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PREVALENCE OF BURNOUT SYNDROME (BOS) AND ITS ASSOCIATION WITH PROFESSIONAL QUALITY OF LIFE AMONG CLINICAL PHYSICAL THERAPISTS.

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ABSTRACT

Background: Burnout Syndrome (BOS) is a psychophysiological syndrome consisting of a triad of emotional and physical exhaustion, an exhibition of an impersonal attitude, and loss of a sense of achievement for oneself. Whereas Professional Quality of Life is the individual's subjective perception of their position in life. When considering the clinical physical therapist's nature of job, we find that there is extreme physical exhaustion along with the mental stress in regards to the lesser opportunities they get to pursue their careers ahead. Of all these facts, burnout Syndrome seems quite prevalent among Physiotherapists, though there is sparse data on its prevalence among Physiotherapists and its association with quality of life. There are multiple studies indicating burnout syndrome among doctors, nurses, other para-medical staff along with teachers too, but there is a scarcity of data in terms of Physical therapists.

Objectives: This study aimed to find the prevalence of Burnout Syndrome and its association among Clinical physical therapists of government and private hospitals and clinics in Islamabad.

Methodology: This descriptive cross-sectional study was conducted from February 2023 to July 2023 through non-probability convenience sampling data was collected from 152 clinical Physical Therapists of private and government hospitals/Clinics in Islamabad.

Slovin's Formula was used to calculate sample size. Data were collected by using self-administered questionnaires consisting of basic socio-demographic information. The Maslach Burnout Inventory (MBI) was used to measure Burnout Syndrome prevalence and to assess the association between burnout and professional quality of life; the Professional Quality of Life Scale (ProQOL) was used.

Results: The study showed that 40.2% of participants had burnout syndrome out of 87 participants included in the study. Of the remaining participants (59.8%), 46.2% had low emotional exhaustion, 46.2% had High Depersonalization, and 28.8% had high loss of personal achievements. ProQOL scale showed 72.4% average CS, 73.6% BO, and 60.9% STS. Depersonalization was significantly associated with ProQOL burnout, while other categories of MBI showed insignificant associations.

Conclusion: The study concluded that Burnout Syndrome is prevalent among clinical Physical therapists of government and private hospitals/clinics, but there is only a significant association of depersonalization with ProQOL burnout.

INTRODUCTION:

Burnout (BO) is a psychosocial problem that affects professionals in many fields. It occurs, due to long-term and intense stress at work environment, which leads to three main symptoms: emotional exhaustion (EE). depersonalization (DP), and reduced sense of professional achievement (PA). Emotional exhaustion (EE) is when a person feels drained of energy and lack of motivation in their work, because of personal conflicts or heavy workloads. Depersonalization (DP) is a psychological state where people become emotionally distant, often treating people at workplace in an impersonal way. Reduced professional achievement (PA) is when people evaluating own performance negatively, feeling less competent, which leads to dissatisfaction in their careers. (de Paiva et al., 2017).

Burnout Syndrome was introduced in 1974 by psychiatrist Herbert Freudenberger and psychologist Christina Maslach also described it among social workers, nurses, and lawyers. These professionals often reported negative perception, and decline in emotional, struggling to connect with patients or clients. (Bejer et al., 2019). Wolfe was the first to research Burnout Syndrome (BOS) Physiotherapists. (González-Sánchez et al., 2017).BO symptoms such as headaches, fatigue, and irritability often due to emotional stress, reduced sense of professional achievement makes a person feel incompetent or lacking in skills (Bejer et al., 2019). According to Freudenberg, feelings of failure and depletion is due to overuse of energy or resources. This leads to negative emotion in a work-related context. (Carmona-Barrientos et al.,2020).

Quality of Life (QoL) is the person's subjective evaluation of their position in life, based on cultural and social contexts as well as personal goals and expectations. According to WHO, it is highlight the need to consider both subjective and objective factors to assess quality of life. Research indicates that Burnout Syndrome (BOS) can affect persons across various professions. (González-Sánchez et al., 2017). Individuals most at risk

include physicians, nurses, Physiotherapists, and others working with significant responsibilities. (Bejer et al., 2019)

The research has been conducted on workrelated issues and disorders affecting physical therapists. Previous studies on mental health issues has shown a low to moderate increased prevalence of burnout syndrome among physical therapists. (Girbig et al., 2017). There are limited clinical findings on burnout Physiotherapists, other studies among focusing on other medical field. However, physical therapists are also at high risk (Corrado et al., 2019). In rehabilitation settings, 46% of physical therapists had moderate burnout with emotional exhaustion. Another study found 58% of physical and occupational therapists experienced high burnout (Patel & Bartholomew, 2021). Several studies have investigated burnout in physical and occupational therapists (Corrado et al) found high risk of BO in physical therapists, though with a small sample size. Recent findings show female therapists in their 20s at small or medium sized hospitals are more prone to burnout. Women in large hospitals had higher personal accomplishment (PA) than men. Younger therapists had higher emotional exhaustion (EE), depersonalization (DP), and PA than older ones. (Kim et al., 2020). Healthcare workers are at high risk of burnout. Studies show up to 50% of doctors in pediatric departments report moderate to high emotional exhaustion (Yao et al., 2022). In Physiotherapists, burnout levels range from medium to high, especially early in their careers, with no major gender differences (Rodriguez-Nogueira et al., 2022).

A 2016, descriptive study on 116 Physiotherapists in Spain to assess burnout, they found that working over 40 hours or treating over 20 patients weekly led to higher emotional exhaustion (EE) and depersonalization (DP). A 65.23-point level

of burnout syndrome was seen among Physiotherapists (González-Sánchez et al., 2017). Similarly, another study reported that low EE and DP, with moderate personal accomplishment (PA) level among Physiotherapists. EE was highest in those over 40 and with longer experience (Bejer et al., 2019). Bruno Corrado et al. studied burnout in Physiotherapists. They found that 45% were at high risk of developing burnout, 16% already experiencing it, and only 1.7% were without risk of BO. (Corrado et al., 2019). In 2018, Marica Leonardo-Grandos et al assess burnout and quality of working life among women. Only 4% showed signs of burnout, 30% showing low job satisfaction, some domain of quality of work life scale have low to moderate relationship with burnout scale. (Leonardo-Granados & Chocó-Cedillos, 2018).

Previous studies on doctors, nurses, teachers and other professional. Studies on doctors found 57.1% had personal burnout, High stress and job demands were key burnout causes. (Ming Yao et al., 2022). Mohammad Almatarfi et al assessed burnout in teachers 36% had high burnout, more common among women and younger teachers. (Almatarfi et al., 2022). Kmelly Kerolayne et al. studied nursing professionals and found that BO has an influence on outcome of the quality of life and more prevalent in those with high income and older age. (Ribeiro et al., 2021). Alemayehu Sayih Belay et al. examined nurses in public hospitals, found considerable proportion of nurses had burnout syndrome. (Belay et Al.,2021).

This study aims to assess the prevalence of burnout syndrome and its association with quality of life among male and female clinical physical therapists of Government and Private Hospitals and clinics in Islamabad. While many previous studies have focused on other professionals such as doctors, nurses, physicians, medical students and teachers. This study will provide clinical Physiotherapists with a better understanding of the risks of burnout syndrome and how it affects their professional quality of life.

Materials and Methods Design and Setting

The study employed a descriptive crosssectional design to investigate the prevalence of burnout syndrome and its association with professional quality of life among clinical physical therapists. This cross-sectional approach selected allow was to measurement of the frequency of burnout and its correlation with professional quality of life for identifying patterns within a defined population. The study was conducted in Islamabad, covering both Pakistan, government and private hospitals and physiotherapy clinics. These included PIMS, Polyclinic Hospital, NIRM, Kulsoom International Hospital, and other wellestablished hospitals and clinics, ensuring a diverse and representative research sample. Data was collected over a six-month period from February to July 2023.

Ethical Statement

The research was reviewed and approved by the Research Ethics and Review Committee of the University Institute of Physical Therapy, University of Lahore, Islamabad Campus. Permissions were also obtained from the administrative departments of the participating hospitals and clinics. Informed written consent was obtained from all participants prior to data collection.

Sampling

A non-probability convenience sampling technique was adopted to recruit practicing clinical physical therapists from a total population of 245 professionals working in government and private hospitals and clinics in Islamabad. The sample size was calculated using Slovin's formula with a 95% confidence

level and 5% margin of error, yielding a sample size of 152 participants. After applying the inclusion and exclusion criteria, a final sample of 87 participants was included in the analysis. Participants were eligible if they were registered clinical physical therapists aged between 25 and 60 years with at least one year of clinical experience in government and private hospitals and clinics within Islamabad. Participants were excluded if they had previously diagnosed psychiatric disorders, including generalized anxiety or depression or if who failed to complete the full questionnaire.

Data Collection Tools and Instruments

Data was collected using a semi-structured, self-administered questionnaire available in printed format and online forms shared via Google Forms. The questionnaire consisted of three sections: demographic information (gender, age, work schedule, etc.), the Maslach Burnout Inventory (MBI), and the Professional Quality of Life Scale (ProQoL Version 5).

The Maslach Burnout Inventory (MBI), a validated 22-item tool was used to assess three core dimensions of burnout: **Emotional Exhaustion (EE)**, **Depersonalization (DP)**, and **Personal Achievement (PA)**. Each item was rated on a 7-point Likert scale ranging from 0 ("Never") to 6 ("Every day").

The ProQoL Scale, widely used in clinical research, has three domains: Compassion Satisfaction (CS), Burnout (BO), and Secondary Traumatic Stress (STS). Each subscale score was categorized into low, average, and high levels.

Statistical Analysis

Data were entered into Microsoft Excel for initial cleaning and verification. It was then analyzed using IBM SPSS Statistics Version 26. Descriptive statistics, including frequencies and percentages, were used to summarize demographic variables and

burnout levels. Normality of the study dataset was assessed by using the Shapiro-Wilk test. As the data were not normally distributed (p < 0.05), non-parametric tests were applied. The Chi-square test was used to examine

associations between subscales of MBI and ProQOL dimensions. A p-value of less than 0.05 was considered statistically significant. Where applicable, Cramer's V test was used to evaluate the strength of associations.

Results

After applying the inclusion and exclusion criteria, the sample size of total 87 participants included in the study, among

them were predominantly female (n = 47, 54.0%), with male participants being (n = 40, 46.0%) (Table 1).

Table 1: Gender Distribution

Gender	No. of participants	Percentage (%)
Female	47	54.0
Male	40	46.0
Total	87	100.0

Out of 87 participants, more individuals (94.3%) were lying between the ages of 25 to 40. In the marital status category, more individuals (58.6%) fall in the Unmarried

category. Out of the three categories of shift timings, more participants (60.9%) were working in the morning shift. (Table 2).

Table 2: Demographics

Variables	Frequency Percent (%)	
Age Category		
25-40	82	94.3
41-60	5	5.7
Total	87	100.0
Marital Status		
Married	36	41.4
Unmarried	51	58.6
Total	87	100.0
Shift Timing		
Morning	53	60.9
Evening	5	5.7
Both	29	33.3
Total	87	100.0

The working experience of the Physiotherapists showed 41(47.1%) were working in hospital/clinic for more than 1 year and 46(52.9%) were working in hospital/clinic for more than 2 years. As the

table 3 shows, most of the participants (52.9%) were working in hospital/clinic for more than 2 years. (Table 3).

Table 3: Working Experience

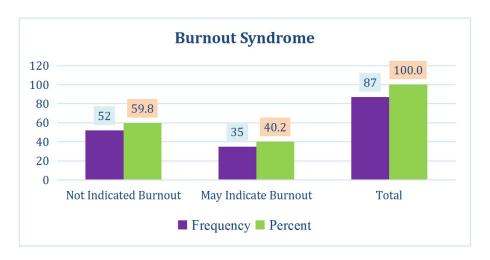
How long have you been working in the hospital/clinic?						
Experience Frequency Percent (%)						
More than 1 year	41	47.1				
More than 2 year	46	52.9				
Total	87	100.0				

Table 4: Categories of MBI in Indicated Burnout Subjects

Dimension	Burnout Criteria	Frequency	Percent (%)
Emotional Exhaustion/Burnout	High Burnout (≥30)	35	100.0
Depersonalization	High Burnout (≥12)	35	100.0
Loss of Personal Achievements	High Burnout (≤33)	35	100.0

According to the set interpretation of MBI scale, 35(40.2%) indicated burnout syndrome and 52(59.8%) were at risk of burnout Syndrome. These 35 participants who were indicated of burnout showed high score of EE, DP and low score of LPA, indicating burnout in these subjects by fulfilling the set interpretation of burnout mentioned in the MBI scale. (Chart 1) (Table 4)

Chart 1: Prevalence of Burnout Syndrome



In terms shows that out of 52 participants, 24(46.2%) had low burnout, 15(28.8%) had moderate burnout and 13(25.0%) had high burnout. shows that out of 52 participants, 18(34.6%) had low burnout, 10(19.2%) had moderate burnout and 24(46.2%) had high burnout. shows that out of 52 participants, 27(51.9%) had low burnout, 10(19.2%) had moderate burnout and 15(28.8%) had high burnout. (Table 5).

Table 5: Categories of MBI listing subjects at risk of Burnout

Emotional Exhaustion/Burnout	Low Burnout (17 or less)	Moderate burnout (18-29)	High burnout (30 or more)	Total
Frequency	24	15	13	52
Percent (%)	46.2	28.8	25.0	100.0
Depersonalization	Low Burnout (5 or less)	Moderate Burnout (6-11)	High Burnout (12 or more)	Total
Frequency	18	10	24	52
Percent (%)	34.6	19.2	46.2	100.0
Loss of Personal Achievements	Low Burnout (40 Or More)	Moderate Burnout (34-39)	High Burnout (33 Or Less)	Total
Frequency	27	10	15	52
Percent (%)	51.9	19.2	28.8	100.0

ProQOL scale demonstrates the three categories; compassion satisfaction, ProQOL burnout and secondary Traumatic Stress. The description of all the categories is as follows;

Compassion, Satisfaction: 87 participants included in the study showed 7(8.0%) have low Compassion Satisfaction, 63(72.4%) have average compassion, satisfaction and 17(19.5%) showed high compassion, satisfaction. Most of the participants (72.4%) showed average compassion, satisfaction.

ProQOL Burnout: Out of 87 participants, 23(26.4%) showed low burnout, 64(73.6%) showed average burnout and none showed in high burnout category. As the table 19 shows, most of the participants (73.6%) showed burnout level.

Secondary Traumatic Stress: Out of 87 participants, 30(34.5%) had low Secondary traumatic stress, 53(60.9%) had average STS and 4(4.6%) showed high STS. As the table 19 shows, most of the participants (60.9%) showed average STS. (Table 6).

Table 6: 3 Categories of Professional Quality of Life Scale

	ProQol Compassion Satisfaction Category		ProQol Burnout Category		ProQol Secondary Traumatic Stress Category	
	Frequency	Percent (%)	Frequency	Percent (%)	Frequency	Percent (%)
Low (22 or less)	7	8.0	23	26.4	30	34.5
Average(23-41)	63	72.4	64	73.6	53	60.9
High (42 0r more)	17	19.5	0	0	4	4.6
Total	87	100.0	87	100.0	87	100.0

The analysis of the association between Maslach Burnout Inventory Emotional Exhaustion with three ProQoL metrics (Compassion Satisfaction, burnout and secondary traumatic stress) showed insignificant association between them. The respective p-value (0.266, .115, 0.077) of three metrics, clearly depicts that emotional exhaustion has no visible effects on either of three categories of ProQoL metrics. (Table 7, 8, 9)

<u>Table 7: Association of MBI Emotional Exhaustion with ProQOL Compassion Satisfaction Category</u>

	ProQol Compassion Satisfaction Category				
Emotional Exhaustion/burnout	Low (22 or less)	Average (23- 41)	High (42 or more)	Total	p-value
Low Burnout (17 Or Less)	2	15	7	24	.266
Moderate Burnout (18-29)	0	14	1	15	
High Burnout (30 Or More)	5	34	9	48	
Total	7	63	17	87	

Table 8: Association of MBI Emotional Exhaustion with ProQoL Burnout Category

		ProQol Burnout Category				
Emotional Exhaustion/Burnout	Low (22 or less)	Average (23-41)	High (42 or more)	Total	p-value	
Low Burnout (17 Or Less)	10	14	-	24	.115	
Moderate Burnout (18-29)	4	11	-	15		
High Burnout (30 Or More)	9	39	-	48		
Total	23	64	0	87		

<u>Table 9: Association of MBI Emotional Exhaustion with ProQoL Secondary Traumatic Stress Category</u>

ProQol Secondary Traumatic Stress Category							
Emotional Exhaustion/Burnout	Low (22 or less)	Average (23-41)	High (42 or more)	Total	p-value		
Low Burnout (17 Or Less)	13	11	0	24	.077		
Moderate Burnout (18-29)	5	10	0	15			
High Burnout (30 Or More)	12	32	4	48			
Total	30	53	4	87			

The analysis of association between Depersonalization with ProQoL metrics (Compassion Satisfaction, burnout and secondary traumatic stress) showed that there is a **significant association of Depersonalization with ProQoL Burnout** according to its p-value (0.039). On the contrary, the results of association between MBI's depersonalization category with ProQoL CS and ProQoL STS metrics clearly showed insignificant association between them. (Table 10,11,12)

<u>Table 10: Association of MBI Depersonalization with ProQoL Compassion Satisfaction Category</u>

ProQol Compassion Satisfaction Category							
Depersonalization	Low (22 or less)	Average (23- 41)	High (42 or more)	Total	p-value		
Low Burnout (5 or less)	1	11	6	18	.358		
Moderate Burnout (6- 11)	1	6	3	10			
High Burnout (12 or more)	5	46	8	59			
Total	7	63	17	87			

Table 11: Association of MBI Depersonalization with ProQoL Burnout Category

ProQol Burnout Category							
Depersonalization	Low (22 or less)	Average (23-41)	High (42 or more)	Total	p-value		
Low (5 or less)	9	9	0	18	.039		
Moderate (6-11)	2	8	0	10			
High (12 or more)	12	47	0	59			
Total	23	64	0	87			

<u>Table 12: Association of MBI Depersonalization with ProQoL Secondary Traumatic Stress Category</u>

ProQol Secondary Traumatic Stress Category								
Depersonalization	Low (22 or less)	Average (23- 41)	High (42 or more)	Total	p-value			
Low BO (5 or less)	9	9	0	18	.406			
Moderate BO(6-11)	3	7	0	10				
High BO (12 or more)	18	37	4	59				
Total	30	53	4	87				

The analysis of the association between Maslach Burnout Inventory's loss of personal achievement category with three ProQoL metrics (Compassion Satisfaction, burnout and secondary traumatic stress) showed insignificant association between them. The respective p-value (0.492, 0.128, 0.392) of three metrics, clearly depicts that loss of personal achievement has no visible effects on either of three categories of ProQoL metrics. (Table 13,14,15)

<u>Table 13: Association of MBI Loss of Personal Achievement with ProQoL Compassion Satisfaction</u>

ProQol Compassion Satisfaction							
Loss of Personal Achievements	Low (22 or less)	Average (23-41)	High (42 or more)	Total	p-value		
Low (5 or less)	1	20	6	27	.492		
Moderate (6-11)	0	7	3	10			
high (12 or more)	6	36	8	50			
Total	7	63	17	87			

<u>Table 14: Association of MBI Loss of Personal Achievement with ProQoL Burnout</u> Category

	ProQol Burnout					
Loss of Personal Achievements	Low (22 or less)	Average (23-41)	High (42 or more)	Total	p-value	
Low (40 Or More)	11	16	-	27	.128	
Moderate (34-39)	2	8	-	10		
High (33 Or Less)	10	40	-	50		
Total	23	64	0	87		

<u>Table 15: Association of MBI loss of Personal Achievement with ProQOL Secondary Traumatic Stress</u>

ProQol Secondary Traumatic Stress							
Loss of Personal Achievements	Low (22 or less)	Average (23-41)	High (42 or more)	Total	p-value		
Low (40 Or More)	9	18	0	27	.392		
Moderate (34-39)	5	5	0	10			
High (33 Or Less)	16	30	4	50			
Total	30	53	4	87			

DISCUSSION

The results of the current study show that Burnout Syndrome is prevalent in 40.2 % among Clinical Physical Therapists of Government and private Hospitals of Islamabad, Pakistan. As in 2017 Spain study estimated the prevalence of burnout syndrome and showed that Physiotherapists from Extremadura showed a 65.23% of burnout syndrome, according to the Maslach Burnout Inventory questionnaire. (González-Sánchez et al., 2017)

Marisa Leonardo-Granados studied the Professional Quality of Life and Burnout Syndrome in nurses showed a 4% of Burnout Syndrome.(Leonardo-Granados & Chocó-Cedillos, 2018).In another Italian cross sectional study (2019) on burnout syndrome among Italian physical therapists showed 45.8% of the physical therapists were affected by burnout. (Corrado et al., 2019)

Overall, our results confirm the findings reported by other studies that there is a high prevalence of burnout among physical therapists.

In this study the Burnout Syndrome is more common in females (54.3%). The study in Brazil (2021) also showed that Burnout Syndrome was most common among females (51.3%), where (15.1%) of participating

nurses were classified with BS.(Ribeiro et al., 2021) .In another study of Malaysia, on prevalence of Burnout Syndrome and its associated factors among doctors, a higher prevalence of female doctors was also identified.(Yao et al., 2022). In another study of Mohammad Almatrafi et.al showed BS was significantly higher among young aged teachers (42.2% vs. 23.7%) and female teachers (42.1% vs. 27%).(Almatrafi et al., 2022), which showed similar results to our study in comparison to females ratio having more Burnout than males.

Participants who had burnout (40.2%) showed high level of EE, DP and LPA whereas (59.8%) participants who were at risk of burnout showed Low EE (46.2%), moderate EE (28.8%) and high EE (25%). The depersonalization was low (34.6%), moderate (19.2%) and high (46.2%). The loss of personal achievement was low (51.9%), moderate (19.2%) and high (28.8%). So, the dimensions were analyzed separately, it was found that participants had a low level of emotional exhaustion, LPA, and a high level of depersonalization.

We compared our results with the findings of Corrado et al 2019 study on the prevalence of burnout syndrome among Italian Physiotherapists, which results showed that 75% of physical therapists had a moderate EE score, 90% had a moderate to high DP score, and 80% had a moderate to low PA score.(Corrado et al., 2019)

In Bejer et al Poland study (2019) which examined group of Physiotherapists, also observed a low level of Emotional Exhaustion and Personal Accomplishment while high Depersonalization was observed. (Bejer et al., 2019)

Marisa Leonardo-Granados, (2018) studied the Professional Quality of Life and Burnout Syndrome in nurse showed a Burnout Syndrome of 3.6%, high emotional exhaustion of 20%, depersonalization of 24.5% and low job satisfaction of 30% was

observed.(Leonardo-Granados & Chocó-Cedillos, 2018)

In this study there is insignificant association of burnout syndrome with quality of life except depersonalization with ProQOL Burnout which shows significant result.(Leonardo-Granados & Chocó-Cedillos, 2018) (Ribeiro et al., 2021)

CONCLUSION:

The study showed that 40.2% of participants had burnout syndrome out of 87 participants included in the study. Of the remaining participants (59.8%),46.2% had emotional exhaustion, 46.2% had High Depersonalization, and 28.8% had high loss of personal achievements. ProQOL scale showed 72.4% average CS, 73.6% BO, and 60.9% STS. Depersonalization significantly associated with ProQOL burnout, while other categories of MBI showed insignificant associations.

Limitations

Limitations of this study were;

- 1. Sample size was relatively small.
- 2. Unequal distribution of male and female participants.
- 3. More data collected was from 25-40 age category of physical therapists

Recommendations

- 1. Broader epidemiological studies involving different centers, well distributed throughout the country, are recommended.
- 2. In future studies, larger sample size should be taken.
- 3. Future researcher should correlate with other risk factors (like work experience, days and hours of work) of Burnout Syndrome.
- 4. Future studies should focus on higher age category above 35-60 years.

REFERENCES

Almatrafi, M., Alsulami, E., Saleh, R., Sadaqa, G., Alamoudi, R., Althagafi, J., Alghamdi, F., & Goweda, R. (2022). The prevalence and severity of burnout syndrome among school

teachers in Makkah city, Saudi Arabia: A cross sectional study. *Med. Sci*, 26.

Asghar, A. A., Faiq, A., Shafique, S., Siddiqui, F., Asghar, N., Malik, S., Kamal, S. D., Hanif, A., Qasmani, M. F., & Ali, S. U. (2019). Prevalence and predictors of the burnout syndrome in medical students of Karachi, Pakistan. *Cureus*, 11(6).

Bejer, A., Domka-Jopek, E., Probachta, M., Lenart-Domka, E., & Wojnar, J. (2019). Burnout Syndrome in Physiotherapists working in the Podkarpackie province in Poland. *Work*, 64(4), 809-815.

Belay, A. S., Guangul, M. M., Asmare, W. N., Bogale, S. K., & Manaye, G. A. (2021). Prevalence and associated factors of burnout syndrome among nurses in public hospitals, southwest ethiopia. *Ethiopian journal of health sciences*, 31(3).

Bhatia, M., & Saha, R. (2018). Burnout in medical residents: A growing concern. *Journal of postgraduate medicine*, 64(3), 136. Bianchi, R., Schonfeld, I. S., & Laurent, E. (2018). Burnout Syndrome and depression. *Understanding depression: Volume 2. Clinical manifestations, diagnosis and treatment*, 187-202.

Boni, R. A. d. S., Paiva, C. E., De Oliveira, M. A., Lucchetti, G., Fregnani, J. H. T. G., & Paiva, B. S. R. (2018). Burnout among medical students during the first years of undergraduate school: Prevalence and associated factors. *PloS one*, *13*(3), e0191746. Carmona-Barrientos, I., Gala-León, F. J., Lupiani-Giménez, M., Cruz-Barrientos, A., Lucena-Anton, D., & Moral-Munoz, J. A. (2020). Occupational stress and burnout among Physiotherapists: a cross-sectional survey in Cadiz (Spain). *Human resources for health*, *18*, 1-10.

Castro, C. S. A. A. A., Timenetsky, K. T., Katz, M., Corrêa, T. D., Felício, A. C., Moriyama, T., Kernkraut, A. M., Ferraz, L. J. R., & Serpa Neto, A. (2020). Burnout Syndrome and engagement among critical care providers: a cross-sectional study.

Revista Brasileira de Terapia Intensiva, 32, 381-390.

Corrado, B., Ciardi, G., Fortunato, L., & Servodio Iammarrone, C. (2019). Burnout Syndrome among Italian Physiotherapists: A cross-sectional study. *European Journal of Physiotherapy*, 21(4), 240-245.

de Lourdes Campos, M., & De Lucena, R. d. C. S. (2017). Quality of life and prevalence of burnout syndrome in higher education teachers. *International Archives of Medicine*, 10.

de Paiva, L. C., Canário, A. C. G., de Paiva China, E. L. C., & Gonçalves, A. K. (2017). Burnout Syndrome in health-care professionals in a university hospital. *Clinics*, 72, 305-309.

Dobroch, J., Baczewska, M., Szyłejko, A., Chomicz, K., & Knapp, P. (2021). Factors predisposing to burnout syndrome among medical staff participating in complex surgical processes. *Indian Journal of Community Medicine: Official Publication of Indian Association of Preventive & Social Medicine*, 46(2), 258.

Girbig, M., Freiberg, A., Deckert, S., Druschke, D., Kopkow, C., Nienhaus, A., & Seidler, A. (2017). Work-related exposures and disorders among physical therapists: experiences and beliefs of professional representatives assessed using a qualitative approach. *Journal of Occupational Medicine and Toxicology*, 12, 1-9.

González-Sánchez, B., López-Arza, M. V. G., Montanero-Fernández, J., Varela-Donoso, E., Rodríguez-Mansilla, J., & Mingote-Adán, J. C. (2017). Burnout Syndrome prevalence in Physiotherapists. *Revista da Associação Médica Brasileira*, 63, 361-365.

Herrity, J. (2023). 9 Causes of Burnout (With Helpful Ways To Manage It). https://www.indeed.com/career-advice/career-development/causes-of-burnout

Kim, J.-H., Kim, A.-R., Kim, M.-G., Kim, C.-H., Lee, K.-H., Park, D., & Hwang, J.-M. (2020). Burnout Syndrome and work-related

stress in physical and occupational therapists working in different types of hospitals: which group is the most vulnerable? *International journal of environmental research and public health*, 17(14), 5001.

Kleinpell, R., Moss, M., Good, V. S., Gozal, D., & Sessler, C. N. (2020). The critical nature of addressing burnout prevention: Results from the critical care societies collaborative's national summit on prevention and management of burnout in the ICU. *Critical care medicine*, 48(2), 249.

Kowalska, J., Chybowski, D., & Wójtowicz, D. (2021). Analysis of the sense of occupational stress and burnout syndrome among working Physiotherapists—a pilot study. *Medicina*, 57(12), 1290.

Kumaresan, A., Sebastian, N., Suganthirababu, P., Srinivasan, V., Vishnuram, S., Kumar, P., Jayaraj, V., Alagesan, J., Prathap, L., & Kandakurti, P. (2022). Efficacy of physiotherapy management on burnout syndrome amongst it professionals during the COVID-19 pandemic. *Work*(Preprint), 1-7.

Leonardo-Granados, M., & Chocó-Cedillos, A. (2018). Professional Quality of Life and Burnout Syndrome in nurses of the Department of Internal Medicine of Roosevelt Hospital. *Revista Científica*, 27(2).

Mahmoodi-Shahrebabaki, M. (2019). Teacher burnout. *The TESOL encyclopedia of English language teaching*, 1-8.

Maslach, C. (1996). *MBI Scale*. C. Maslach, S.E. Jackson, M.P. Leiter (Eds.), Maslach Burnout Inventory manual (3rd ed.), Consulting Psychologists Press (1996)

Mesters, P., Clumeck, N., Delroisse, S., Gozlan, S., Le Polain, M., Massart, A., & Pitchot, W. (2017). Professional fatigue syndrome (burnout): Part 2: from therapeutic management. *Revue medicale de Liege*, 72(6), 301-307.

Patel, R. M., & Bartholomew, J. (2021). Impact of Job Resources and Job Demands on Burnout among Physical Therapy Providers.

International journal of environmental research and public health, 18(23), 12521.

Patel, R. S., Sekhri, S., Bhimanadham, N. N., Imran, S., & Hossain, S. (2019). A review on strategies to manage physician burnout. *Cureus*, 11(6).

Ribeiro, E. K. d. A., Santos, R. C. d., Araújo-Monteiro, G. K. N. d., Brandão, B. M. L. d. S., Silva, J. C. d., & Souto, R. Q. (2021). Influence of burnout syndrome on the quality of life of nursing professionals: quantitative study. *Revista brasileira de enfermagem*, 74, e20200298.

Rodríguez-Nogueira, Ó., Leirós-Rodríguez, R., Pinto-Carral, A., Álvarez-Álvarez, M. J., Fernández-Martínez, E., & Moreno-Poyato, A. R. (2022). The relationship between burnout and empathy in Physiotherapists: A cross-sectional study. *Annals of Medicine*.

Ronginska, T., & Doliński, A. (2020). Strategies of coping with failure in the structure of managers 'professional burnout syndrome. *Management*, 24(2).

Saravanabavan, L., Sivakumar, M., & Hisham, M. (2019). Stress and burnout among intensive care unit healthcare professionals in an Indian tertiary care hospital. *Indian journal of critical care medicine: peer-reviewed, official publication of Indian Society of Critical Care Medicine*, 23(10), 462.

Stamm, B. H. (2009). *ProQoL Scale* B. Hudnall Stamm, 2009. Professional Quality of Life Compassion Satisfaction and Fatigue Version 5 (ProQOL). /www.isu.edu/-bhstamm or www.progol.org.

Yahya, M. S., Abutiheen, A. A., & Al-Haidary, A. F. (2021). Burnout among medical students of the University of Kerbala and its correlates. *Middle East Current Psychiatry*, 28(1), 1-7.

Yao, L. M., Hung, C. S., Ain, S. N., Pui, E., & Lee, O. C. (2022). Prevalence of burnout syndrome and its associated factors among doctors in Sabah, Malaysia. *Psychology, health & medicine*, 27(6), 1373-1380.