Burnout among Health Worker in Primary Health Care Center in Taif City, Saudi Arabia

Majed Mutlaq Althobaiti

College of Medicine, Taif University, Email: Dr.majed1991@hotmail.com

Dr. Lotfy Fahmi Mohamed Issa

Associate professor of Public Health and Community Medicine, College of Medicine, Taif University – Taif Region

Abstract

In recent year burnout is a universal problem in healthcare. It also has critical magnitudes on health staff, either physically or mentally which may will lead to reduced job performance, and impact in patient care ,and its make some of health worker leave the work. Health care workers look like be at risk of burnout than others. Numerous studies on burnout in healthcare have been shown, most of them intensive on one medical field (e.g. psychiatry and emergency) or career (limiting the study to nurses or physicians). Burnout has adverse effect on care value and patient agreement, In addition, health system cost increase due poor quality of care, reduced incentive, and probable medical error.

Keywords: Burnout, Primary Health Care, job performance.

1. Introduction

Background

In recent year burnout is a universal problem in healthcare(1). also has critical magnitudes on health staff, either physically or mentally.(2) which may will lead to reduced job performance, and impact in patient care ,and its make some of health worker leave the work(3). Health care workers look like be at risk of burnout than others (4). numerous studies on burnout in healthcare have been shown, most of them intensive on one medical field (e.g. psychiatry and emergency) or career (limiting the study to nurses or physicians) (1). Burnout has adverse effect on care value and patient agreement, In addition, health system cost increase due poor quality of care, reduced incentive, and probable medical error (4)

Rational:

The burnout on health worker can affect the job satisfaction which lead to decrease of patient care. Most of published study in Saudi Arabia consider the burnout among physician only. There is an obvious need to understanding the risk factor and the effect of burnout on health worker so that improve the worker job satisfaction and patient care.

Aim of the study:

• The General Objective:

To investigate Burnout among health worker in primary health care center in Taif city, Saudi Arabia

• The specific objective:

- To assess the prevalence of burnout among health worker in PHCc in Taif city.

- To assess the risk factor of burnout (soicodemographic, number of working hours)

2. Literature review

The term burnout, initially used for engine failure, was first useful to humans in the mid-1970s to define a stress syndrome with described symptoms including exhaustion, frustration, anger, negligence and a feeling of uselessness and/or failure (6). It can occur particularly among individuals who are highly motivated (7)

Maslach & Jackson define burnout as 'a syndrome of emotional exhaustion, depersonalization and reduced personal competence that can occur among individuals who do "people work" of some kind'(1).

however, The MBI (Maslach Burnout Inventory) is a self-assessment examination tool that contains of 22 questionnaire items. This tool defines and measures burnout as a 3dimensional syndrome of emotional exhaustion, depersonalization, and reduced achievement. Many influences related with burnout, such as age, sex, job unhappiness, working hours, marital status, and work-home interference (3).

The health worker are individuals whose job it is to keep and improvement the health of their communities .(8)

Current studies show a high level of burnout and stress in healthcare workers. Studies from around the world, have described prevalence rates of burnout from 2.6% to 75%. including on physicians, primary health care workers ,nurses, physiotherapists and other health professionals(4)

Study in Brazil in (2014) the response rate 90% of 216 professionals selected show that the prevalence of burnout was 6.7% to10.8%. with

average age 49 year, 16% were male and 84% were female, 61 of professionals had postgraduate education ,28% were doctor and 37% nurses, 28% were general practitioners, 15% pediatricians and 11% gynecologists. The risk factor increase with younger age, more work hour, job dissatisfaction (9)

In Madrid, Molina siquero, (2003) Burnout was seen in 69.2% of the physicians (95% CI, 62.1%-75.4%) response rate 80.3, Burnout was establish to be connected with possible psychiatric illness. the prevalence of burnout among worker and possible psychiatric disease was high ,increase the risk of burnout with long-lasting employment position ,extra 1700 patients on the patient list , patient load of 35 to 47 patients/day , and age amongst 37 and 46 years (10)

In Belgian, S. Vandenbroeck, (2017). 5700 participant ,1169 physicians and 4531 nurses with response rate 26%. The prevalence was 6% of the sample on three burnout dimensions and in 13% for at least two dimensions. Of all the job strains (workload, emotional burden, and work-home interfering) clearly related to emotional exhaustion and depersonalization. Doctors suffering long shifts and high workload are more At risk to develop burnout (1).

In middle east the prevalence was reported between 6.3% to 90% (4,11) while in KSA is vary between 15% to 28% (2,6). However, in Riyadh, Abdullah Bany Hamdan. (2019) study of 157 participant and response rate of 62.8%, showed that 28.7% of them described moderate to severe burnout, Physicians (35.1%) were recorded to have the maximum rate of burnout, followed by nurses (29%) and allied healthcare professionals (27%) (2).

While In Asir, N.S. Al-Sarai, (2013). Study of 390 and 94% response rate, 29.5% of

respondents stated high emotional exhaustion, 15.7% high depersonalization and 19 low personal accomplishment (6).

3. Methodology

Study design:

A cross sectional study in PHC

Study setting:

Taif city is a city in mecca province of Saudi Arabia, at in elevation of 1879, it has 1,200,000 people.

The PHCc in Taif city.

Study population:

Male and female health worker in PHC at Taif city during the academic year 2019/2020.

Inclusion criteria:

- The health worker age between 20-60.
- Both sexes.

- The health worker had at least 1 year of working in center.

Exclusion criteria:

- The health worker under 20 or above 60 of age

- The health worker with chronic disease.

- The health worker with less than 1 year working.

Sampling

• sample size

The study population includes health worker in primary health care in taif city. The cluster random sample will be used. • Sampling technique

Using EPI-INFO software, a minimum required sample of 385 health worker was determined, assuming that the prevalence of burnout is 50 with a precision of 5%, confidence level of 95% and an error of 0.05.

• Data Collection tool and technique

Self-administered questionnaire which included the Maslach Burnout Inventory (MBI) as well as data on their demographic and professional characteristics.

• Data Management and Statistical Analysis:

Data entry and analysis will be done using the Statistical Package of Social Sciences (SPSS version 25). Descriptive statistics will be calculated, in the form of frequencies and percentages for qualitative variables and mean and standard deviations for quantitative variables. Chi square test will be applied to test significance of differences between categorical variables, while independent samples t-test and one-way ANOVA (F-test) will be applied to test the significance of differences between mean scores of quantitative variables. Statistical significance will be considered when p-values are less than 0.05.

• Ethical Considerations:

All necessary official approvals will be fulfilled before start of data collection. An informed consent cover page has been added to the study questionnaire. Collected data will be dealt with confidentially.

• Budget:

This study is completely self-funded.

4. **Results (Statical Analysis)**

First Count of "every question remark"

First scope of the analysis was the relation between Occupation type to the working hours according to gender:

Row Labels	Lap technician	Nurse	Other	Pharmacist	Physicians	Grand Total
Female	23	153		1	29	206
8	23	153		1	28	205
10					1	1
Male	18	102	1	24	55	200
8	18	100	1	24	54	197
9		2			1	3
Grand Total	41	255	1	25	84	406



Second "the link between working hours for every gender and such one question"

Row Labels	Lap technician	Nurse	Other	Pharmacist	Physicians	Grand Total
Female	23	153		1	29	206
8	23	153		1	29	206
Male	18	102	1	24	55	200





Finally, "Count of Questionnaire summary"

	Lap technician	Nurse	Other	Pharmacist	Physicians	Grand Total
Female	23	153		1	29	206
8	23	153		1	29	206
Male	18	102	1	24	55	200
8	18	100	1	24	54	197
9		2			1	3
Grand Total	41	255	1	25	84	406



Histogram

Pareto chart for the relation percentage



For statical analysis into non-numerical Data, it was a must to replace it into numerical Data by replacing it as the following table:

At least a few times a year	0
At least once a month	1
Every day	2
Never	3
Once a week	4
Several times a month	5
Several times a week	6

Overall score for occupational exhaustion (EE)

For collecting of question numbers of 1, 2, 3, 4, 5, 6, 7, 8 and 9.

Row Labels	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Lap technician	3.56	2.93	2.98	2.61	1.27	2.71	3.37	2.76	2.61
Nurse	3.47	3.38	2.83	2.49	1.11	2.82	2.86	2.86	2.32
Other	4.00	4.00	3.00	3.00	3.00	3.00	3.00	4.00	3.00
Pharmacist	3.60	3.28	2.80	3.08	2.20	2.56	2.88	3.28	2.08
Physicians	2.89	3.13	2.83	2.26	1.30	2.35	2.71	2.46	2.48
Grand Total	3.37	3.28	2.84	2.50	1.24	2.69	2.88	2.80	2.37

The grand total gets to 23.96 which gets the score of Moderate degree

For collecting of question numbers of 10, 11, 12, 13 and 14.

Row Labels	Average of Q10	Average of Q11	Average of Q12	Average of Q13	Average of Q14
Lap technician	2.98	2.73	2.71	2.39	1.51
Nurse	3.35	2.67	2.06	2.03	1.44
Other	3.00	5.00	1.00	3.00	1.00
Pharmacist	2.72	2.12	2.08	2.88	1.88
Physicians	3.06	2.61	2.05	2.37	1.54
Grand Total	3.21	2.63	2.12	2.19	1.50

Overall score for depersonalization / loss of empathy (DP)

The grand total gets to 11.66 which gets the score of High degree

For collecting of question numbers of 15, 16, 17, 18, 19, 20, 21 and 22.

Overall score personal accomplishment assessment (PA)

Row Labels	Q22		Q21	Q20	Q19	Q18	Q17	Q16	Q15
Lap technician		3.90	3.29	3.85	4.00	0.66	3.68	4.44	4.12
Nurse		3.68	3.54	3.68	3.79	0.71	3.73	4.26	4.11
Other		2.00	5.00	2.00	1.00	2.00	2.00	2.00	2.00
Pharmacist		3.56	3.12	2.92	4.08	1.52	4.52	4.12	4.44
Physicians		3.46	2.90	3.79	3.79	1.13	3.75	4.17	3.94
Grand Total		3.65	3.36	3.67	3.82	0.84	3.78	4.25	4.09

The grand total gets to 27.45 which gets the score of Low degree

5. Discussion

By showing the recent results of total fatigue among health workers in the primary health care center in the city of Taif, Kingdom of Saudi Arabia, it was found that the total result that the questionnaire was urged to include within nine questions to know occupational fatigue to find the basic ratios of the average answers through the relationship between the job title and its relationship The level of psychological comfort for the employee or not, according to the different medical job titles, it was found that the ratio is found between 18-29, which is 23.96 mm, which gives an indication of a medium impact degree, which expresses that the occupational fatigue arising from the hardships of the profession in primary health care centers in Taif, is only average. The impact on the employees stems from the accuracy of the disciplines required and working in them.

On the other hand, the overall results of depersonalization / loss of empathy - one of the indicators of work in health care difficulties - showed that the five questions put in reference to know the extent of the loss of empathy between employees and patients, are in the highest degree of recurring the horrors of health events witnessed by employees in primary health care In Taif, pharmacists are ranked first in losing sympathy with patients, while Physicians come in the last place as they are the most sympathetic to patients. Due the average is between 6-11 denotes the average, the result is 11.66, which gives scope for it to be the highest degree.

Finally, the total percentage of the employee's sense of personal achievement was measured, which was found to be at its lowest level in terms of all health care workers in Taif, and this leads us to find the motives and reasons that lead them to this feeling of personal lack of achievement and this appears in the Pareto chart, which shows that the most affected by this matter It is the nursing staff who suffers from difficulty finding individual personal achievements due to the crowding of primary care and the sequence of events, which makes no room for any assessment based on individuals and not teams.

Reference

 Vandenbroeck S, Van Gerven E, De Witte H, Vanhaecht K, Godderis L. Burnout in Belgian physicians and nurses. Occup Med Oxf Engl. 2017 Oct 1;67(7):546–54.

- Bany Hamdan A, Alshammary S, Javison S, Tamani J, AlHarbi M. Burnout Among Healthcare Providers in a Comprehensive Cancer Center in Saudi Arabia. Cureus. 2019 Jan 30;11(1):e3987.
- Aldrees TM, Aleissa S, Zamakhshary M, Badri M, Sadat-Ali M. Physician wellbeing: prevalence of burnout and associated risk factors in a tertiary hospital, Riyadh, Saudi Arabia. Ann Saudi Med. 2013 Oct;33(5):451–6.
- 4. Zarei E, Ahmadi F, Sial MS, Hwang J, Thu PA, Usman SM. Prevalence of Burnout among Primary Health Care Staff and Its Predictors: A Study in Iran. Int J Environ Res Public Health. 2019 Jan;16(12):2249.
- 5. WHO | Burn-out an "occupational phenomenon": International Classification of Diseases [Internet]. WHO. [cited 2019 Jul 13]. Available from: http://www.who.int/mental_health/eviden ce/burn-out/en/
- Al-Sareai NS, Al-Khaldi YM, Mostafa OA, Abdel-Fattah MM. Magnitude and risk factors for burnout among primary health care physicians in Asir Province, Saudi Arabia. East Mediterr Health J Rev Sante Mediterr Orient Al-Majallah Al-Sihhiyah Li-Sharq Al-Mutawassit. 2013 May;19(5):426–34.
- 7. Esiebo A. A manual for protecting health workers and responders. :150.
- Weltgesundheitsorganisation, editor. Working together for health. Geneva: World Health Organisation; 2006. 209 p. (The world health report).
- Silva SCPS, Nunes MAP, Santana VR, Reis FP, Machado Neto J, Lima SO. Burnout syndrome in professionals of the primary healthcare network in Aracaju, Brazil. Cienc Saude Coletiva. 2015 Oct;20(10):3011–20.

- 10. Molina Siguero A, García Pérez MA, Alonso González M, Cecilia Cermeño P. [Prevalence of worker burnout and psychiatric illness in primary care physicians in a health care area in Madrid]. Aten Primaria. 2003 May 31;31(9):564– 71.
- Al-Hashemi T, Al-Huseini S, Al-Alawi M, Al-Balushi N, Al-Senawi H, Al-Balushi M, et al. Burnout Syndrome Among Primary Care Physicians in Oman. Oman Med J. 2019 May;34(3):205–11.