Intention to stay of nurses in current posts in difficult-to-staff areas of Yemen, Jordan, Lebanon and Qatar: A cross-sectional study

Fadi El-Jardali [a,*], Susan F. Murray [b], Hani Dimassi [c], Diana Jamal [a], Raeda AbuAlRub [d], Khaled Al-Surimi [e], Michael Clinton [f], Nuhad Y. Dumit [f]

[a] Department of Health Management and Policy, Faculty of Health Sciences, American University of Beirut, Beirut, Lebanon
[b] King's College London, Department of Health Policy & Management, Florence Nightingale School of Nursing & Midwifery, UK
[c] School of Pharmacy, Lebanese American University, Beirut, Lebanon
[d] College of Nursing, Jordan University of Science and Technology, Amman, Jordan
[e] Community Medicine Department, Faculty of Medicine & Health Sciences Thamar University, Yemen, College of Public Health and Health Informatics, King Saud ben Abdulaziz University for Health Sciences, Saudi Arabia
[f] Rafic Hariri School of Nursing, Faculty of Medicine, American University of Beirut, Beirut, Lebanon

ARTICLE INFO

ABSTRACT

Background: The nursing workforce shortages in difficult-to-staff areas have implications not only for quality of care but also for population health outcomes. An understanding of attrition and of retention is important to inform policies on the nursing workforce.

Objectives: This paper draws on questionnaire survey data from nurses working in difficult-to-staff areas in four countries in the Eastern Mediterranean Region (Yemen, Jordan, Lebanon and Qatar). It aims to identify the specific and common factors associated with nurses' intention to stay in their current post for the coming 1–3 years in three countries with an internally trained nursing workforce and in a fourth where the workforce is externally recruited.

Methods: Nurses working in 'difficult to staff' areas in Yemen, Jordan, Lebanon and Qatar were surveyed. A conceptual model composed of 6 dimensions based on that of the World Health Organization was constructed with 'intent to stay' (Career Decisions) as the main outcome. Regression models were constructed for each of the dimensions in the conceptual model with 'intent to stay' as the dependent variable for each of the study countries. Subsequently, a collective model that combined Lebanon, Jordan and Yemen was constructed to identify common factors that are associated with intent to stay.

Results: Factors associated with intent to stay differed for study countries. Marriage was positively associated with intent to stay in Lebanon and Jordan whereas years of experience were positively significant for Lebanon and Yemen. Shorter commuting time was significantly associated with intent to stay in Jordan whereas a preference for village life was significant for Lebanon. Job satisfaction was significantly associated with intent to stay in all study countries. Nurses in Lebanon, Jordan and Qatar who indicated that they would choose nursing if they had the opportunity to choose a career all over again were significantly more likely to intend to stay in their current post.

Conclusions: Studies of nurses working in these areas can help national policymakers and local nursing directors better manage the sparse nursing workforce in these localities and to provide them with appropriate incentives and support to encourage them to stay.

© 2013 Elsevier Ltd. All rights reserved.

* Corresponding author at: Department of Health Management and Policy, Faculty of Health Sciences, American University of Beirut, Riad El Solh 1107 2020, Beirut, Lebanon. Tel.: +961 1 350000x4680, 4692.
E-mail addresses: fe08@aub.edu.lb (F. El-Jardali), Susan_fairley.murray@kcl.ac.uk (S.F. Murray), hani.dimassi@lau.edu.lb (H. Dimassi), dj06@aub.edu.lb (D. Jamal), raeda71@yahoo.com (R. AbuAlRub), Kalsurimi@hotmail.com (K. Al-Surimi), mc42@aub.edu.lb (M. Clinton), ny00@aub.edu.lb (N.Y. Dumit).

What is already known about the topic?

- In addition to global health workforce shortages, mal-distribution poses a bigger problem whereby approximately 80% of workers are concentrated in urban settings.
- Despite the fact that half the world's population resides in rural areas, they are served by 38% of the global nursing workforce.
- The implications of nursing shortages are evident by detrimental health outcomes in many low and middle income countries around the world.

What does this paper add?

- Different factors affect intent to stay in difficult-to-staff areas in each study country whereby it is associated with a multitude of personal, career related, and financial factors.
- Although some financial incentives appeared to be important predictors of intent to stay in difficult-to-staff areas in countries with internally trained workforce (Lebanon, Jordan and Yemen), they not as important in the country that relies on externally trained workforce (Qatar).
- Job satisfaction was significantly associated with intent to stay in difficult-to-staff areas in all study countries.

1. Introduction

Shortages in the global health workforce necessitate that countries work toward developing and maintaining a strong, motivated and more capable workforce that can attend to population health challenges and strengthening health system performance functions. A growing body of evidence links the availability of health workers in sufficient numbers and with proper training to enhanced population health outcomes (Anand and Barnighausen, 2004). However, the worldwide deficit in health workers which the World Health Report estimated at 4.3 million workers (WHO, 2006) combined with the geographically disproportionate concentrations of health workers (Dussault and Franceschini, 2006; Kuehn, 2007), mean that many countries are currently struggling to maintain positive health outcomes in underserved, rural and remote areas. In the Eastern Mediterranean Region (EMR) the overall deficit has been estimated at 306,031 health workers indicating a 98% increase is required on the total stock of 312,613 (WHO, 2006). The region was documented as having the second lowest Human Resources for Health (HRH) density (per 1000 population) among the six administrative regions of the World Health Organization (WHO). The shortage of nurses in the EMR will eventually be reflected in poor health outcomes (El-Jardali et al., 2007). There are concerns about wide disparities in access to care and population status between sub-populations within EMR countries (El-Jardali et al., 2010). The majority of the health workforce, including nurses, is concentrated in urban areas, leaving rural and remote areas severely underserved.

The World Health Organization has described '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 internally trained communities, and any place that has been severely affected by a major natural or man-made disaster.*" (WHO, 2010, p. 10). Research on the subject of health workers in rural and underserved areas in the EMR has focused mainly on describing distribution problems and shortages (El-Jardali et al., 2012). Evidence in Yemen, for example, points to wide disparities between rural and urban areas which are not only due to patterns of service delivery but also due to health workforce distribution. Approximately 80% of workers are concentrated in urban settings (WHO, 2009). In Lebanon, most research has addressed the issue of physician shortages (Akl et al., 2007, Kassak et al., 2006; Saab et al., 2003). Although limited research has been published on nurses, the available literature provides some insight. Geographic mal-distribution may be an indirect outcome of the concentration of medical and nursing schools in urban areas (El-Jardali et al., 2012)/mal-distribution can also be an outcome of internal migration from rural areas to urban areas, and of a drain of expertise to external migration to opportunities elsewhere (El-Jardali et al., 2012). For example, evidence suggests that 1 in 5 university trained nurses in Lebanon emigrated within 2 years of receiving their degree (El-Jardali et al., 2008). A key feature of the regional context is that a number of affluent Middle Eastern countries, particularly oil rich Gulf countries, have an extreme shortage of internally trained nursing workforce and rely on internationally educated health workers to rectify that problem. Some of this intake is supplied externally from 'high exporting' countries such as the Philippines and India (Alonso-Garbayo and Maben, 2009) and some from elsewhere in the Middle East and North Africa (MENA).

Hayajneh et al. (2009) addresses the difference between rural and urban areas in Jordan, and shows differences in turnover rate by geographic region, sector, and place of residence (urban/rural). There, rural hospitals were found to have lower turnover rates which the authors attributed to the presence of more public hospitals and proximity to nurses' place of residence (Hayajneh et al., 2009). It should be noted that nurses in Jordan prefer working in public rather than private hospitals as the former offer better salaries and working conditions compared to the latter (Hayajneh et al., 2009). A recent national study in Lebanon revealed staggering turnover rates ranging between 67.1–78.9% (El-Jardali et al., 2009a,b). The study also indicated that many nurses also prefer to live and work in urban areas (El-Jardali et al., 2008) because health organizations located in more rural areas generally offer lower salaries and fewer opportunities for career advancement (El-Jardali et al., 2012).

As in the wider international HRH literature, researchers have tended to focus investigations on why nurses leave, or plan to leave, their posts and to extrapolate from these to suggest strategies for improving retention (El-Jardali et al., 2009a,b, AbuAlRub and Al-Zaru, 2008,