Exploring the relationship between work environment, job satisfaction, and intent to stay of Jordanian nurses in underserved areas

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ABSTRACT

Aims: The aims of this study are to (1) examine the relationships between work environment, job satisfaction and intention to stay at work; and (2) explore the predicting factors of intention to stay at work among nurses in underserved areas.
Background: Developing and fostering creative work environment are paramount especially in underserved areas, where the work conditions present many challenges.
Methods: A descriptive correlational design was utilized to collect data from 330 hospital nurses who worked in two underserved governorates in Jordan. A set of instruments were used to measure the variables of the study.
Results: The results showed a strong positive association between job satisfaction and work environment. The results of logistic regression indicated receiving housing, job satisfaction, and work environment were the predicting variables of the level of intention to stay at work.
Conclusion: It is critical to improve work conditions and create a culture of supportive work environment in underserved area.

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1. Introduction and background

The global nursing shortage and its negative impact on health care has been a challenge for nurse administrators all over the world. Research evidence points out that adequacy of health care providers is critical for maintaining population health (Aiken et al., 2012; Alenius, Tishelman, Runesdotter, & Lindqvist, 2014). There are also disproportionate concentrations of health workers in some areas at the expense of others (Kuehn, 2007). It is widely acknowledged that nurses are an important part of health systems, providing up to 90% of direct patient care (O'Brien-Pallas et al., 2003); yet there are large global shortages of nurses with inequities in the distribution of the nursing workforce (Goulette, 2010).

It is well evidenced that residents in rural areas receive less health care than those from urban areas (Bennett, Bellinger, & Probst, 2010; Jackson et al., 2009; World Health Organization [WHO], 2006). The WHO reports that over half of the world's population resides in rural

areas but they are served by only 38 and 25% of the global nursing workforce and physician workforce respectively (WHO, 2006). Such problems with the inequitable distribution of nursing workforce contribute to the global burden of disease and poor health outcomes (Blaauw et al., 2010; Paquette, Zuckerman, & Finlayson, 2011). The WHO defined underserved areas as "geographical areas where populations have limited access to qualified health-care providers and quality health-care services. They include remote and rural areas, small or remote islands, urban slums, conflict and post-conflict zones, refugee camps, minority and indigenous communities, and any place that has been severely affected by a major natural or man-made disaster" (WHO, 2010, page 9). A total of 57 countries around the world face critical health workforce shortages as identified in the WHO, 2006 report. These countries have fewer than 2.3 nurses, doctors and midwives per 1000; which is believed to be too few to deliver the basic level of care needed (WHO, 2006). Moreover, the East Mediterranean Region is suffering from a shortage of nurses that has reached alarming rates and is believed to impact health outcomes (El-Jardali, Jamal, Abdallah, & Kassak, 2007). Preliminary research in the region suggested that many nurses prefer working in urban areas thus leaving rural areas underserved (AbuAlRub, El-Jardali, Jamal, Iblasi, & Murray, 2013; El-Jardali, Makhoul, Jamal, & Tchaghchaghian, 2008), raising concerns about wide discrepancies in access to care between urban and rural areas, and highlighting the need for detailed research on the problem of underserved areas.

To effectively tackle the problem of nursing shortage, efforts should focus on redesigning the work environment. Creating and fostering

supportive work environment are most important especially in underserved areas; where the work conditions present many challenges (AbuALRub & Khawldeh, 2013; Lagarde & Blaauw, 2014). Understanding the factors that might affect job turnover or intention to stay may provide feasible solutions to nursing shortage. For the most part, a supportive work environment is the base for retaining nurses (Kirwan, Mathews, & Scott, 2013; Tervo-Heikkinen, Partanen, Vehviläinen-Julkunen, & Laaksonen, 2008). The assessment of nurses' perceptions of their work environment is paramount when dealing with workforce issues (Al-Kandari & Thomas, 2008). Thus, the objectives of the present study were to (1) examine the relationships between job satisfaction, work environment and intention to stay at work; and (2) explore the predicting factors of intention to stay at work among nurses in underserved areas.

There is a scarcity of research worldwide and in the Middle Eastern countries about work conditions of nurses in underserved areas. In general, international and regional literature showed that nurses working in supportive urban work environment intend to stay more in their work and have less intent to leave their organizations (AbuAlRub, 2010; Aiken et al., 2011; Ganz & Toren, 2014; Lansiquot, Tullai-McGuinness, & Madigan, 2012; Zhang et al., 2014). Job satisfaction has been linked positively with nurses' retention (Ganz & Toren, 2014; Kaddourah, Khalidi, Abu-Shaheen, & Al-Tannir, 2013). Research studies that were conducted in urban areas in developed countries showed that positive perceptions of work environment enhanced the levels of nurses' satisfaction and retention (Ganz & Toren, 2014; Zhang et al., 2014; Rochefort & Clarke, 2010). Such a positive impact of practice environment on job satisfaction was also recently asserted by Lambrou, Merkouris, Middleton, and Papastavrou (2014) who conducted a systematic review of 14 research studies to examine the impact of work environment on nurses' job satisfaction. Moreover, data from 137 hospitals in Pennsylvania from 1999 to 2006 were analyzed by Kutney-Lee, Wu, Sloane, and Aiken (2013) to explore if nursing outcomes such as dissatisfaction and turnover are related to changes in nursing practice environment over time. The findings asserted that nursing outcomes were improved over time due to improvement in practice environment.

Literature from the region documents the challenges pertaining to socio-cultural aspects in developing a local nursing workforce. Nurses' social status is a discouraging factor to remain in the profession. Additionally, many female nurses leave the profession after marriage (AbuAlRub et al., 2013; Zarea, Negarandeh, Dehghan-Nayeri, & Rezaei-Adaryani, 2009). Socio-cultural factors make recruitment and retention of nurses from the region difficult, due to both the nature of the work (females having to work with males, evening/night shifts) and poor perceptions of nursing as nurses are perceived as patients' maids and doctors' assistants (Al-Jarallah, Moussa, Hakeem, & Khanfar, 2009).

1.1. Context of Jordan

Jordan is one of the Middle Eastern countries. Its population is around 6.66 million of which 78% are living in urban areas (Department of Statistics [Jordan] and Macro International, 2014). El-Jardali et al. (2008) pointed two of the key challenges that face Jordanian health workforce as geographical imbalances of health workers and excessive out migration. The average turnover rate of nurses was reported as 36.6% by Hayajneh, AbuAlRub, Athamneh, and Almakhzoomy (2009).

The levels of job satisfaction and intention to stay among hospital nurses in Jordan are on the borderline (AbuAlRub, 2010; Altaany & Jassim, 2013). Jordanian nurses suffer from poor work conditions such as stress, dissatisfaction, and unsupportive work environment (AbuAlRub, 2007, 2010); which enhanced turnover among Jordanian nurses (AbuAlRub, 2007; Hayajneh et al., 2009). Research studies conducted in urban areas in Jordan showed a positive association between job satisfaction and intention to stay work among nurses (AbuAlRub, Omari, & Al-Zaru, 2009).

This is the first study to explore the underlying causes of Jordanian nurses' shortage and retention in underserved areas. Most of the studies that investigated the organizational variables of job satisfaction, nurses' intention to stay at work and work environment were conducted in urban areas in Jordan. There is only one recent qualitative study that was conducted by AbuAlRub et al. (2013) to explore the views of nurses who work in underserved areas, directors of health care institutions and policy makers regarding nurses' retention in underserved areas. The results showed that non supportive work environment, lack of nursing schools in these areas, poor public transportation and lack of financial motivations were some of the reasons that underlie nurses' turnover in Jordanian underserved areas.

Investigating the perceptions of nurses concerning their work environment and job satisfaction and the effect of such variables on nurses' intention to stay at work would help nurses administrators and policy makers in designing effective strategies to promote retention of nurses in underserved areas.

2. Methods

This study utilized a descriptive correlational design. This study was a part of a larger multi-country project (El-Jardali et al., 2012).

2.1. Setting and sample

The study sampled all health care centers and hospitals in two underserved governorates (Mafrq and Ma'an) in Jordan. Both governorates have remote and rural areas and were acclaimed as underserved areas by key informants in a previous study (AbuAlRub et al., 2013). All public hospitals and comprehensive health care centers; 3 hospitals and 7 centers in Mafraq and 2 hospitals and 6 centers in Ma'an were targeted for the present study.

The accessible population was all registered nurses and midwifes in the targeted hospitals. A convenience sampling method was employed. Five hundred thirty-five questionnaires were distributed. Three hundred thirty completed questionnaires were returned, which indicated a response rate of 61.68%.

2.2. Instruments

A structured survey was utilized for data collection. The questionnaire consisted of a demographic form and the following instruments:

Job satisfaction was measured by the McCloskey Mueller Satisfaction Scale (MMSS). This scale contains 31 items on a rating range from 1 to 5; where 1 indicates "very dissatisfied", and 5 indicates "very satisfied". For the present study, a total of 6 items were dropped by a panel of nursing research experts as they were perceived to be not significant to nurses in underserved areas. Moreover, the items were rated on a four-point Likert scale instead of a five-point Likert scale that included a neutral point (El-Jardali, Dimassi, Dumit, Jamal, & Mouro, 2009). The overall alpha coefficient for the scale was 0.89 (Mueller & McCloskey, 1990). In this study, the alpha coefficient for the scale was 0.95.
Work environment was measured by a scale that consisted of 14 questions that were rated on a four-point Likert scale (ranging from strongly disagree to strongly agree). Some of the items were taken from the Revised Nurse Working Index (NWI-R) (Aiken & Patrician, 2000); and additional ones were added by the research team as seen relevant to nurses' work in underserved areas based on reviewed literature. The overall alpha coefficient for the scale in the present study was .93.
Intention to stay was measured by one question, rated on a four-point Likert scale (ranging from strongly disagree to strongly agree), that asked participants to respond to "Are you likely to remain in your current job for the foreseeable future (the coming 1 to 3 years)?" This variable was also measured by asking participants to respond by "yes" or