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Workplace Stress in Comprehensive Health Centers and Its Impact on Career Commitment

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Abstract

Considering that workers in healthcare institutions are most at risk of workplace stress (WPS), and that career commitment (CC) is a fundamental requirement for organizational success, this descriptive and quantitative survey study attempts to provide up-to-date details on the extent of WPS and CC and the impact of WPS on CC in Comprehensive Health Centers (CHCs) in Jordan during 2015 and 2016. Four hundred workers were randomly selected from twelve CHCs; the response rate was 73%. The study used the software SPSS version (15.0) for Windows to examine the data. The study produced a number of findings, with the results of mean and standard deviations revealing that the presence of WPS is high and CC is low among CHCs workers. Multiple regression tests showed that high levels of WPS have a negative impact on CC. The study results therefore suggest that appropriate interventions to control WPS may be useful to improve CC in CHCs in Jordan.

Keywords: workplace stress, career commitment, comprehensive health centers, Jordan

1. Introduction

Not all workplace stress (WPS) is bad or acute and, to a certain extent, it can motivate workers, improving productivity and the desire to work (Cooper & Kompier, 2012). However, where chronic and sustained, WPS can be a silent killer (Harris, 2014). Nearly two-thirds of workers around the world believe that they experience constant exposure to WPS and its complications (Edwards, 2011; Daft, 2014). Many studies have indicated that workers in the health sector are the group most exposed to WPS (Michie, 2002; Rossi, Perrewé, & Sauter, 2006; Hackett, Palmer, & Farrants, 2009; Fiabane, Giorgi, Sguazzin, & Argentero, 2013). WPS is considered a major cause of negative effects on institutions (Brown, 2012), including physical and psychological illness, high turnover and absenteeism (Wright, 2014), family conflict (Oncel, Ozer, & Efe, 2007), violence (Saleh & Saif, 2014), and decline of career commitment (CC) (Mrayyan & Al-Faouri, 2008; London, 2014).

In Amman, the capital of Jordan, Comprehensive Health Centers (CHCs) are among the key institutions considered as essential public primary health care providers. These twelve CHCs are visited by almost five million patients annually, which means they need to be effective, have workers seek to achieve their goals, and be characterized by high levels of CC. Based on the fact that health care institutions in Jordan suffer from high levels of WPS (AbuAlRub & Al-Zaru, 2008; Hamaideh, Mrayyan, Mudallal, Faouri, & Khasawneh, 2008; Saif, 2015), the importance of CC as a major factor for success (Jamal, 2014), and the results of studies which indicate that there is a clear relationship between WPS and a decline in CC (Khatibi, Asadi, & Hamidi, 2009; Jamal, 2014; Irefin & Mechanic, 2014), the aim of the current study is to gain a proper understanding of workers' opinions about WPS in CHCs and its possible impact in CC by answering the following questions:

- *First question: What is the extent of WPS and CC in CHCs?*
- *Second question: What is the impact of WPS (input, process, and outcome factors) on CC inCHCs?*

2. Literature review

(Sawyer, 2013; Collins, 2003; World Health Organization, 2003; Centers for Disease Control and Prevention, 2008).

2.2 Workplace Stress (WPS)

The workplace is the main cause of stress for adults (International Labour Organization, 2012; American Institute of Stress, 2015). WPS is produced by the interaction of workers and working conditions (Martins, Ferreira, & Guilhem, 2013). For an in-depth understanding of the sources of WPS and to meet the aim of the current study, the author reviewed many of the previous studies, (Rosen & Milam-Perez, 2005; Paludi, Nydegger, & Paludi, 2006; Centers for Disease Control and Prevention, 2008; Royal College of Nursing, 2009), to provide a comprehensive perception of the causes of WPS and classifies them as follows:

2.2.1 WPS Connected to Input Factors

We spend upward of 90% of our time inside buildings, so architectural design has a significant effect on human health, including WPS (Evans & McCoy, 1998; Clements-Croome, 2006). This is related to the availability of sufficient space to provide services, the structural integrity of buildings, and adequate space for moving around (Millais, 1997). We must also take into consideration that inadequate workplace heating, ventilation, air conditioning, safety systems, noise control and poor lighting, decor, and design have a strong relationship with increased WPS (Feng, Hudson, & Tan, 2013). Macqueen, Bruce, and Gibson (2012) found WPS present in health institutions when management policies do not properly determine the number and mix of staff required to achieve their goals. Pathak (2012) stated that poor tools, including equipment and supplies, and unavailability of diagnostic services, treatment materials, and medications are major causes of WPS (Perrewé, Ferris, Frink, & Anthony, 2000).

2.2.2 WPS Connected to Process Factors

Recent studies on the diagnosis of WPS focused primarily on process factors as a key issue that can influence organizational stress. WPS can be a result of inadequate leadership style, unfair management practices, lack of empowerment, lack of participation in decision making, and inadequate communication (American Psychological Association, 2011). Good planning such as safety programs, plans for responding to emergencies, availability of clinical guidelines, and implementation of education and training programs are vital in controlling WPS (Stein-Parbury, 2009; Laschinger & Leiter, 2006). It is usually associated with high workloads, long working hours, congested workplaces, high-demanding jobs, and poor coordination between colleagues, patients' families, and other health organizations (Hackett et al., 2009; Centers for Disease Control and Prevention, 2015).

2.2.3 WPS Connected to Outcome Factors

Several studies have emphasized that unsatisfactory work outcomes are a major cause of WPS (Roy, 2013). In the USA, 49% of workers said that low wages were a contributory factor to WPS (Saif, 2015). The American Psychological Association (2011) found that discrepancies between the workers' expectations and those of the organization might be a source of WPS.

Nowadays, issues related to patient outcomes have become one of the main topics taken into account when assessing WPS in health institutions. WPS usually increased where patient conditions and outcomes were more negative (Winterowd, Beck, & Gruener, 2003; Wright, 2014). Other stress factors within healthcare organizations involved the issues of trust between workers and patients and their families (Yip, 2001), or clashes with patients and families (Billiter-Koponen & Fredén, 2005).

Awareness of shareholder satisfaction and a health institution's reputation for effectiveness and efficiency are also important factors in the presence and level of WPS (Shehan, 2015). WPS also emerges when opportunities for development, career advancement, and job stability are lacking (Fiabane et al., 2013).

2.3 Career Commitment (CC)

Commitment is the nature of the relationship of the employee to the organization, in terms of both membership and quality of membership (Mowday, Porter, & Steers, 2013). The aim of the organization is to improve CC in order to achieve success (Jamal, 2014). The concept of CC relates to the emotional reactions of an individual to the characteristics of the employing organization (Carter, Ulrich, & Goldsmith, 2005). Overall, CC is a term used to describe employees' commitment to their work and the strength of an individual's participation in a particular organization (Çelik, Dedeoglu, & Inanir, 2015). It is determined by whether an employee behaves consistently with and adopts organizational norms, values, and goals, and by their level of satisfaction with the organization (Tetrick, 2012). Different background variables that affect CC include organizational culture, characteristics, and leadership style (Sahin, 2013). CC is also highly affected by workplace stress (Griffin, 2011), and by the design and physical characteristics of the workplace in particular (Gaol, Kadry, Taylor, & Li, 2013).

3. Study Design

This study was prepared in the light of its subject, theoretical dimensions, and questions, based on quantitative, descriptive, analytical, and field research methods. Before performing this study, the author adhered to all ethical regulations set out by the Ministry of Health (MoH), and formal permission was obtained from the CHC Directorate in the MoH, which has administrative charge of CHCs in Jordan. The workers included in the study were permanent workers who had spent more than five years working in CHCs. To ensure confidentiality, participation in the study was voluntary and anonymous.

The study population consisted of CHC workers (n=589) during 2015 and 2016. Four hundred questionnaires were distributed to a random sample of workers, and a total of 291 complete and valid questionnaires were sent back (73% response rate). Those who refused to participate, failed to return the questionnaire, or returned incomplete questionnaires were excluded.

Based on the aim of the study, and following review of a considerable amount of related research mentioned earlier, the author developed the study questionnaire, which contained three parts. The first part consisted of five statements to describe some characteristics of the sample such as gender, age, qualifications, level of experience and job description. The second part aimed to detect the presence of WPS in CHCs, with independent variables included in 23 statements as shown in Tables 1, 2, and 3. The third part comprised seven statements to detect the presence of CC in CHCs as a dependent variable. The study used a five-point Likert scale, the most commonly used scale to measure the attitudes of respondents, which ranges from strongly disagree (1) to strongly agree (5). Questionnaire statements were formulated positively, meaning that lower mean values are associated with increased WPS and poorer CC levels.

SPSS version (15.0) for Windows (SPSS Inc., Chicago, IL, USA) including mean value (MV) and standard deviation (SD) were used to evaluate the existence of WPS and CC; multiple regression was used to assess the impacts of WPS on CC. A value of $p \leq 0.05$ was considered statistically significant. Questionnaire validity was assessed by having the questionnaire scrutinized by five experienced referees, whose comments were taken into account in drafting the final version. Questionnaire reliability was measured by Cronbach's Alpha for independent and dependent variables; these were 0.75 and 0.89 respectively, which is acceptable for completion of the study procedures.

4. Study Results

4.1 Sample Characteristics

The questions on the characteristics of the sample showed that women accounted for the majority of the study sample (73%). The average age of participants was 34, a majority (91%) held a graduate certificate, 100% had a minimum of five years' experience and 66% were nurses.

To answer the first study question, *What is the extent of WPS and CC in CHCs?,* MV and SD were used to evaluate levels of WBS and CC in CHCs, 'based on a five-point Likert scale with 3 as the mean.

4.2 WPS Related to Input Factors

Table 1 displays the reactions of participants to statements related to WPS arising from input factors. As is clear from Table 1, the majority of participants agree that, in general, the design of the workplace is appropriate for the tasks performed (MV=3.18). However, the study also finds many input factors that are seen as increasing WPS. A majority of participants agree that workplace ventilation is insufficient (MV=2.95), lighting is inadequate (MV=2.93), as are the waiting areas (MV=2.77). Results also indicate a lack of modern equipment and devices (MV=2.72) and insufficient staff levels to satisfy work requirements (MV=2.68). In addition, participants describe noisy workplaces (MV=2.61), poor safety conditions in the workplace (MV=2.59), and space inappropriate to work requirements (MV=2.55). Overall, Table 1 indicates that most input factors in CHCs can be considered as factors adding to WPS.

Table 1. WPS Related to Input Factors

≠	Item	MV	SD	Rank	Estimate
6	There is suitable space in the workplace to perform required tasks	2.55	.94	9	Unsatisfactory
7	Workplace design is appropriate for the tasks performed	3.18	1.10	1	Satisfactory
8	There is adequate ventilation in the workplace	2.95	1.17	2	Unsatisfactory
9	There are adequate public places and waiting areas	2.77	.97	4	Unsatisfactory
10	There is adequate lighting in the workplace	2.93	.92	3	Unsatisfactory
11	The workplace is not noisy	2.61	1.07	7	Unsatisfactory
12	There are adequate safety systems in the workplace	2.59	1.14	8	Unsatisfactory
13	Devices and equipment necessary to perform the required actions are available	2.72	1.20	5	Unsatisfactory
14	The number and mix of staff is sufficient to achieve goals	2.68	1.21	6	Unsatisfactory

4.3 WPS Related to Process Factors

Table 2 illustrates workers' reactions to statements regarding WPS related to process factors. According to the results of Table 2, participants agree that workers have opportunities to take decisions concerning the implementation of their tasks (MV=3.47), and receive support and assistance when needed (MV=3.45). However, the participants disagree that CHCs are managed by expert leaders (MV=2.72), and maintain that there is an excessive workload, which is not commensurate with the number of work hours (MV=2.61). There are also problems in providing workers with guidelines covering the tasks assigned to them (MV=2.57). Likewise, the participants indicate that their working environments were not comfortable (MV=2.56), with low levels of empowerment (MV=2.37). The MV and SD calculated in Table 2 indicate that many WPS issues related to process factors are present in CHCs.

Table 2. WPS Related to Process Factors

≠	Item	MV	SD	Rank	Estimate
15	The workplace is managed by expert and qualified leaders	2.72	1.23	3	Unsatisfactory
16	Workers are adequately empowered to deal with work situations	2.37	1.17	7	Unsatisfactory
17	Workers are involved in the decisions concerning the work assigned to them	3.47	1.00	1	Satisfactory
18	Workers have guidelines covering the majority of the tasks assigned to them	2.57	1.20	5	Unsatisfactory
19	Assigned working hours are sufficient to complete the workload	2.61	.98	4	Unsatisfactory
20	I work in a comfortable environment	2.56	1.19	6	Unsatisfactory
21	I find adequate support from colleagues when needed	3.45	1.11	2	Satisfactory

4.4 WPS Connected to Outcome Factors

Looking at Table 3, we note that all statements related to CHC outcome factors are triggers for WPS. Participants, disagree that workers can reconcile work needs and the needs of their families adequately (MV=2.98). What is more, the participants disagree that they are paid fairly for their work (MV=2.95). They feel that working in a CHC does not allow for sufficient professional development (MV=2.85) and that feelings of stability and job security are not satisfactory (MV=2.82). The MVs were especially low for statements 27 (MV=2.71), 23 (MV=2.63), and 28 (MV=2.56), indicating that weak capacity to accomplish all of the goals of the CHC and patients leads to increased WPS. Therefore, having investigated the outcome factors in the CHC workplace, we can say they all contribute to WPS.

Table 3. WPS Related to Outcomes Factors

≠	Item	MV	SD	Rank	Estimate
22	I am paid fairly for the work I do	2.95	1.14	2	Unsatisfactory
23	Achievement of work objectives is compatible with achieving my own goals	2.63	1.23	6	Unsatisfactory
24	Working conditions do not conflict with my family needs	2.98	1.19	1	Unsatisfactory
25	Working conditions help workers with professional development	2.85	1.21	3	Unsatisfactory
26	Work is characterized by stability and job security	2.83	1.15	4	Unsatisfactory
27	I am satisfied with patient outcomes overall	2.71	1.25	5	Unsatisfactory
28	I am satisfied with CHC outcomes overall	2.56	1.15	7	Unsatisfactory

4.5 Career Commitment

It is observed in Table 4 that most respondents agree that working in the CHCs gives them a certain measure of pride (MV=3.04). However, the participants state that their feelings of happiness are not at the desired level (MV=2.92). Participants face difficulties in detecting the real needs of the patients (MV=2.89), and therefore in providing the best service appropriate to their condition (MV=2.79). The majority show a weak desire to remain in this job (MV=2.67) and feel they do not get enough support from their managers in CHCs (MV= 2.37). It is clear from the Table 4 results that CC scores in CHCs were low.

Table 4. Career Commitment

≠	Item	M	SD	Rank	Estimate
29	I am satisfied with the work in the CHC	2.92	1.20	2	Unsatisfactory
30	I want to continue working in the CHC	2.68	1.22	5	Unsatisfactory
31	I think there is a lot I can do for patients in CHCs	2.79	1.21	4	Unsatisfactory
32	I feel that I have a lot to be proud about working with CHC patients	3.04	1.12	1	Satisfactory
33	I often find myself understanding the needs of CHC patients	2.89	1.17	3	Unsatisfactory
34	I definitely wish to remain in this job	2.67	1.18	6	Unsatisfactory
35	During my work at CHC I receive support from my manager	2.37	1.13	7	Unsatisfactory

To answer the second study question, *What is the impact of WPS (input, process, and outcome factors) on CC in CHCs?,* the following hypothesis has been formulated: *WPS (input, process, and outcome factors) have a negative impact on CC in CHCs.* For the analysis, multiple regression tests were performed.

Table 5 shows VIF values for all the independent variables below 10. Tolerance test values are more than .05, suggesting no multicollinearity problem. Data follow a normal distribution with skewness values less than 1.

Table 5. Variance Inflation Factor, Tolerance, and Skewness Tests.

Independent variables	**VIF**	**Tolerance**	**Skewness**
Input factors	3.285	.304	.367
Process factors	3.739	.267	.086
Outcome factors	3.416	.293	.067

Table 6 shows that the F-ratio=241, which suggests that the regression model can significantly predict CC. In the same table, R^2 = .36, which implies that 36% of the total variance in CC is a result of WPS.

Table 6. The Model Summary

Model summary			
R	R^2	F	Sig.
.600	.360	241.36	.000

Tables 6 and 7 shows that Sig. ≤.05, so a null hypothesis can be rejected and alternative hypothesis accepted, which states that WPS (input, process, and outcome factors) contribute to the decline in CC in CHCs.

Table 7. Results of Sub-hypotheses ($H_0$1–$H_0$3)

Sub-hypothesis	B	Beta	t-value	Sig.	R	R^2
WPS related to input factors has a negative impact on CC in CHCs	.576	.506	12.178	.000*	.506	.256
WPS related to process factors has a negative impact on CC in CHCs	.521	.038	13.573	.000*	.548	.300
WPS related to outcome factors has a negative impact on CC in CHCs	.549	.034	15.955	.000*	.610	.372

5. Discussions and Conclusions

The aim of this study was to investigate the impact of WPS on CC in CHCs in Jordan. To the author's knowledge, no studies have investigated WPS and CC in CHCs. The MV and SD results showed that WPS tends to be high and CC is liable to be low in these CHCs, while multiple regression indicated that WPS has a significant impact on the decline in CC.

Results of WPS related to input factors suggest that the MoH does not provide appropriate sufficient buildings to provide health services for patients in CHCs. This would be contrary to the World Health Organization recommendation regarding the provision of effective designs, suitable spaces, and adequate resources in health organizations as a means to control WPS (World Health Organization, 2003). The results here agree with those of Al-khasawneh & Futa (2013), which stated that hospital structure was a vital cause of WPS in Jordanian teaching hospitals, and with Saif (2015), who stated that one of the problems for health care institutions in Jordan was the need for more efficient equipment and tools. However, Saleh (2016) showed that the MoH does show concern for the presence of appropriate designs, space, lighting, and ventilation in Jordanian health institutions built recently.

Statistical analysis of the results for WPS related to process factors also suggests that CHCs need to improve the management process. They do not facilitate workers to participate in decision making, provide support, encourage empowerment, and develop support guidelines or managing intense workloads. Many other sources suggest that the factors mentioned above are fundamental causes of WPS (World Health Organization, 2010; American Psychological Association, 2011). The results agree with those of Hamaideh et al. (2008), who found that a high workload is the main cause of WPS among nurses in Jordan, and with Saif & Saleh (2013), which pointed to the lack of willingness of health leaders in Jordan to support employee empowerment or their participation in decision making.

Based on the data on WPS related to outcome factors, we can conclude that workers in CHCs believe that work requirements are in conflict with their commitments to their families, and that the benefits that they receive from work, such as wages, stability, and career development, do not meet their needs. It is also clear that workers want to achieve better patient outcomes and that when these are achieved, they feel increased pride in their work. The results agree with those of the American Psychological Association (2011), which stated that salary is one of the main causes of WPS among healthcare providers in the USA, and with Saif (2015), who stated that low rewards is one of the main causes of WPS in Jordanian hospitals. The results are also consistent with Mrayyan (2009) in her study about job stressors in ICU departments in Jordanian hospitals, which reported that patients' deaths is the chief stressor among nurses in Jordan. Hamaideh, Mrayyan, Mudallal, Faouri, & Khasawneh (2008) indicated the importance of good patient outcomes in controlling WPS.

The data from workers in CHCs confirmed a drop in their CC and that in their opinion they were not satisfied with the work and the services they provide to patients. However, they do not feel that the CHCs encourage them to make the best effort possible. However, the poor level of CC is understandable given their long hours in uncomfortable environments and in conditions of high WPS.

The findings of the current study indicate that WPS has a significant negative impact on CC. This finding is consistent with Jamal (2014), who found significant negative relationships between WPS and CC among nurses in Middle Eastern hospitals, Al-Hawajreh (2011) who found the same in Jordanian hospitals, and Biswas & Biswas (2010) and Tang (2008) in the higher education sector. The results of this study indicate that WPS is present at high levels in CHCs, and that CC exists at a low level, with the significant impact of WPS on CC being diagnosed in this study.

6. Recommendations

lighting need to be improved. To enhance working conditions, the MoH must demand the provision of sufficient resources and avoid understaffing in dealing with the growing numbers of patients. Optimally, CHCs need significant commitment from leadership to ensure empowerment, encourage participation in decision-making, help workers to recover from traumatic events, and conduct periodic assessments of WPS. Workloads must be appropriate and the appropriate amenities must be provided in the workplace.

WPS and CC both appear susceptible to the influence of worker reward, so workers need to be paid fairly and provided with opportunities for professional development; continuous learning programs and training are essential for career development, and approaches for relieving personal distress and dealing with critically ill patients should be implemented. CHC administrative staff should establish lines of communication with workers related to input, processes, and outcomes and their opinions should be both solicited and utilized. For CHCs to achieve higher levels of professional success, they need to recognize workers as professional partners and remove obstacles that inhibit this, thereby reducing WPS and promoting CC. Finally, further research is recommended as vital to overcome the current study limitations by expanding the size of the study population, taking the demographics characteristics of the participants into consideration and using qualitative approaches for in-depth investigation of the study elements.

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