how to promote healthier lifestyles.

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