



Sources of stress among Doctor of Physical Therapy Students

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ABSTRACT

Background: stress is major cause of mental and emotional disturbance among medical students which affects their life and their professional career. It also affects the quality of studies.

Objective of Study: To find out the sources of stress and psychological morbidities among DPT (Doctor of physical therapy) students.

Methodology: It was a cross sectional survey. Total number of students were 303, 92 were male and 211 were female. Data was collected from The University of Lahore, Riphah International University Lahore, Fatima memorial hospital, School of Allied health sciences, Allama Iqbal Medical College, King Edward Medical College, BahyddinZakria University, University of South Asia, University of Sargodha Lahore campus and Superior University through self-designed questionnaire. Data was collected from September 2014 to December 2014.

Results: Females are more prone to take stress in all condition. Credit hours and job stress is mostly common in students.

Conclusion: Psychological morbidity was present in higher proportion in DPT undergraduate students, multiple factors i.e. long credit hours, job insecurities, increase work load (test, assignments, exams), family expectations were highly present in the students which should be address as soon as possible to give community good professionals.

Key words: Students, Stress, Morbidity

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2. Riphah International University, Lahore Campus

INTRODUCTION

The adverse effects of increased burden of medical studies on health learners have caused turmoil for many years. Medical studies need fulltime attention along with isolation from personal life due to unavoidable pressure of performing well in academic, social and financial⁽¹⁾ The unrecognized emotional disturbance is not only effecting students personal life but also putting their families at higher risk.⁽²⁾

According to a research mastering abilities, personal endurance, scarcity of time for social life, feeling of anonymity, peer competition, continues long study hours are different determinants of the stress.⁽³⁾ researcher found that lack of actual stress coping strategies during medical training forced students to use alternative, harmful ways i.e. tobacco and drugs abuse.⁽⁴⁾ Medical education basically fails to prepare the students for dealing with current pressure and that stress they will encounter in their professional life.⁽⁵⁾

In a cross sectional study researchers compares stress level of male medical students of two different countries Egypt and Saudi Arab. They found almost equal prevalence of stress in both groups (94.7% Egyptians, 92.3% Saudis) whereas anxiety and depression was significantly more in Egyptian students ($p < 0.01$)

due to multiple factors like small classrooms (71.4%), poor peer guidance (32.6%), insecure future (26.6%) and limited time for leisure activities (25%)⁽⁶⁾ In a systematic review it was found the prevalence of stress in US and Canadian Medical students. In that after reviewing 40 articles they found higher prevalence of stress in medical students despite of the country, whereas gender had significant association with stress (females had higher level of stress than male students). However due to limited data available on sources of stress authors were unable to find any significant association with different factors or determinants causing stress.⁽⁷⁾

Basinet B et al and his co researches did a cross sectional survey in B.P.Koirala Institute of Health Sciences, Nepal found 29.78%, overall prevalence of depression (36.74% and 22.22% in first and third year respectively)⁽⁸⁾ Kjeldstadli K et al in a six year longitudinal study on medical students found that life satisfaction is significantly ($p = 0.01$) curtail during their medical studies. This study concluded that medical students should give time to their personal life to improve the satisfaction level.⁽⁹⁾ The basic objective of this study is to find out the sources of stress and psychological morbidities among DPT (Doctor of physical therapy) students



METHODOLOGY

The study design was cross sectional survey. Data was collected from The University of Lahore, Riphah International University Lahore, and Fatima memorial hospital, School of Allied health sciences, Allama Iqbal Medical College, King Edward Medical College, BahyddinZakria University, University of South Asia, University of Sargodha Lahore campus and Superior University. Data was collected from September 2014 to December 2014. The sample size will be 303 students will be included. The sample size had been calculated by using 5% level of significance.

Non probability purposive sampling technique was used. Male and female students with age ranging between 18-25 years with no psychological problems were included in this study. Individuals with any neurological and diagnosed psychological disease were not included in this study. In this study a self-designed questionnaire having 16 items was distributed between major DPT colleges in Lahore. Respondent rate was 75.5% without giving any priority to gender, study year, socio economic status etc. consent was taken. Questionnaire was validated after conducting a pilot study. Data was analyzed using SPSS 18 software. Mean and standard deviation was taken for quantitative data. For qualitative data frequency percentage was used.

RESULTS

There were more female students 69.64% than males 30.36% in this cross sectional survey, Mean age was 21.70 ± 1.82

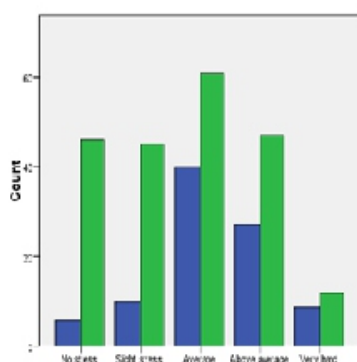


Fig 1: Stress of Future Job

Average level of stress was seen in most of the DPT students regarding their future job $n=101$; 33.33% (male 13.20% $n=40$ and female 20.13% $n=61$) after that Above average level was seen in DPT students $n=74$; 24.42% (male 8.91% and female 15.51 %), although no stress level and slight stress level had almost equal percentages (17.16% and 17.82% respectively). However, only 6.9% (male 2.9% $n=9$ and females 3.9 % $n=12$) students had sever level of job stress .

Table 1: Stress and credit hours relation

Personal Level of Stress	Credit Hours in Semester			Total
	Under 18	16-18	More than 18	
No Stress	5	11	5	21
Slight Stress	9	35	49	93
Average	16	43	81	140
Above Average	2	11	28	41
Very Hard	1	3	4	8
Total	33	103	167	303

Increasing trend was seen in all Personal levels of stress (slight, average, above average and hard) and credit hours. Adding all three levels of stress more percentage 53.64% ($n=162$; slight $n=49$, Average $n=81$, above average $n=28$ and very hard $n=4$) was seen in students having credit hours >18 after that students who have 16-18 credit hours came ($n=92$; 30.36%) and lowest percentage 9.2% was seen in students having credit hours less than 18

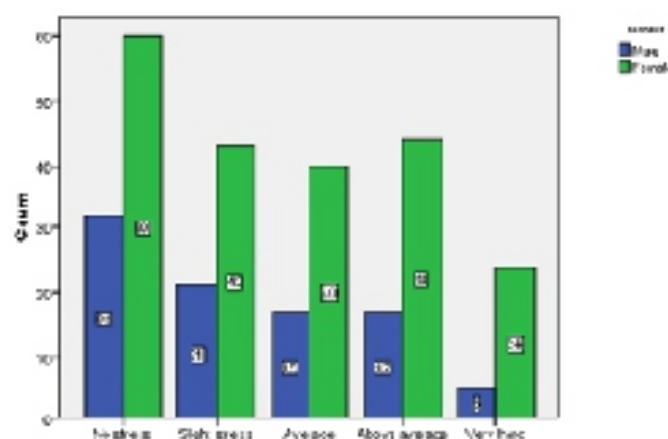


Fig 2: Living away from home

Living away from home was seen as a factor of stress seen in DPT students as the percentage was 48.51 % as a whole $n=147$ (slight $n=64$, Average $n=57$, above average $n=61$ and very hard $n=29$). More over Living away from home



was not important determinant as highest percentage was present in slight level 21.12% (male 6.93% and female 14.18%).

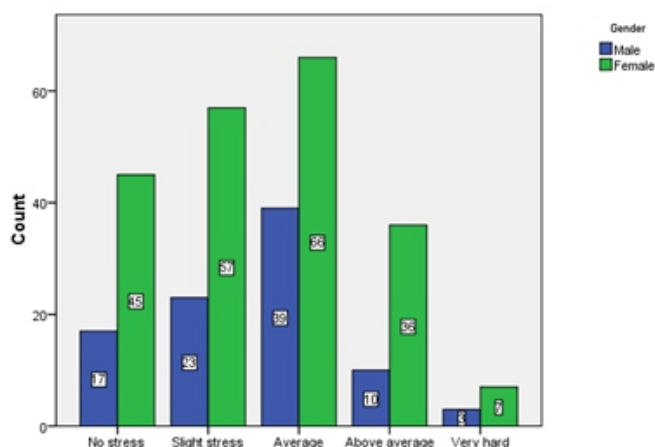


Fig 3: Worried about financial Issues

Stress level was seen more in average level $n=105$; 34.65% (male $n=39$; 12.87% and female $n=66$; 21.78%) in terms of financial issues. Slight level of stress came next to it $n=80$; 26.40% (male $n=23$; 7.59% and female $n=57$; 18.81%), lowest percentage was seen in severe stress ($n=10$; 3.3%).

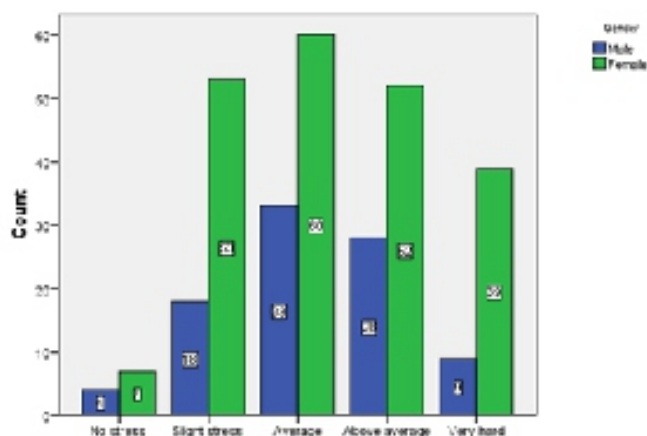


Fig4: Worried about Grades

Grades were seen bit more contributing towards stress i.e. Average level $n=93$; 30.69% (female $n=60$; 19.80% and male $n=33$; 10.89%) after that above average ($n=80$; 26.40%) and severe stress came ($n=48$; 15.84%).

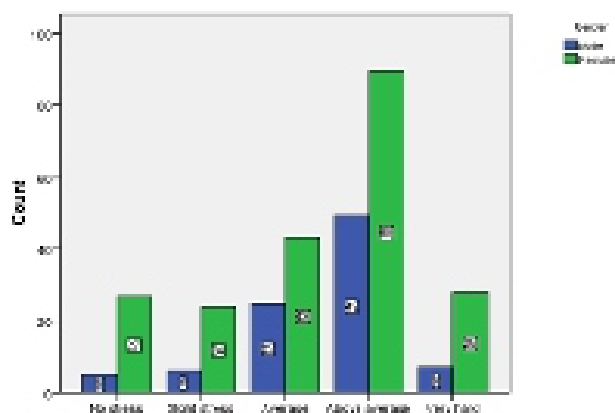


Fig 5: Stress occur due to family expectation

Above average level was seen more $n=138$; 45.5% (male $n=49$ and female $n=89$) in DPT students due to family expectations. Secondly to it was average level of stress with $n=68$ (male $n=25$ and female $n=43$). Here severe level of stress had also noticeable number $n=35$ (male $n=7$ and female $n=28$).

Table 2: Do you work well under stress Gender Cross tabulation

Do you work well under stress	Gender		
	Male	Female	Total
	Yes	94	154
No	32	117	149
Total	92	211	303

Among DPT 50.82% (male $n=60$ and female $n=94$) said they work well in stress and 49.17% (male $n=32$ and female $n=117$) said they don't work well in stress. However, efficacy of working was badly affected in females 55.45% then male

DISCUSSIONS

In this study moderate level (Average level) of stress was seen in most of the DPT students regarding their future job $n=101$; 33.33% (male 13.20% $n=40$ and female 20.13% $n=61$) after that Above average level was seen in DPT students $n=74$; 24.42% (male 8.91% and female 15.51%), although no stress level and slight stress level had almost equal percentages (17.16% and 17.82% respectively). However, only 6.9% (male 2.9% $n=9$ and females 3.9% $n=12$) students had severe level of job stress. Park KH, Kim D-h in 2015 proved that



prevalence of stress is really higher in medical studies due to number of academic, social and personal factors.⁽¹⁰⁾ Stress of performing well whatever the situation is making doctors psychological patients than professionals.⁽¹¹⁾ Physiotherapy education is making changes in Pakistan to meet international criteria, resulting in huge changes, increased workload etc leading to stress. A Simple cross sectional study in 9 major DPT colleges were done in order to see the stress level during undergraduate studies, as there were little evidences of stress association in Physiotherapy students in Pakistan.

In a sample of 303 DPT undergraduate students, most of the physiotherapy trainers were female (69.64%) whereas males were only 30.36%. Davis J in an article of "Physiotherapy. Where is the men?"⁽¹²⁾ Proves that in this field more men therapist are required, consistent with the results of this study. In the current survey of the DPT students mean age was 21.7 years with SD 1.827, however as there was not research done so there was no study present to support my results. Although various other researches were done i.e. Risk of LBP in Physiotherapy students in which mean age of the students were close to my results.⁽¹³⁾ Mottarm E et in their cross sectional survey on young physiotherapist found that moderate stress level was seen in physiotherapist, consistent with my results as in my study average level was seen.⁽¹⁴⁾

Living away from home was also seen as a factor of stress seen in DPT students as the percentage was 48.51 % as a whole n=147 (slight n=64, Average n= 57, above average n=61 and very hard n=29). More over Living away from home was not important determinant as highest percentage was present in slight level 21.12% (male 6.93% and female 14.18%). Strong evidence of above factor was not as such highlighted in previous researches, so researches supporting my results were not present due to multiple demographical factors. Whereas , in Ireland a study was done focusing on the factors of stress in First year students in University , in which Gibney A et al found that living away from home was one of the factor of

stress in many students .⁽¹⁵⁾

Above Average level of stress was related to multiple factors like family expectations (45.5%), test/exams /assignments (32%) and average in determinants like financial issues (34.65%), studies workload (41.58%), worried about grades (30.69%). Although researches related to Physiotherapy was limited but many studies done on MBBS students support .Drybye LN et al done a systematic review to find the prevalence of stress in US and Canadian Medical students. In that after reviewing 40 articles they found higher prevalence of stress in medical students despite of the country, whereas gender had significant association with stress (females had higher level of stress than male students). However due to limited data available on sources of stress authors were unable to find any significant association with different factors or determinants causing stress.

⁽¹⁶⁾ Still more research need to be done to see the significance of above given factors so that evidence based work could be done on DPT students to improve their quality of life. All above studies focus only MBBS students of a single Medical college, still lot need to be done regarding this topic focusing different specialties i.e. BDS, Allied (DPT, MLT, MIT etc) as strategies couldn't be possible without knowing actual factors of stress, every field had its own factors of stress and different medical colleges had different ways of training so one couldn't relay on results of studies done on single college with single field. Larger number of DPT colleges in market, no guarantee of future due to no council in Pakistan along with increase burden of studies makes me compel to do a study on DPT students to identify their prevalence of stress and its factors of stress.

CONCLUSION

Psychological morbidity was present in higher proportion in DPT undergraduate students , multiple factors i.e. long credit hours, job insecurities, increase work load (test, assignments, exams), family expectations were highly present in the students which should be address as soon as possible to give community



good professionals. All above factors need to be address by Physiotherapy teaching institutes either by introducing recreational activities, free counseling of students or check and balance between studies and personal life.

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