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Prevalence and risk factors associated with burnout syndrome among healthcare workers in Afghanistan

Afganistan'da sağlık çalışanlarında tükenmişlik sendromu sıklığı ve ilişkili risk faktörleri

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ABSTRACT

Objective: This study aims to identify the prevalence of burnout syndrome (BS) with its subscales of emotional exhausting (EE), depersonalization (DP), and personal accomplishment (PA) among frontline healthcare workers in Afghanistan. **Methods:** A total of 623 health workers contracted by NGOs participated in a cross-sectional study in ten provinces. A self-administered questionnaire including Maslach Burnout Inventory were used for data collection. Proportions and factors associated with BS were calculated. Epi info v.7 and SPSS v.20 were used for data management. **Results:** Totally, 264 were females (41.8%); 83% were married and two-third had ≥14 years of education. Half (58%) had monthly income of 130-260. The mean age was 32.5 years, by differentiation of 29.4 years in females and 34.9 years in males. Ten (1.6%) declared currently smoking and 5% dissatisfied with their job. Just 13% were doing private business besides current job. Average number of children was 3.4 and average years of experiences was 8.7. Proportion of high EE, DP and PA was 6.3%, 8.3% and 26.6% respectively. At multivariate analysis age, job satisfaction and work pressure were associated with EE; high level of DP was related to age and job satisfaction; and PA was associated with age, work load, work pressure, security and annual vacation. **Conclusion:** Frontline health workers are affected by various level of burnout syndrome. They should be supported by management with better work environment to prevent problem and provide quality health services.

Keywords: Afghanistan, burnout, depersonalization, health worker, prevalence

ÖZ

Amaç: Bu çalışma, Afganistan'da ön saflarda çalışan sağlık çalışanları arasında tükenmişlik sendromu (BS) ve alt boyutları olan duygusal tükenme (EE), duyarsızlaşma (DP) ve kişisel başarı (PA) yaygınlığını belirlemeyi amaçlamaktadır. **Yöntem:** Kesitsel çalışmaya on ilde sivil toplum kuruluşlarında sözleşmeli olarak çalışan toplam 623 sağlık çalışanı katılmıştır. Veri toplamada Maslach Tükenmişlik Envanterini de içeren, kendi kendine uygulanan bir anket kullanıldı. Çalışmada BS sıklığı ve ilişkili faktörler hesaplanmıştır. Veri analizi için Epi info v.7 ve SPSS v.20 kullanıldı. **Bulgular:** TKatılımcıların 264'ü kadındı (% 41.8); % 83'ü evli ve üçte ikisi ≥14 yıl eğitim almıştı. Yarısının (% 58) aylık geliri 130–260 $ idi. Yaş ortalaması kadınlarda 29.4, erkeklerde 34.9' olmak üzere toplamda 32.5 idi. On kişi (% 1.6) halen sigara içtiğini ve % 5 çalışan işinden memnun olmadığını belirtti. Katılımcıların %13'ü mevcut işle birlikte özel iş yapıyordu. Katılımcıların ortalama olarak 3.4 çocuğu vardı ve ortalama deneyim yılı 8.7 yıldı. Yüksek EE, DP ve PA oranı sırasıyla % 6.3, % 8.3 ve % 26.6 idi. Çok değişkenli analizlerde yaş, iş doyumu ve iş baskısı EE ile ilişkilendirildi; yüksek DP seviyesi yaş ve iş doyumu ile ilişkiliydi ve PA yaş, iş yükü, iş baskısı, güvenlik ve yıllık tatillerle ilişkiliydi. **Sonuç:** Sağlık hizmetlerinin sunumunda ön saflarda yer alan sağlık çalışanları, çeşitli düzeylerde tükenmişlik sendromundan etkilenmektedir. Kaliteli sağlık hizmetlerinin sağlanması için çalışanlar yönetim tarafından desteklenmelidirler.

Anahtar kelimeler: Afganistan, tükenmişlik, duyarsızlaşma, sağlık çalışanı, prevalans

Introduction

Burnout syndrome is a state of physical, emotional, and mental exhaustion that results from prolonged exposure to job stressors or work situations that are emotionally demanding.[1-2] Freudenberg described the term "burnout" in 1974, which characterized by loss of energy and feelings of life being broken into pieces that remain after fire wreckage. Stress and burnout are part of the everyday affairs of organizations with adverse outcomes.[3-5] Health care professionals are at a high risk of developing burnout due to the inherent demands and stress of work environment. Their symptoms maybe anxiety, irritability, mood swings, insomnia, depression, and a sense of failure as a consequence of burnout.[6-8]

In Qatar, the level of burnout syndrome among GPs were 12.6% with higher rates among females, while in Brazil the prevalence was 10.8% and associated factors were younger age, excessive hours of work and job dissatisfaction.[9-11] In Turkey, almost 45% of health workers showed emotional exhaustion (EE), 33.2% depersonalization (DP) and 28% personal accomplishment (PA).[12] Similarly, in India, 66% of the participants scored high on EE and DP scales, whereas 87.1% scored low on PA scale and 62.86% and 11.41% had medium and low scores on the satisfaction with the medical practice scale.[13] A hospital study in Mina city reported high levels of EE (61.8%), high levels of DP (52.5%) and low levels of PA (45.7%). The factors associated with DP as years of working followed by age, hours of working shift, followed by sleeping time, and gender.[14] A longitudinal study in USA reported that work stress, work overload, limited participation in decision-making, and client disability care, were positively associated with burnout.[15] In Saudi Arabia, 29.5% reported high EE, 15.7% high DP and 19.7% low PA, with 6.3% scoring high in all 3 dimensions.[16] In a descriptive cross-sectional study in Malawi showed that burnout appears to be common among participating maternal health staff.[17] A study in Pakistan reflected that 79% were experiencing severe burnout and nurses of surgery and obstetrics/gynecology departments working longer hours on the night shift scored higher on burnout and lower on quality of life.[18] In another study in Turkey among midwives

and nurses the Maslach PA score was 23, the emotional burnout score median was 15 and the DP score median was found to be 3[19] In Hungary, the strongest predictors of burnout were emotional dissonance for emotional exhaustion and negative emotions for depersonalization.[20] A correlational study in Italy reported that working with acute patients, home-care of chronic and anxiety were factors significantly associated with a low job satisfaction.[21] Furthermore, in another study in Hungary the predictors for burnout in mental health workers were reported as pay and rewards satisfaction, work climate, advancement opportunities, physical manifestations of occupational stress were significant predictors of emotional exhaustion.[22]

In Afghanistan, primary health care is the cornerstone of rural healthcare which has been designed and implemented in Basic Package of Health Services (BPHS) since 2003. It is supported by essential package of hospital services (EPHS). The job description of health workers in rural areas have been evolved and expanded now.[23-24] Job related burnout is a widespread problem in healthcare and mostly endemic in the human services where nurses are involved.[25] There is no report of any study in Afghanistan, however, few studies reflected burnout among health workers in neighboring countries. For instance, a couple of studies in Iran indicated that burnout was the main theme; as reported 34.5% had moderate to severe levels of burnout, 31.4% had abnormal scores in emotional exhaustion (EE), 16.8% in depersonalization (DP), and 47% in the personal accomplishment (PA) subscales. Age, education level, number of children, and years of employment were found to have a significant association with the burnout level of the participants. [26-27] A cross sectional study of community health workers in Pakistan showed that 26% of respondents had mental distress and 19% had significant job pressure.[28] Availability of information on burnout in the country among health workers is needed to tailor the terms of reference based on workload. This study aims to provide information on prevalence of burnout and its categories among health care workers in selected health centers in Afghanistan.

Methods

A cross sectional survey was conducted on a representative sample of health facilities and data were collected from health workers using self-administered questionnaires. The Maslach Burnout Inventory (MBI)[29] tool were adopted and used to collect data on level and categories of burnout and associated factors among health workers. The study conducted in those provinces of the country in which the monitoring mission was planned by Grant and Contract Management Unit (GCMU) in MoPH to have oversight on delivering health services (figure 1).
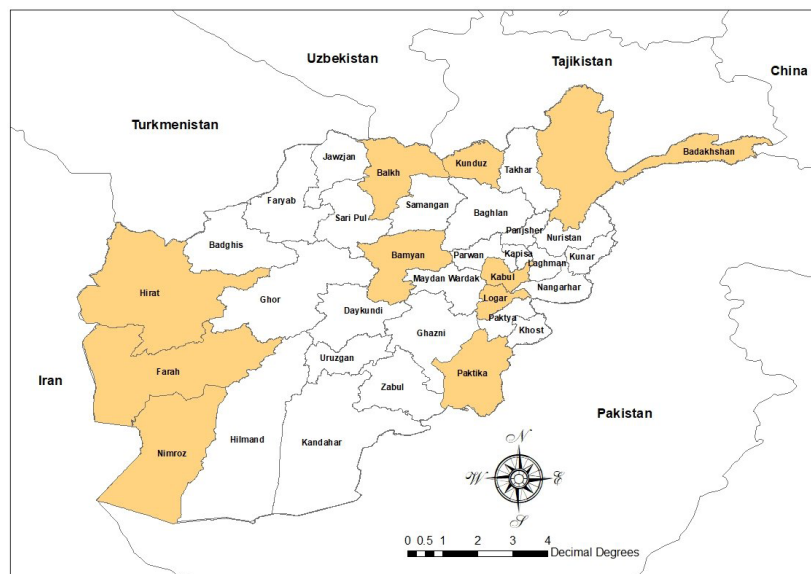
Figure 1: provinces in which the study on burnout syndrome was conducted

Basically, the MoPH began implementing the Basic Package of Health Services (BPHS) in 2004 through contracting arrangement in rural areas. BPHS continues to serve as the foundation of the Afghanistan health system and remains the key instrument in making sure that the most important and effective health interventions are made accessible to all Afghans.[23] In 2005 the MoPH developed Essential Package of Hospital Services (EPHS) to function as a referral center for patients needing more specialized treatment and care, supplement for the BPHS, and place for training of health cadres.[24] The health care workers being involved in provision of health services through BPHS and EPHS by nongovernmental organizations (NGOs) in contracted health facilities were target population. Health workers of less than six months experience, not present during data collection and not willing to participate and working in insecure areas were excluded.

As the national prevalence of burnout and associated risk factors is not available in the country, we assumed the highest prevalence and 95% confidence interval and band of error of 5% which leaded to 385 subjects to be included in the study. However, taking into consideration the proportion of risk factors reflected in literature in similar settings, the number of subjects in this study raised to 600 individuals. Sampling frame were different types of health facilities in BPHS and EPHS. There are four main fixed level of health centers under BPHS including Sub Health Center (SHC), Basic Health Center (BHC), Comprehensive Health Center (CHC) and District Hospitals (DH) each which standard number and type of professional staff. In addition, in EPHS there are provincial hospitals (PH), regional hospitals (RH) and national hospitals (NH). Total numbers of professional standard staff in these four levels of facilities are assumed to be 12500.[30] Totally 632 health workers from various types of health facilities were interviewed. Following operational definitions were used to identify the variables:

Burnout: In this study burnout refers to physical fatigue, emotional exhaustion, depersonalization and personal achievement of health care workers as measured by Maslach Burnout Inventory (MBI). Some cut-offs were used to define low, average or high levels of each dimension of the MBI.[31] In this classification the cut-off of scores for EE was defined as: low, ≤ 14; average, 15-24; high, ≥25; for DP was defined as: low, ≤3; average, 4-9; high, ≥ 10; and for PA was defined as: low, ≥ 40; average, 33-39; high, ≤ 32.

Health Care Workers: They refers to all clinical staff working in BPHS and EPHS facilities.

Primary health center: These are BPHS health centers staffed by health workers.

Data collection instrument started with demographic and socioeconomic variables and followed with variables regarding job related symptoms for burnout and stress; at the end the MBI questionnaires which contain 22 questions with seven options were used. A data entry tool was developed, tested and used in Epi Info v.7 while analysis performed utilizing the statistical package for social sciences (SPSS) version 20. In descriptive statistics, mean standard deviation and frequency, percentage distribution were calculated while in inferential statistics chi-square test were computed to find the association between burnout scores with selected socio demographic variables. Multivariate analysis was conducted in order to taken into account the effect of confounding variables. Monitor officers were trained before data collection, data were checked in field as well as in Kabul and during data entry to find and rectify errors. Verbal consent was taken before filling the form and the study protocol were approved by Institutional Review Board (IRB) in Ministry of public health (MoPH).

Results
Out of all study respondents (632), there were 264 females (41.8%) and 363 males (57.4%) while the rest (0.8%) did not identify their sex. The overall mean age was 32.5±10 years by differentiation of 29.4 ±9.2 years in females and 34.9 ±10 years in males.

This difference was statistically significant (p <0.001). The participants related to BPHS and EPHS health facilities as 146 (23.1%) were from provincial hospitals, 112 (17.7%) were from district hospitals, 173 (27.4%) were from comprehensive hospitals, 142 (22.5%) were from basic health centers, 54 (8.5%) were from subhealth centers, 4 (0.6%) were from prison health centers and finally just one (0.2%) were from mobile team in all ten provinces. Almost 83% were married and two third had education level of 14 years or more. More than half of health workers (58%) had income of ten to twenty thousand Afghanis equal to 130 to 260$ (1USD=76.5 Afghanis). Totally 10 (1.6%) declared that they are currently smoking and 5% mentioned they are not satisfied with their job. Half of health workers were involved in managerial job and 80% got managerial support. Just 13% were doing private business along with current job. More than half of respondents expressed that their workload is medium while 40% has written it is high and the rest said it is low. On average they had more than 3 children (3.4±2.5). The mean years of experiences as a general was 8.7±7.4 years while being in current job it was 5.4±5.01 years. The mean number of annual vacations days taken was (13.0±8.0).

Burnout syndrome consisting of emotional exhaustion (EE), depersonalization (DP) and personal achievement is analyzed after combining of its related questionnaire. In this study the cut-off scores of ≥ 26 for high emotional exhaustion, ≥ 9 for high depersonalization and ≤ 33 for diminished personal accomplishment were used.[32] As a whole the proportion of high EE was 6.3%, the proportion of high depersonalization was 8.3% and low personal achievement was 26.6%. After combining all these factors (high EE, high DP and low PA) the proportion of burnout was reported in 15 health workers showing 2.4%.

As shown in figure 2, the low, medium and high proportion of EE were 67.6%, 25.5% and 6.3%; the low, medium and high level of DP were 75.6%, 17.1% and 8.3%; low, medium and high proportion of PA were 59.2%, 14.2% and 26.6%. Mean burnout scores were 12.09 ±7.86 for emotional exhaustion, 9.3 ±4.35 for depersonalization and 37.57 ±12.06 for personal accomplishment.

The dichotomous levels of each dimension are described with respect of socio-demographic variables in table 1. High level of EE and DP is more in lower ages while PA that is higher in higher ages. Burnout proportion in case of EE and DP is similar in males and female, however DP is higher in males versus females. Those who are married have lower proportion of EE (5.9% vs 8.4%), lower level of PA (26.1% vs 29%) and lower level of DP (7.4% vs 12.1%) as compare to singles. In addition, as table 1 shows the lower the level of education the higher level of EE and DP and the lower the level of PA. The higher level of EE and DP is reported from Paktika, Farah and Badakhshan provinces whereas the low level of PA is reported from Paktika, Kunduz and Logar provinces. In addition, according to analysis, the higher the number of children in a family the higher level of EE and DP and lower level of PA. Low salary also affect the level of burnout as shown in Table 1.

Job related factors are cross tabulated with three component of burnout and reflected in Table 2. Specialists, nurses and midwives who
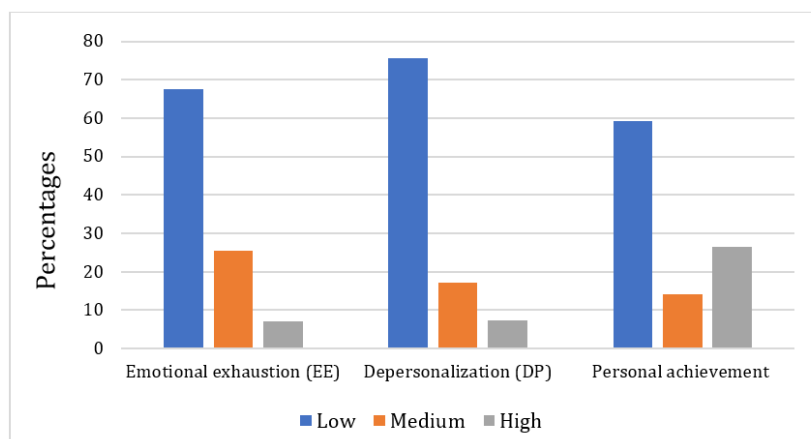
Figure 2: Graphical presentation of burnout dimensions in three categories

Table 1: Frequency distribution of the socio-demographic characteristics and prevalence of Burnout subscales among study participants

Variables	Subgroups	Subjects		EE		DP		PA	
		n	%	n	%	n	%	n	%
Age Groups (missing 53 (8.4%))									
	Less than 25	171	27.1	16	9.4	16	9.4	42	24.6
	25 - 34	188	29.7	14	6.9	19	9.3	47	25
	35 - 44	147	23.3	6	4.3	8	5.4	36	24.5
	45 and more	73	11.6	0	0.0	4	5.5	28	38.4
Gender (missing 5 (0.8%)									
	Female	264	41.8	16	6.1	23	8.7	57	21.6
	Male	363	57.4	24	6.6	29	8.0	109	30.0
Marital Status (missing 1 (0.2%))									
	Single	107	16.9	9	8.4	13	12.1	31	29.0
	Married	524	82.9	31	5.9	39	7.4	137	26.1
Professional Graduation (missing 15 (2.4%))									
	School Graduate Grade 10	22	3.5	3	13.6	5	22.7	9	40.9
	School Graduate Grade 12	117	18.5	5	4.3	10	8.5	33	28.2
	School Graduate Grade 14	300	47.5	21	7.0	25	8.3	74	24.7
	University Graduate	178	28.2	11	6.2	12	6.7	45	25.3
Job Location									
	Badakhshan	35	5.5	3	8.6	2	5.7	9	25.7
	Balkh	72	11.4	3	4.2	4	5.6	13	18.1
	Bamyan	48	7.6	0	0.0	2	4.2	4	8.3
	Farah	77	12.2	7	9.1	8	10.4	24	31.2
	Hirat	118	18.7	7	5.9	11	9.3	34	28.8
	Kabul	50	7.9	1	2.0	2	4.0	7	14.0
	Kunduz	57	9	1	1.8	3	5.3	20	35.1
	Logar	68	10.8	1	1.5	3	4.4	22	32.4
	Nimroz	53	8.4	0	0.0	1	1.9	11	20.8
	Paktika	54	8.5	17	31.5	16	29.6	24	44.4
Number of Children									
	Less than 3	273	43.2	21	7.7	25	9.2	67	24.5
	3 to 6	147	23.3	6	4.1	10	6.8	37	25.2
	More than 6	59	9.3	2	3.4	3	5.1	17	28.8
Income in local currency, Afghani (missing 20 (3.2%))									
	Less than 10000	63	10	7	11.1	10	15.9	22	34.9
	10000 to 20000	369	58.4	20	5.4	26	7.0	97	26.3
	20001 to 50000	148	23.4	10	6.8	12	8.1	36	24.3
	More than 50000	32	5.1	1	3.1	2	6.3	3	9.4
Smoking Status (missing 20 (3.2%))									
	Yes	10	1.6	1	10.0	1	10.0	2	20.0
	No	602	95.3	39	6.5	48	8.0	160	26.6

Table 2: Frequency distribution of job-related factors and prevalence of Burnout subscales among study participants

Variables	Subgroups	Subjects		EE		DP		PA	
		n	%	n	%	n	%	n	%
Positions in Health Centers (missing 10 (1.6%))									
	MD (Physician)	85	13.4	3	3.5	6	7.1	25	29.4
	Specialists	34	5.4	4	11.8	3	8.8	4	11.8
	Nurses	175	27.7	14	8.0	17	9.7	48	27.4
	Midwives	117	18.5	10	8.5	13	11.1	21	17.9
	Vaccinators	67	10.6	1	1.5	4	6.0	13	19.4
	Pharmacists	21	3.3	2	9.5	1	4.8	7	33.3
	Community Health Supervisor	22	3.5	0	0.0	0	0.0	6	27.3
	Technicians	45	7.1	1	2.2	6	13.3	15	33.3
	Others	56	8.9	3	5.4	1	1.8	23	41.1
Involvement in Management (missing 28 (4.4%))									
	Yes	314	49.7	21	6.7	28	8.9	76	24.2
	No	290	45.9	19	6.6	24	8.3	81	27.9
Duration of Experiences (missing 28 (4.4%))									
	< 5 years	261	41.3	17	6.5	25	9.6	68	26.1
	5-10 years	154	24.4	14	9.1	14	9.1	38	24.7
	10-15 years	94	14.9	3	3.2	3	3.2	21	22.3
	15-20 years	49	7.8	1	2.0	5	10.2	9	18.4
	> 20 years	46	7.3	2	4.3	3	6.5	17	37.0
Duration of Experiences Current Job (missing 10 (1.6%))									
	<5 years	387	61.2	24	6.2	35	9.0	99	25.6
	5-10 years	147	23.3	10	6.8	8	5.4	41	27.9
	>10 years	88	13.9	4	4.5	7	8.0	23	26.1
Annual Vacation Taken in Days (missing 64 (10.1%))									
	<5 days	111	17.6	11	9.9	10	9.0	42	37.8
	5-10 days	134	21.2	10	7.5	10	7.5	32	23.9
	11-20 days	235	37.2	11	4.7	23	9.8	59	25.1
	>20 days	88	13.9	6	6.8	5	5.7	19	21.6
Involvement in Private Business (missing 9 (1.4%))									
	Yes	80	12.7	5	6.3	8	10.0	24	30.0
	No	543	85.9	35	6.4	42	7.7	141	26.0
Managerial Support (missing 20 (3.2%))									
	Yes	545	86.2	32	5.9	42	7.7	145	26.6
	No	67	10.6	8	11.9	8	11.9	18	26.9
Job Satisfaction (missing 7 (1.1%))									
	Yes	594	94	31	5.2	45	7.6	157	26.4
	No	31	4.9	9	29.0	6	19.4	9	29.0
Load of Work (missing 31 (4.9%))									
	Low	24	3.8	1	4.2	3	12.5	4	16.7
	Medium	331	52.4	16	4.8	29	8.8	92	27.8
	High	246	38.9	20	8.1	17	6.9	61	24.8
Feeling Work Pressure (missing 17 (2.7%))									
	Low	139	22	1	0.7	11	7.9	34	24.5
	Medium	329	52.1	18	5.5	25	7.6	77	23.4
	High	147	23.3	19	12.9	14	9.5	51	34.7

are apparently taking more responsibilities in health services have higher level of EE (11.8%. 8%, 8.5%), high level of DP (8.8%, 9.7%, 11.1%). Furthermore, low level of PA is reported in technicians (33.3%), pharmacists (33.3%) and MDs (29.4%). Those with less than 5-year experiences and 5-10 years of experiences had higher level of EE (6.5% and 9.1%) as well as highest proportion of DP is recorded in experience group of 15-20 years, whereas the highest experience group (>20years) have lowest level (37%) of PA. The level of satisfaction from job also affected the proportion of burnout. For instance, those who are satisfied had lower level of EE (5.2% vs 29%) and DP (7.6% vs 19.1%) and higher level of PA (26%vs 29%) as compare to dissatisfied group. The effect of workload and work pressure is also reported in Table 1 for more detail.

Table 1 and 2 just reported the level and proportions of EE, DP and PA in different groups of socio-demographic and job-related categories. However, at multivariable analysis those factors which were statistically significant or thought to be biologically important included in the analysis model (Table 3). As shown few factors had significant association with each category of burnout after controlling the effect of other factors. For instance, Age group with adjusted odd ratio (AOR) of (0.89), job satisfaction with AOR of (0.19) and work pressure with AOR of (0.23) had significant association with EE. In addition, Age and job satisfactions with AOR of 0.29 and 0.96 (marginally significant) had association with DP. Furthermore, a group of factors such as age with AOR of (2.35), workload with AOR of (0.51) security with AOR of (0.62), work pressure with AOR of (2.54) and annual vacation with AOR (1.03) had significant association with PA.

Discussion
Among frontline primary healthcare workers in Afghanistan the proportion of high emotional exhaustion (EE) (6.3%), depersonalization (DP) (8.3%) and low personal achievement (PA) (26.6%) is identified for the first time which was demanding. According to multivariate analysis age, job satisfaction and work

pressure were associated with EE; high level of DP was related to age and job satisfaction; and PA was associated with age, work load, work pressure, security and annual vacation. Health workers being involved in provision of health services in Afghanistan are affected by various level of burnout syndrome which is characterized by emotional exhaustion, depersonalization, and a diminished sense of personal achievement. Recently, many studies have documented the high prevalence of burnout among healthcare providers.[33] Burnout has been common among physicians, nurses, and other healthcare professionals, ranging, the prevalence, from 40 % to 60% affected by their work environments, exposure to violence and terror, and emotional distress and low social support.[34] The proportions of all dimensions in Afghanistan are lower as compare to health workers in Pakistan, Saudi Arabia and other countries.[16, 32-37] However, these proportions represent the health workers who are recruiting by non-governmental organizations and providing health services on behalf of MoPH using package of BPHS and EPHS. Probably good work environment, incentives, salaries and other benefits affects them positively as compare to their counterpart in public facilities as well as private sector.[35] In addition, the various cut-offs are used by different authors in research papers which is required to be taken into account while comparing the burnout results.[36] Furthermore, the mean level of each dimension in our findings were also lower as compare our neighboring country, Iran[37] and Turkey.[38]

Multivariate analysis reflected that the factors such as age, job satisfaction and work pressure were associated with emotional exhaustion. These findings have been supported by other studies in Saudi Arabia[16], Iran[37], Lebanon[39] and in Pakistan.[40] The high level of depersonalization was related to many socio-demographic and job-related factors, however at logistic regression the age and job satisfaction was significantly associated to depersonalization. Similar associations were found in other studies as well. The low level of personal achievements was associated with some factors such as

Table 3. Multivariate logistic regression analysis for risk factors associated with three subscales of burnout syndrome among study participants

Variables	Subgroups	B	Standard Error	Adjusted OR	95% CI	p-value
For Emotional Exhaustion						
Age						
	Yes	-0.11	0.037	0.896	0.834-0.964	0.003
Job Satisfaction						
	No	-	-	-	-	-
	Yes	0.52	0.521	0.183	0.066-0.508	0.001
Work Pressure						
	Low	-	-	-	-	-
	High	-1.451	0.398	0.234	0.107-0.511	0.000
Work Experiences						
	>5 years	-	-	-	-	-
	<5 years	-0.859	0.47	27.636	0.168-1.064	0.068
For Depersonalization						
Job Satisfaction						
	No	-	-	-	-	-
	Yes	-1.21	0.489	0.298	0.114-0.778	0.013
Age						
	No	-	-	-	-	-
	Yes	-0.035	0.019	0.966	0.931-1.003	0.069
Personal Achievement						
Age Group						
	< 40years	-	-	-	-	-
	> 40years	0.856	0.259	2.353	1.415-3.912	0.001
Workload						
	No	-	-	-	-	-
	Yes	-0.672	0.277	0.511	0.296-0.879	0.002
Provinces Security						
	Secure	-	-	-	-	-
	Less Secure	-0.465	0.215	0.628	0.412-0.598	0.031
Work Pressure						
	More	-	-	-		-
	Less	0.932	0.296	2.541	1.423-4.535	0.002
Vacation taken annually						
	<10 days	-	-	-	-	-
	>10 days	0.027	0.014	1.027	1-1.055	0.053

age, work load and pressure, security in work stations and vacations taken annually at logistic regression. Such findings are supported by other studies in literature.[16, 40] Identification of the problem for the first time among health workers using the organized study is a strength in its nature. Having high gap in research on human resources in Afghanistan, this study is a critical step to bridge the breaks in research. In addition, the concept is burnout is not fairly known in health system, so the report will inspire paying attention to it. We had collected information just from health workers who are contracted by NGOs while the public and private sector is missing. In addition, a larger sample size for each province and each section/department could have more comprehensive and generalizable results. Self-administered questionnaire also has its own limitations due to unavailability of interviewer to describe the technical points. In such self-report individuals with high negative or positive affectivity may perceive their work environment more negatively or positively. Improving work environment is recommended to be improved socially and physically for better work outcome. However, the terms of reference (TOR) of health workers should be reviewed to make it logical based on time available. The reasons for dissatisfaction of job should be clarified and resolved. Probably some changes are required at the health facility levels to address the factors affecting the burnout among health workers. In case of ignoring such challenges, certainly it will adversely affect provision of services, system effectiveness, productivity and performance. Further comprehensive studies are required to focus on specific factors that has high effect on level of burnout among health workers at various departments.

Conclusion

Healthcare workers are involved in high demanding services expected by clients with more pressure and load, so apparently they are at higher risk of burnout. In Afghanistan, primary health services at rural areas are provided by NGOs contracted by government, while other healthcare providers are government and private sector. Until now, the level of burnout is not clear among these three providers in the country. However, as mentioned in literature the level of burnout is more prevalent among frontline health workers particularly nurses. The findings of this study reflected low status of burnout among health workers employed by NGOs as compare to other countries, whereas this prevalence is needed to be evident among public and private healthcare providers to be compared with NGOs. The low level of burnout as compare to other countries are either due to good incentives or work environment fostered by NGOs. Such practices should be promoted in other settings. So, frontline health workers are affected by various level of burnout syndrome. They should be supported by management with better work environment to prevent problem and provide quality health services. Conduction of studies to identify burnout among public and private health sectors is needed to learn more lessons.

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