

The Effects of Workplace Discrimination on Job Stress and Depression Among Nurses: A Test of Mediation

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Abstract

The present study was intended to examine the effect of discrimination on the development of job stress and depression, and the mediating role of job stress between workplace discrimination and depression among nurses in hospitals in Iran. The sample comprised 166 nurses holding a bachelor's degree or higher and working in hospitals located in the districts of 5 and 17 of Tehran, the capital city of Iran, which are usually inhabited by economically middle- and low-income people respectively. A random sampling technique was employed based on a cross-sectional design. This study revealed that workplace discrimination was positively correlated with job stress ($\beta = .178$, $p = .000$) and depression ($\beta = .142$, $p = .002$). Job stress was positively correlated with depression ($\beta = .253$ and $p = .000$). The study analysis revealed that job stress partially mediated the relationship between workplace discrimination and depression among nursing professionals. The study suggests that workplace discrimination can be considered a predictor of negative health outcomes and nurses may be vulnerable to job stress, resulting in depression.

Keywords: Workplace discrimination, job stress, depression, nurse, hospital

1. Introduction

1.1 Background

Any form of unfair treatment may negatively impact health, and diverse groups may be vulnerable to adverse health outcomes (Lewis et al., 2015; Williams et al., 2019). As a part of health professionals, nurses are one of the most strategic resources that play an important role in health and medical issues. However, physicians regard nurses as their helpers rather than as professional peers, and a hierarchical structure exists between them (Farsi et al., 2010). However, some increase in the number of male nurses has caused the dissatisfaction of nurses to be reflected in a part of mass media, but still, nursing is seen as an inferior job in the hospital (Nikbakht-Nasrabadi et al., 2003).

Although the Healthcare Reform in 2014 was to expand insurance coverage and improve access to health care, it has led to some unintended drastic consequences (Heshmati & Joulaei, 2016). On the other hand, evidence from different resources suggests an increased rate of discrimination against nursing professionals in Iran. Meanwhile, except for a few that had a qualitative study on violence, sexual harassment, and job dissatisfaction (e.g., Najafi et al., 2017; 2018; Atefi et al., 2014), there is a dust of scarcity on this subject (Valizadeh et al., 2015). Therefore, part of the background study in this research was based on newspaper articles and news.

Under the title "Nurses have always been despised", *Salamat News Agency*, an Iranian newspaper (TABANA, July 2022), reported that medical service organisations in Iran have been engaged in injustice and discrimination in which human beings in pain and in need of humanitarian services have become a commercial and economic source. Sadaghaini (1998) also argued that the implementation of a mechanism in which public hospitals are expected to generate revenues has negatively affected the medical professions, causing a change in the values from the core objectives of disease prevention and effective treatment to wealth creation (Arredondo & Orozco, 2008). Therefore, most of the programs focus on increasing income by establishing hospitals and providing hospital beds and equipment. As a result, resources have been placed in the pockets of a particular group and the double increase in payments has led to the emergence of self-centred doctors who look down on the patients and other hard-working hospital staff (Jafari et al., 2011).

The findings of the study conducted by Jafari et al. (2011) also claimed that there seems to be some sort of informal and unwritten agreements that allow physicians to hospitalise their private clinic patients in public hospitals to reduce the patients' hoteling and facility costs while physicians receive their fees as in private sector that comes out-of-pocket and is known as under-the-table payments. According to the Salamat News Agency, an Iranian newspaper (TABANA, July 2022), due to organisational injustice, nursing professionals who are 70% of the body of the medical staff have been at the service of doctors to generate more and more money, whilst being abused and oppressed. Whenever they demand equity, recognition, and a sense of worthiness, they are subjected to criticism by the authorities who are again doctors (Rezazadeh, 2021).

An article in another newspaper pointing out the results of a comparison between the income of nurses and doctors in 14 countries of the world, claimed that in no country in the world, the income of doctors is sometimes a thousand times that of nurses as is in Iran (Naseri, 2018). In line with it, some studies and many other newspaper articles, referring to the sufferings of nurses from the surprising difference between their incomes with doctors, wrote that the ignorance of the important role of nurses as members of health and treatment groups is related to the implementation of the self-governance plan of hospitals and the unfair distribution of the income leading to a deep inequality between doctors and nurses (e.g., Heshmati & Joulaei, 2016; Hatamizadeh et al., 2019; Rezazadeh, 2021; Salary, 2015; Sharifi-Moghaddam, 1995; Breaking News, Sep. 2019). The present research aimed to investigate the concerns of Iranian nurses about inter-professional collaboration, and the purpose of this correlational mediation study was to explore the effect of workplace discrimination on job stress and depression among the nurses in Iran, and to find out whether job stress mediates the relationship between workplace discrimination and depression among nurses in Iran.

1.2 Workplace Discrimination

Discrimination is generally defined as the act of making distinctions between human beings based on the groups, classes, or other categories to which they are perceived to belong (Marchiondo et al., 2018). Workplace discrimination is defined as treating an individual less favourably in hiring, firing, pay, job assignments, promotions, layoff, training, fringe benefits, in terms of their employment status, individual or group characteristics, age, race, colour, or sex (Draper, 2011; Jasinskaja-Lahti et al., 2006; Williams et al., 2003). In general, workplace discrimination can be present in a variety of ways, such as racial harassment or micro-aggression (Byrd, 2016), as well as the glass ceiling effect causing a pervasive resistance to the efforts of women and minorities to reach the top ranks of management (Purcell, 2010).

Although several studies indicate that employees suffering from unfair and unjust treatments and discrimination against specific groups of people all around the world can lead to many psychological and social problems including job stress (e.g., Dhanani et al., 2018; De Castro et al., 2008; Xu et al., 2020) and depression (e.g., Yunus et al., 2018; Kim et al., 2020; Hammond et al., 2010), there is a scarcity on workplace discrimination against nurses in Iran (Valizadeh et al., 2015).

1.3 Job Stress

Job stress negatively affects mental health, physical well-being, and organisational performance (Jalagat, 2017). Parker and DeCotiis (1983) defined stress as the divergence from intrapersonal normality. Parker and DeCotiis further explained job stress as a physiological functioning in which feeling of discomfort is the first level outcome that puts employees at significant risk, negatively affecting mental health and physical well-being. The psychological imbalance explains the second level outcome that involves diminished work satisfaction, commitment, and motivation, as well as decreased quality of work and job performance. Stress has also been found to be associated with depression (Won & Kim, 2016; Miura et al., 2008).

1.4 Depression

Beck (1979) characterised depression as low mood, hopelessness, low self-esteem and self-worth, poor concentration, as well as a loss of interest or pleasure. Based on Beck's cognitive theory, individuals' experiences guide the way they think, which then give a rise to the development of attitudes or assumptions referred to as schemas. Descalzi et al. (2017) stated that depression is a chronic illness that is genetically based and has the potential to induce work-related stress. Depression may also be induced by stress (Knoll & Carlezon, 2010; Van Praag et al., 2004; Yunus et al., 2018).

Studies have found a link between perceived workplace discrimination and a wide range of mental health outcomes such as job stress and depression (Lewis et al., 2015; Taylor et al., 2007). To the extent of the literature review, most of the literature linking discrimination and health has focused on instances of racial, gender, weight, and age discrimination (e.g., Jackson & McDonald, 2019), while a comparatively smaller number has examined

links between workplace discrimination, job stress and depression (e.g., Kessler et al., 1999; Pieterse et al., 2012; Schmitt et al., 2014).

1.5 Research Hypotheses

Based on the literature review, earlier studies have indicated workplace discrimination as the predictor of job stress and depression, and job stress is positively correlated with depression. The underlying assumption of this study is that

workplace discrimination is a concept within the reach and control of the organisation and the management system. Therefore, the present study seeks to test the following hypotheses and reveal the relationships:

H1: Workplace discrimination is positively correlated with job stress

H2: Workplace discrimination is positively correlated with depression

H3: Job stress is positively correlated with depression

H4: Workplace discrimination may indirectly affect depression. The study is then interested in affirming the role of Job stress as the mediator in the link between workplace discrimination and depression.

2. Methodology and Design

Regarding the purpose of the present research, a quantitative, descriptive, cross-sectional survey design was utilised to collect data on socio-demographics, workplace discrimination, job stress and depression. This cross-sectional study was carried out in the hospitals located in districts 5 and 17 in Tehran, the capital city of Iran, which are mostly inhabited by moderate and low-income residents respectively. Survey questionnaires were completed by the nurses holding a bachelor's degree or higher with at least 2 years of working experience that lays the ground for understanding, scoping, and defining the concept of the respondents' experience (Law et al., 2009). Using simple random sampling, 166 usable completed questionnaires were collected.

Socio-demographics included age, tenure in nursing, gender, education, and marital status. The survey instruments were designed around the validated instrument that has been extensively used and tested across a wide range of public and private sectors. Considering the surprising difference in the income of nurses and doctors and the socioeconomic diversity status of hospitals in Iran, the workplace discrimination instrument developed by Burkard et al. (2022) consisting of 20 items was used. The Job Stress Scale, developed by Parker and DeCotiis (1983) with 13 items, and finally, the PHQ-9 developed by Kroenke and Spitzke (2002), consisting of nine items corresponding to the nine DSM- IV symptoms of depression were used in this study.

Before testing the hypotheses, the instruments underwent a scale purification process, involving examinations of Cronbach's alpha and item-to-total correlations. The items of original instruments were modified for medical service units and then translated into the Persian Language. Three experts in the field, reviewed the questionnaire to determine its consensual validity, and the wording of statements was also simplified. Lastly, a pilot test was conducted with 29 nurses, and the final adjustment was made accordingly. Using Cronbach's alpha coefficient and internal consistency of different items, all the items indicated a very good level of item-to-total correlation scores and were all above the 0.7 recommended by Feldt (1980). A five-point Likert scale ranging from strongly agree to strongly disagree was used to collect data and statistical significance was considered achieved with a p-value of less than 0.05.

3. Results

Descriptive characteristics of respondents included age, tenure, gender, marital status, and education. Age ranged from 23 to 51 (mean 29) and tenure was 2 to 23 (mean 6.23). Of the total respondents, 138 (83.13%) of them were female and 28 (16.87%) were male. The number of married respondents was 47 (28.31%) and single 119 (71.69%). The formal education level of the respondents was 155 (93.37%) undergraduate and 11 (6.63%) graduate degrees.

Multiple regression analyses were conducted to test the hypotheses. The result of the first regression analysis indicated a positive and significant relationship between workplace discrimination and job stress with a standardised β value of .178 ($p = .000$) that supported H1. The result of the second regression analysis between workplace discrimination and depression was significant, indicating support for H2, with a standardized β value of .142 ($p = .002$). The result of the third regression analysis was used to explain H3. The standardized β value was .253 and $p = .000$, at accepted significant value of 0.05. A high β value supports H3 and is the indication that job stress is a strong predictor of depression. The final multiple regression was testing the mediating effect of job stress between workplace discrimination and depression relationship. After providing mediating variable, the coefficient value of β had a significant change and was reduced to .121 ($p = .002$). Since the mediation is partly

indirect which equals the reduction of the effect of the initial variable on the outcome (Preacher & Hayes, 2004), job stress is partially mediating the relationship between workplace discrimination and depression, and H4 was supported.

4. Discussion

Considering descriptive characteristics of respondents, the age and tenure indicated that most of the nurses were at a younger age meaning that they do not remain on the job. Gender information showed that nursing is mostly a female occupation and highlights the importance of an appropriate and supportive organisational and psychological atmosphere. Marital status indicated the existence of some economic and social obstacles. Finally, the formal education level of the respondents puts them in professional human capital and knowledge assets of hospitals that should be treated accordingly.

The results of multiple regressions supported H1 and showed that workplace discrimination will psychologically affect the nurses and engender job stress within them, which was in line with the previous findings (e.g., Dhanani et al., 2018; De Castro et al., 2008; Xu et al., 2020). The results also supported H2 and revealed that workplace discrimination is positively correlated with depression among nurses which is consistent with previous studies (e.g., Yunus et al., 2018; Kim et al., 2020; Hammond et al., 2010), demonstrating the danger of nursing staff discrimination in hospitals. Finally, the results supported H3 and indicated that depression may also be induced by stress which is in line with the previous findings (e.g., Knoll & Carlezon, 2010; Van Praag et al., 2004; Yunus et al., 2018).

Although theoretically, employees who experience discrimination in their workplace are more likely to have job stress that can end up in depression and the results supported H4, to the extent of the literature review, the workplace discrimination relationship with depression has not been examined with a mediator in any previous studies as theoretically suggested in this study. Therefore, the results cannot be compared with any available literature. However, in response to the shortcoming of the literature, the job stress mediating effect was validated in the context of this study.

5. Conclusion and Recommendation

The present study showed the nature of workplace discrimination and emphasised nursing professional staff's interpretation of their organisational setting in relation to their own well-being. The findings of this study are underpinned by the resource-based view (RBV) theory that provides a greater focus on nurses as the strategic human capital in the hospitals and suggests the capitalisation of these professional employees as knowledge assets of the hospitals (Barney, 2001). This study suggests that nurses need equity and psychological and emotional support to be provided for them. In turn, hospitals can benefit from happy and healthy professionals that are effectively committed and engaged with their job as supported by RBV theory.

Considering the fact that discrimination and a severe class divide are more annoying and painful than poverty (Grusky & Szelenyi, 2018; Adams, 1965; Al-Zawahreh & Al-Madi, 20120; Cohen, 2019), a salary increase is not always recommended as a solution for dissatisfaction with a root of discrimination and may only lead to an increase in the costs of production or service and therefore to a rise in prices (Necşulescu & Şerbănescu, 2013). Increasing the salary of nurses, on the other hand, may again result in salary discrimination (Holmes, 2011). Instead, changing the organizational culture and the perspective of doctors to nursing professionals from vertical to horizontal through facilitating the work of nurses in managerial and decision-making positions is recommended. Meanwhile, an effective monitoring system for the prevention of using resources for personal gain and implementing a tiered tax arrangement can also be quite effective in reducing income gaps (García-Sánchez, 2020; Fremstad & Paul, 2019).

Since trends associated with healthcare system reform may become evident only over time, a comprehensive Difference-In-Differences (DID) and Strengths, Weaknesses, Opportunities, and Threats (SWOT) analyses are strongly recommended to evaluate its broader effects on healthcare delivery, efficiency, equity, and effectiveness (Xu et al., 2018).

Competing Interests Statement

The authors declare that there are no competing or potential conflicts of interest.

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