ORIGINAL ARTICLE

Burnout among gynaecological residents in Lahore, Pakistan: A cross-sectional survey

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Abstract

Objective: To determine the prevalence of burnout among gynaecological residents and factors associated with it.

Methods: This cross-sectional study was conducted at King Edward Medical University, Lahore, Pakistan over a period of one month in June, 2016. Residents of gynaecology and obstetrics from 7 teaching hospitals of Lahore were included in the study. Along with demographic details, information regarding social life and job satisfaction was acquired. For burnout, Maslach Burnout Inventory-Human Services Survey was used which is a 22-question scale. Data was analysed using SPSS 20.

Results: Of the 102 participants, 57(55.9%) were satisfied after choosing gynaecology as career. It was found that emotional exhaustion and depersonalisation were significantly higher among residents working in government institutions than private institutions ($p<0.05$). Those having more than 2 years of post-graduate experience had significantly higher depersonalisation than those with lesser experience ($p=0.016$). Also, working for 50-60 hours/week and feeling dissatisfied with the specialty were associated with significantly higher emotional exhaustion and depersonalisation ($p<0.05$).

Conclusion: Burnout was highly prevalent among gynaecological residents.

Keywords: Burnout, Gynaecology, Residents, Maslach Burnout Inventory, Pakistan, Lahore. (JPMA 67: 1318; 2017)

Introduction

Burnout is a syndrome which is common in demanding jobs and among those people who care for others like teachers, social workers and healthcare professionals, particularly gynaecologists, surgeons and paediatricians.[1] Healthcare workers, especially gynaecologists and surgeons, are exposed to high levels of stress at workplace. Demanding jobs, hectic duty hours without break and persistent tension can lead to exhaustion, and physical and psychological distress. Moreover, burnout syndrome can increase the risk of medical errors and decrease job satisfaction and lack of interest at workplace which incites early retirement.[2-4]

According to Maslach et al., burnout has three interrelated dimensions: depersonalisation, emotional exhaustion and low personal accomplishment and poor self esteem. Prolonged and intense quality of distress and exposure to stress is the most important cause of emotional exhaustion and it results in loss of enthusiasm for work, feeling trapped, defeated and helpless. Depersonalisation happens when physicians manage their patients differently, objectify them, and create a negative environment and attitude towards their co-workers and profession. Inefficiency and the lack of a sense of personal achievement and defeat are characterised by the individual unable to perform their duties and responsibilities and detachment and retirement from the job.[5,6]

A few studies are available in the literature which address the factors for burnout among residents. The current study was planned to look for prevalence of burnout syndrome among gynaecologic residents, and also to identify the factors which contribute to high burnout. The study is expected to help us to address and take care of those issues in order to decrease stress and burnout and increase quality of life of gynaecological residents.

Subjects and Methods

This cross-sectional study was conducted at Department of Gynaecology and Obstetrics, King Edward Medical University, Lahore, Pakistan over a period of one month in June, 2016. There are about 10 institutions in Lahore which are training the residents in the field of obstetrics and gynaecology. However, due to some logistic issues and technical problems (not getting approval from ethical board), we included 7 teaching hospitals (4 public-sector

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and 3 private-sector hospitals) in this study. Approval from ethics committees of all the hospitals was obtained. A questionnaire was designed and all the residents in those hospitals were contacted in person and were asked to fill the proforma. The questionnaires were anonymous and written consent from all residents was obtained. Our questionnaire consisted of 2 portions:1) demographic portion; and 2) Maslach Burnout Inventory-Human Services Survey (MBI-HSS). Regarding demographic details, following details were asked from residents: age; gender; year of graduation; post-graduation experience; medical degree other than Bachelor of Medicine, Bachelor of Surgery (MBBS); religion; marital status; number of children; is your spouse a doctor?; time taken to reach workplace; job status (i.e. adhoc, contract, permanent); how many hours do you work/week? (50-60 hours, 60-80 hours, >80 hours); do you work at any other set-up also?; are you satisfied after choosing the specialty; and monthly income.

Second portion of the proforma was MBI-HSS.[7] It is a validated and reliable tool for assessing burnout among healthcare professionals and residents and has been used in many studies.[8,9] It comprises 22 items, which assess burnout among health professionals in mainly 3 domains, namely emotional exhaustion (EE), depersonalisation (DEP) and personal and professional achievement (PPA). Each of these domains was assessed on a 7-point Likert scale. The following cut-offs were used to define low, average or high levels of each dimension of the MBI; EE: low, $\leq$ 14; average,15-24; high, $\geq$ 25; DEP: low, $\leq$ 3; average, 4-9; high, $\geq$ 10; PPA: low, $\geq$ 40 ; average, 33-39; high, $\leq$ 32 (inverse scale). The burnout was labelled if any resident had high score in EE and/or DEP.

Initial analysis of our data sheets showed that only one participant was male. Also, only 2 participants had an additional post-graduate degree. We excluded the three pro-formas.

In the statistical analysis, simple descriptive statistics were used for frequency and percentages. To ascertain risk factors associated with the existence of burnout, chi-square test was used. P>0.05 was considered significant.

Results

Of the 102 participants, 66(64.7%) were from public and 36(35.3%) from private hospitals. The overall mean age of the residents was 27.45±1.69 years. Moreover, 57(55.9%) were satisfied after choosing gynaecology as a career while 45(44.1%) were dissatisfied. Besides, 96(94.1%) participants

Table-1: Demographic details of the residents.

Age	27.45 ± 1.69
Post-graduation Experience	2.25 ± 1.36
Religion	
Muslim	102 (100%)
Marital status	
Single	54 (52.9%)
Married	48 (47.1%)
Number of children	
None	17 (16.6%)
1	19 (18.6%)
2	12 (11.8%)
Time to reach hospital	
Less than 30 min	72 (70.5%)
More than 30 min	30 (29.4%)
Spouse as doctor	
Yes	6 (5.9%)
No	42 (41.1%)
Post-graduate experience	
Upto 2 years	64 (62.7%)
More than 2 years	38 (37.2%)
Working hours/ week	
50-60 hours	69 (67.6%)
60-80 hours	3 (2.9%)
>80 hours	25 (24.5%)
Do you work at any other setups also?	
Yes	5 (4.9%)
No	97 (95.1%)
Are you satisfied after choosing this speciality?	
Yes	57 (55.9%)
No	45 (44.1%)
Monthly Income	
<60,000 PKR	96 (94.1%)
60000-100000 PKR	6 (5.9%)
>100,000 PKR	0
Institution	
Government	66 (64.7%)
Private	36 (35.3%)

PKR: Pakistani rupee.

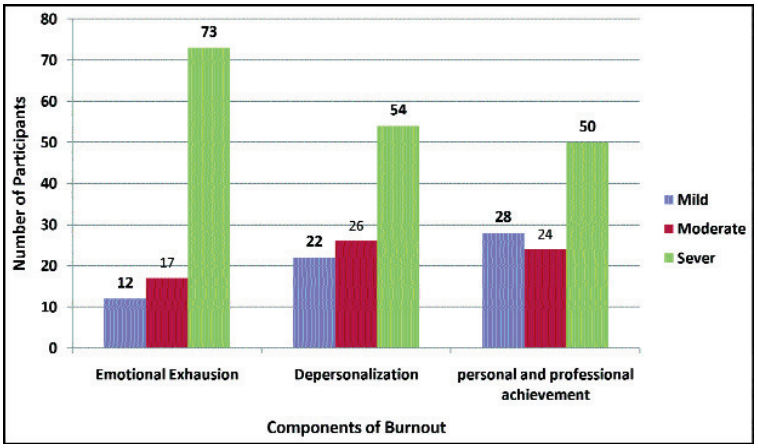

Figure: Professional burnout scores of residents.

Table-2: Residents who were dissatisfied with their speciality.

n = 102	Low to Moderate Emotional Exhaustion	High Emotional Exhaustion	P	Low to Moderate Depersonalisation	High Depersonalisation	P	Low to Moderate Personal Accomplishment	High Personal Accomplishment	P
Institute									
Government	10	55	0	23	43	0.001	46	20	0.263
Private	19	17		25	11		28	8	
Age									
<30 years	27	69	0.447	46	51	0.556	71	26	0.42
>30 years	2	3		2	3		3	2	
Experience									
Upto 2 years	19	44	0.379	36	28	0.011	45	19	0.286
More than 2 years	9	27		11	25		28	8	
Marital Status									
Married	16	37	0.451	29	25	0.11	39	15	0.558
Unmarried	13	35		19	29		35	13	
Children									
No children	22	48	0.645	37	34	0.26	50	21	0.745
1 Child	4	15		6	13		15	4	
2 Children	3	9		5	7		9	3	
Doctor Spouse									
Yes	1	5	0.443	4	2	0.285	5	1	0.473
No	28	67		44	52		69	27	
Jobs Status									
Contract	29	66	0.123	45	51	0.603	69	27	0.473
Permanent	0	6		3	3		5	1	
Hours/Week									
56-60 hours	8	63	0	24	47	0	54	17	0.025
60-80 hours	2	3		4	1		1	4	
<80 Hours	19	7		20	6		19	7	
Do you work at any other setup also?									
Yes	2	3	0.441	4	1	0.147	4	1	0.58
No	27	70		44	53		70	27	
Are you satisfied after choosing this speciality?									
Yes	24	33	0	33	24	0.011	41	16	0.528
No	5	40		15	30		33	12	
Monthly Income									
<60K PKR	26	70	0.222	43	53	0.078	69	27	0.473
60-100K PKR	3	3		5	1		5	1	
Time to reach hospital									
Less than 30 minutes	23	50	0.199	32	41	0.208	53	20	0.583
More than 30 minutes	6	23		16	13		21	8	

PKR: Pakistani rupee.

were earning less than Rs60,000 per month while 6(5.9%) had a monthly income of Rs60,000-100,000. We found that 97(95.1%) residents were aged below 30 years and 86(81.9%) were between their 1st and 3rd year of their residency training (Table-1).

Professional burnout scores showed that EE levels were high in 73(71.6%) participants, whereas DEP and PPA levels were high in 54(52.9%) and 50(49%) participants, respectively (Figure).

Further analysis showed that EE and DEP were significantly higher in government institutions than private ones. Those having more than 2 years of post-graduate experience had significantly higher DEP than those with less experience (p=0.016). Those residents working for 50-60 hours/week had significantly higher EE and DEP than those working more than 80 hours/week (p>0.00). Also, those residents who were dissatisfied with their speciality had significantly higher EE and DEP than those feeling satisfied (p>0.00 and p=-0.025) (Table-2).

Discussion

Burnout is an important condition being encountered more frequently among all workers particularly physicians. Among physicians, residency is considered as the most exhaustive phase and is thought of promoting burnout among them. Burnout has been defined by many authors. Maslach had described it as a syndrome involving three aspects of one's life, including emotional exhaustion, feeling of depersonalisation and reduction of personal performance and efficiency.[10]

Campbell et al. conducted a prospective trial among internal medicine residents and found that 78% of the residents were burned out. Of them, 42% residents continued to burn out throughout their residency.[11] Among gynaecology residents, burnout prevalence varies from 11-83%, as suggested by many authors.[12] In our study, we found the prevalence of burnout in 76.9% participants, which is quite high. Govardhan et al. conducted a similar trial on gynaecology residents in the United States and found the prevalence of burnout in >50% of residents.[13] Ghetti et al. reported the prevalence of burnout in gynaecological residents in United States as 70%.[14] In a study from Pakistan, Muzaffar Y. and et al. found burnout in 30.6% of medical students.[15] In another study by Zubairi et al., burnout was found in 74.6% of residents in a hospital from Pakistan.[16] This shows that burnout is a universal thing and is highly prevalent among all residents, irrespective of state and race. It is almost equally and highly prevalent in both developing and developed countries. However, some authors have suggested some difference according to culture variation.[17]

As burnout is highly prevalent, it is important to identify the risk factors associated with it. In our study, we have identified that significant risk was present in those senior residents who had already completed their two years of residency. Similar findings were noted by Chaput et al. among plastic surgery residents.[17] Other factors we identified that lead to higher burnout scores included more working hours, working in government set-up and dissatisfaction with the specialty. Another study found that higher burnout scores among gynaecology residents were related with more working hours and dissatisfaction with their jobs among.[13] Moradi et al. conducted a meta-analysis on the topic and they emphasised that work-related stress and job satisfaction are important risk factors which need to be addressed in order to effectively deal with burnout.[12]

Working hours of the residents is a factor which is generally considered as severely influencing their personality and hence burnout. Gynaecology and obstetrics are generally demanding fields which keep residents on their toes in order to deal with any kind of emergency at any time. Therefore, it is important to address the working hours and working environment of residents, particularly in a resource-restricted country like Pakistan where doctors are already small in number than required. West et al. reported that higher burnout scores and working hours were associated with higher medical error rate and leads to decreased empathy and poor quality of life of residents.[18] Landrigan reported a significant decrease in the medical errors by intensive care unit (ICU) residents when their working hours were adjusted.[19] Martini et al. also concluded in their study that working >80 hours/week were significantly associated with decreased efficiency by residents.[20] They also found that among all specialities, working hours were influencing gynaecological residents the most (75% burnout prevalence).

Our study had many limitations as well. Firstly, we included only gynaecological residents in our study, therefore, our results may not be generalised. Secondly, the sample size was limited as we included few hospitals of only one city due to limited resources. Also risk factors and outcomes were assessed at the same time, so temporality cannot be assessed in this study.

Conclusion

High burnout scores were related to more working hours and dissatisfaction with job among gynaecology residents. We need to perform survey on national level to identify and address the risk factors. We also recommend regular counselling and motivational sessions for residents for better outcome.

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Conflict of Interest: None.

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