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# PREVALENCE OF BURNOUT SYNDROME AMONG MEDICAL INTERNS IN DR. ULHAS PATIL MEDICAL COLLEGE AND HOSPITAL, **JALGAON**

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#### **ABSTRACT**

Aim - This study aims to investigate the prevalence of burnout syndrome among medical interns in Dr. Ulhas patil medical college and hospital, jalgaon.

Background - Burnout syndrome is psychological condition characterised by emotional exhaustion, depersonalization, and low personal accomplishment, which translates to inefficient job performance. Due to the prevailing pandemic situation of covid 19 all over the world, has increased tremendous work load on health care professionals. This study assess to find out the prevalence of burnout syndrome among medical interns.

Material and method - this cross sectional study was conducted on 79 healthy amongs 41 male and 31 female medical interns performing covid as well as non covid duty in Dr.Ulhas patil medical college and Hospital, Jalgaon. Data on burnout syndrome were received from Professional Quality Of Life scale. The data was entered into excel sheet. The data was analyzed by using descriptive and interferential statistics.

Results- The results showed that among the covid duty participants ,prevalence of burnout experienced was 50% while, prevalence of non covid participants was 16.32%. The study revealed that prevalence of burnout among medical interns performing covid duty is too high as compared to interns performing non covid duty

Conclusion -The study shows prevalence of burnout syndrome among medical interns. This study find out that burnout syndrome is more in interns attaining covid posting. So the study concludes that interns attaining covid posting have more prevalence of burnout syndrome.

**Keywords** – Burnout syndrome, Covid-19, Medical intern, Professional Quality Of life Scale.

### INTRODUCTION

Burnout syndrome is psychological condition characterised by emotional exhaustion, depersonalization, and low personal accomplishment, which translates to inefficient job peformance. It has been associated with high-stress job, jobs that involve taking care of people and jobs with long working hours; it is a common problem among health professionals and care takers. Burnout syndrome is studied and identified by three different dimensions: emotional exhaustion ,which measures feelings of being emotionally overextended & exhausted by the work; depersonalization, which measures an unfeeling and impersonal response towards the person receiving treatment or service, and personal accomplishment, which measures feelings of competence and achievement in the person's work.

Burnout syndrome also defined as the response to work-related processes of chronic stress .It has been considered as an important health problem in the past decade. Quantitative job demands like experienced work load and time pressure are strongly and consistently related to burnout, particularly the exhaustion dimension, qualitative job demands like role conflict and role ambiguity are also significantly correlated with burnout.<sup>2</sup>

According to the demand-control support model, occupational stress causes burnout when job demands are high while individual autonomy is low & when job stress interferes with home life.<sup>3</sup> Studies have shown that having at least one burnout symptom can cause negative effects in medical students also cause drowsiness, fatigue, eating disorders, migraine, emotional instability, and even the use of illicit drugs.<sup>4</sup>

Work related stress among health care professionals has become a serious health problem.<sup>2</sup>

To medical interns, this period of time is extremely stressful because aside from studying for tests and evaluations, they must complete training in different areas , such as surgery , orthopedic, gynecology, medicine, all ICUs, pediatrics and emergency wards and rooms. They start to take on patient responsibilities, including attending hospitalized and ambulatory patients, assisting with or performing surgeries, taking blood samples, and writing notes for medical record.during this, interns face stressful and demanding situations, irregular eating schedules, sleep deprivation etc.<sup>1</sup>

Coronavirus ,a public health-related emergency situation by the WHO followed by declaration of a pandemic status in march 2020. Most commonly affected are healthcare professionals who are working on the frontline. They suffer from severe psychological side-effects or burnout which may be attributed to extremely long working hours ,heavy work load,& inadequate supply of personal protective equipments (PPE) suplies, over-reporting by audiovisual and social media, and high rate of infection among handling staff.<sup>5</sup>

In addition, because of lack of hospital staff (ranging from nurses to patient transport personnel), medical students may have to take on extra responsibilities to replace or support other roles to guarantee patient care. In a Brazilian study that included an analysis of the literature between 2006 and 2015, 12.1% of physicains and 10.6% of students in general had burnout. An important finding is that of individuals with burnout, 54.6% were young adults.

With this aim ,this study sought to identify the prevalence of burnout in medical interns performing covid and non covid duty in Dr. ulhas patil medical college and hospital, jalgaon

# MATERIALS AND METHODOLOGY

STUDY DESIGN : Cross sectional study

SAMPLE SIZE :  $79 ( n=4pq/E^2 )$ 

STUDY PLACE : Dr. Ulhas Patil medical college and hospital, Jalgaon

SAMPLE TECHNIQUE. : Convenient Sampling technique.

STUDY DURATION : 6 Months

#### SELECTION CRITERIA: INCLUSION CRITERIA-

1. Healthy medical interns

2. Both male and female subjects.

#### :EXCLUSION CRITERIA

1. Interns who refuses to participate

2. Prediagnosed Psychological disorders

MATERIAL REQUIRED : pen ,pencil ,paper

OUTCOME MEASURES : Professional quality of life scale

### **PROCEDURE**

Permission from ethical committee



subjects were selected according to selection criteria

informed consent was taken and the study was explained to the subjects

subjects were interviewed by therapist

statistical analysis was done and result was concluded.

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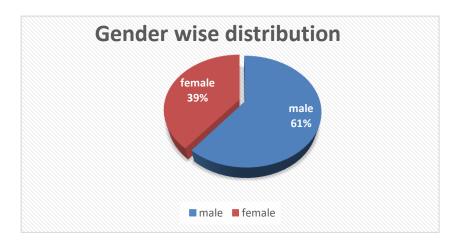
#### **METHOD**

- 1. The study was conducted in Dr,Ulhas patil medical college & hospital, jalgaon between dec,2020 and june 2021.
- 2. Participants 79 participants who met with the inclusion and exclusion criteria was included in this study. Study was carried out after signing inform concent form. PROFESSIONAL QUALITY OF LIFE SCALE was used as a outcome measure.Burnout was checked by 10 items on the 1,4,8,10,15,17,19,21,26,29. The average score on burnout scale is 22.If score is below 18, this probably reflects positive feelings about their ability to be effective in their work.if they score above 27 they may wish to think about what at work makes they feel like they are not effective in their position.
- 3. Statistical analysis The data was entered into excel sheet. The data was analyzed by using descriptive and interferential statistics. Data was expressed as mean  $\pm SD$  for continuous variables and as percentages for categorical.

# DATA ANALYSIS AND INTERPRETATION

Table no.1: Gender wise distribution

Table no.1		
GENDER	FREQUENCY	PERCENTAGE
M	48	61%
F	31	39.24%



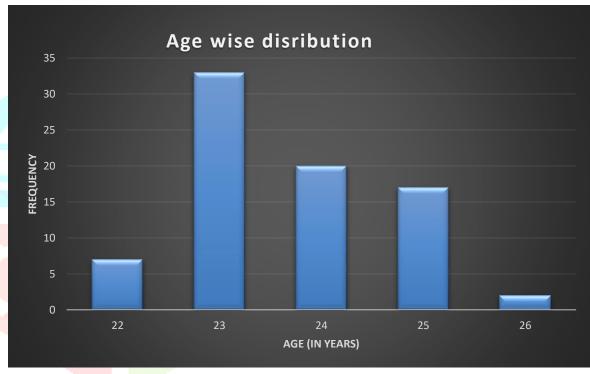
**Graph No.1** 

Table no.1 and graph no.1 shows distribution according to gender .In that total no.of male participants are 48 i.e.61% and total no.of female participants are 31 i.e.39.24%.



Table no.2: Age wise distribution

Table No.2		
AGE	FREQUENCY	PERCENTAGE
22	7	8.86
23	33	41.77
24	20	25.31
25	17	21.51
26	2	2.53

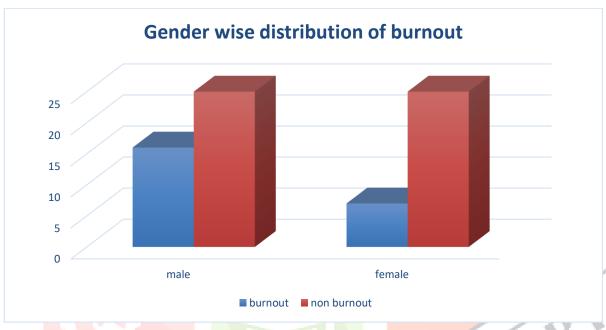


Graph no.2

In the above Table no.2 and Graph no.2 shows Age wise distribution of participants attending covid as well as non covid d

Table no.3: Gender wise distribution of burnout

	male	Female
burnout	16	7
non burnout	31	25

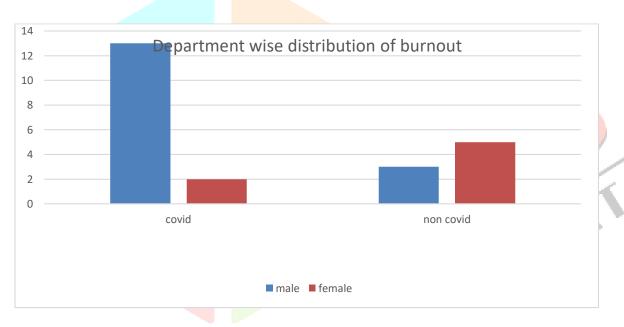


Graph no.3

In the above, Table no.3 and Graph no.3 shows Gender wise distribution of burnout syndrome.

Table no.4 : Department wise distribution of burnout

Column1	male	female
covid	13	2
non covid	3	5

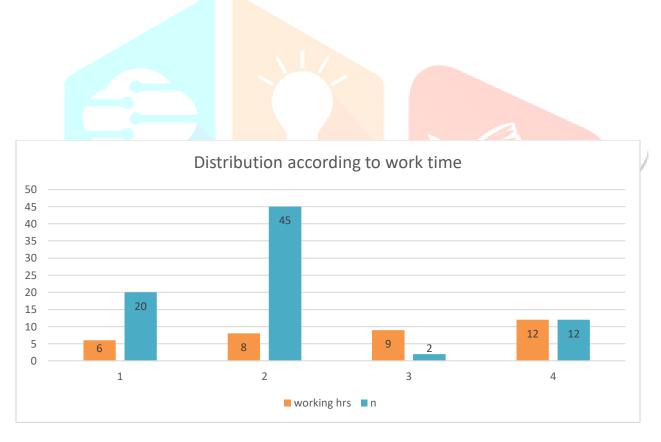


Graph no.4

In the above, table no.4 and Graph no.4 shows department wise distribution of burnout

#### Disribution according to work time

Table no.5		
WORKING HRS	FREQUENCY	PERCENTAGE
6	20	25.31
8	45	56.96
9	2	2.53
12	12	15.18



Graph no.5

In the above ,Table no.5 and graph no.5 shows work time distribution

Table no.6		
REST INTERVAL	FREQUENCY	PERCENTAGE
NONE	23	29.11
5-30 min	23	29.11
31-60 min	30	37.97
>60 min	3	3.79

Table no.6 shows distribution of no.of participants according to rest interval time with their percentages.

### **RESULTS**

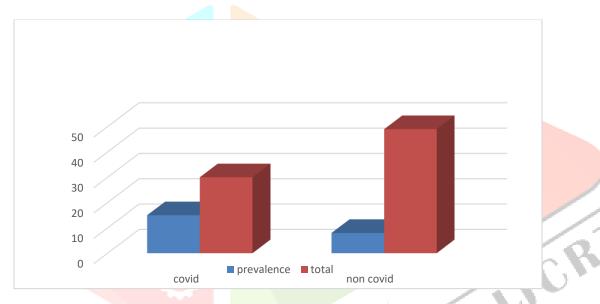
In our study, out of 79 participants, total male participants were 48 i.e.61% and Female participants were 31 i.e.39.24% that showed in Table no.1 and graph no.1. There are 8.86% participants of age group 22, 41.7% participants of age group 23,25.3% participants of age group 24, 21.5% participants of age group 25, and 2.5% participants of age group 26 respectively that showed in table no.2. According to gender, 16 male and 7 female had burnout as well as 31 male and 25 females had non burnout that showed in table no.3 and graph no.3. Majorly participants performing covid duty are more vulnerable to burnout syndrome, the ratio between covid and non covid interns for burnout falls like 13:3, this was followed in males, In females the ratio was considerably different ,out of 7 females examined 2 were covid interns and left out 5 peoples were Non covid interns as showed in table no.4. Table no.5, describes that 20 interns were working for 6hours whose percentage was 25.3%,45 interns were working for 8 hours whose percentage was 56.9%,2 interns were working for 9 hours whose percentage was 2.5%,12 interns were working for 12 hours whose percentage was 15%. Table no.6 describes that,23 Participants had no rest interval whose percentage was 29%, 23 Participants had 5-30 min.of rest interval whose percentage was 29%,30 participants had 31-60 min.of rest interval whose percentage was 37.9%, 3 participants had rest interval of more than 60 mins.whose percentage was 3.7%.

In our study 30 participants, n=30 (37%) were in covid duty,while 49 participants, n=49(62.02%) were in non covid duty. Among the covid duty participants ,prevalence of burnout experienced was 50% (n=15) while, prevalence of non covid participants was 16.32%(n=8)

A total 79 participants ( male 60.70%, female 39.24%) with mean age was 23.67%. In our study ,prevalence of burnout among medical interns, male n=16(20,25%), female n=7(8.86%). Among 16 male participants ,13 were in covid duty ,remaining 3 were in non covid duty ,while 2 female participants were in covid duty and 5 in non covid duty.

	covid	non covid
Prevalence	15	8
Total	30	49

Table no. 7



Graph no.6: Prevalence of participants attending covid and non covid duty

### **DISCUSSION**

The aim of present study was to find out prevalence of burnout syndrome among medical interns performing covid as well as non covid duty.

WHO Now, refers to Burnout as ,"syndrome conceptualized as resulting from chronic work place stress that has not been successfully managed ," in the organizations international classification of diseases diagnostic manual.

In our study, there are total 79 interns are participated among which 30 interns were performed covid duty and 49 interns performed non covid duty. The prevalence of burnout syndrome among interns performing covid duty is too high i.e. 50% while prevalence of burnout syndrome among interns performing non covid duty was 16.32%.

According to the demand-control support model, occupational stress causes burnout when job demands are high while individual autonomy is low & when job stress interferes with home life. Studies have shown that having at least one burnout symptom can cause negative effects in medical students also cause drowsiness, fatigue, eating disorders, migraine, emotional instability, and even the use of illicit drugs.

Bahaa Aldin Alhaffar et al (2019), conducted a similar study to find out the prevalence of burnout syndrome among Surgery physicians in Syria, and revealed that residents physicians presented with burnout with 70 %.

Our study shows similar findings with study which was carried out by Robson Aparecido Lucchetti et al, they found 44.9% burnout prevalence among undergraduate medical students at Brazil.

The three symptoms associated with the burn out syndrome are: Feelings of energy depletion or exhaustion, increased mental distance from one's job or feelings negative towards one's career, reduced professional productivity.<sup>2</sup>

Medical interns had too much work related stress due to their over-elaborated postings in various wards and ICU's such as OBGY, Medicine ward, Ortho ward, Surgery ward, Pediatrics wards. Along with the regular postings they have to study for their PG medical entrance exam which further increases the mental load on them.

Interns who had performed Covid duty were under high level of mental as well as physical strain as they had to work in extremely bad condition while wearing cheap PPE kit in summer season. The Patient – Doctor ratio was too high, that's why burden on interns performing covid duty increases. The interns who are posted in ICU are more prone to mental and

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emotional stress as the severity of covid symptoms and due to which the death rate in ICU are comparatively high.

Dyrbye et al concluded that, burnout can influence thoughts of dropping out from the medical school. This condition could lead to faulty training and weak medical performance in long term.

Burnout syndrome is frequently occurring medical condition among interns Preventive measures should be included in medical colleges as well as other health care professionals to reduced incidence of burnout syndrome. Early diagnosis of burnout syndrome is needed and interventions to reduced burnout syndrome should be followed through all the medical colleges.

### **CONCLUSION**

Our study shows prevalence of burnout syndrome among medical interns. We have found out that burnout syndrome is more in interns attaining covid posting.

So the study concludes that interns attaining covid posting have more prevalence of burnout syndrome.

#### **FUTURE SCOPE**

Further studies should be carried out to identify the factors that lead to burnout syndrome across medical interns as well as other paramedic interns.

# **LIMITATIONS**

Present study is carried out only in single private institute. Study have not taken any consideration if any student consuming any kind of toxins such as alcohol, tobacco, etc which can be because of mental or physical fatigue which is associated with Burnout syndrome.

#### **CLINICAL IMPLICATION**

Rest interval should be increased, social interaction need to be increased, taking time for self care are the intervention which may reduced burnout prevalence among medical interns.

To induce Mind and body relaxation, Physiotherapy group exercise sessions can be conducted, since several study shows that exercises such as aerobics with music, relaxation techniques, strength training shows improvement in several body systems results in better physical and mental health.

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