# Depression, anxiety and stress among school heads in District Gujrat, Pakistan 

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Objective: To measure the prevalence of depression, anxiety and stress among secondary school heads working in District Gujrat, Pakistan.
Methodology: The sample of the study consisted of 165 secondary school heads selected through simple random sampling technique. Urdu version of Depression, Anxiety and Stress Scale (DASS42) was used to measure the study variables by visiting schools located in Gujrat, Kharian, and Sara-e-Alamgir.
Results: The Alpha reliability coefficients of depression, anxiety and stress are $0.89,0.88$, and 0.81 (with 0.94 on total scales) respectively on the present sample of the study. Results showed 62.4\% of the school heads exhibited moderate to
extremely severe level of anxiety followed by $42.5 \%$ of stress and $27.3 \%$ of depression in moderate to extremely severe range. ANOVA also showed that there were significant differences for anxiety and stress but non-significant difference for depression with respect to work experience.
Conclusion: The prevalence of anxiety and depression among school heads was greater in percentage than the estimates given by World Health Organization. Workshops on awareness about mental health related issues should be organized to improve coping and management skills in school heads. (Rawal Med J 202;45:557560).

Keywords: Depression, anxiety, stress.

## INTRODUCTION

It is the responsibility of teachers to teach students necessary knowledge and skills so they can be able to contribute effectively and positively in the development of country as well as in its economy. ${ }^{1,2}$ The head-teacher's role is allied with the high student performance as well as achievements. ${ }^{3}$ The individual personality of a school head might play the determining role for attaining success in the school performance, and also in acquiring commitment and collaboration amongst the staff. ${ }^{4}$
The school heads faced challenging situations such as lack of skilled staff, low commitment available from stakeholders, and diminished resources and funds that are required for running the school. Therefore, heads' performances influenced students' performances and subsequent school ranking. ${ }^{5}$ As a secondary school head having a lot of responsibilities they might suffer from depression, anxiety and stress. Persons with, persistent working hours, workplace conflict, and low job satisfaction, had improved danger of depression, anxiety, and stress. ${ }^{6}$

The depression included lack of interest in pleasurable activities, sadness, hopelessness and dysphoria. The anxiety focused on physiological arousal such as autonomic nervous system and skeleton muscles accompanied with the feelings of irritability and tension. The stress assessed reaction to certain stressors in physical and physiological terms. These changes exhibit five levels namely normal, mild, moderate, severe, and extremely severe. ${ }^{, 7,8}$ A high occurrence of stress, long hours and excessive workload may raise risks about health problems which lead to reduction in productivity of head teachers, children and staff of the school as well as the community. ${ }^{9}$
A study from Muscat reported that headmasters working in bilingual schools were more probably to experience work stress. ${ }^{10}$ A study from Ethopia showed prevalence rate of $22.9 \%$ for depression, $19.2 \%$ for anxiety, and $28.2 \%$ for stress among 354 staff members of Jimma University. ${ }^{11}$ In University of Malaysia, prevalence rate was $22.1 \%$ for the stress. ${ }^{12}$ Other studies showed $19.4 \%$ depressive symptoms, ${ }^{13}$ prevalence of work related stress in $43 \%,{ }^{14}$ and approximately $20 \%$ teachers
experienced extreme stress. ${ }^{15}$ The aim of this study was to explore the prevalence of depression, anxiety, and stress among school heads in district Gujrat, Pakistan.

## METHODOLOGY

Sampling frame of the secondary schools for the present study was acquired through Deputy Trainer (DT) from Education Development Unit (EDU) office, Gujrat. District Gujrat has three tehsils; Tehsil Gujrat, Tehsil Kharian, Tehsil Sara-e-Alamgir with total of 280 secondary schools in all tehsils registered under the EDU. 165 schools were selected through Yamane's formula of sample size. The school heads were contacted by using simple random sampling technique. The inclusion criteria were Government secondary school heads of either gender and were permanent residents of the District Gujrat. The exclusion criteria comprised of secondary school heads who had some sort of terminal physical disability or illness.
Urdu version ${ }^{16}$ of questionnaire Depression Anxiety Stress Scale (DASS-42) ${ }^{7}$ was used. It consists of 42 item and has three factors i.e. depression, anxiety and stress. Each statement was rated on four-point Likert scale i.e. $0=$ Never, $1=$ Sometimes, 2= Often and 3= Almost Always. The Alpha reliability coefficients of depression, anxiety and stress are $0.89,0.88$, and 0.8 (with 0.94 on total scales) respectively on the present sample of the study.
Statistical Analysis: Data were analyzed using SPSS version 20. One way Anova, Post Hoc (Bonferroni) analysis was used to assess the difference in groups. $\mathrm{p}<0.05$ was taken as significant.

## RESULTS

Out of 165 school heads, 75 (45.5\%) were males and 90 (54.5) were females with mean age $46.6 \pm 8.32$ years (Table 1). The highest level in the category of moderate to extremely severe, is observed for anxiety $62.4 \%$ for school heads followed by $42.5 \%$ stress and $27.3 \%$ depression within the mentioned range (Table 2).

Table 1. Demographic characteristics for school heads.

| Variable | Categories | $f$ | \% |
| :---: | :---: | :---: | :---: |
| Marital Status | Married | 143 | 87.5 |
|  | Unmarried | 10 | 6.1 |
|  | Widow | 7 | 4.2 |
|  | Separate | 5 | 3.0 |
| Age | 24-36 | 27 | 16.4 |
|  | 37-48 | 46 | 27.9 |
|  | 49-60 | 92 | 55.7 |
| Education | BA/BSc | 5 | 3.0 |
|  | MA/MSc | 145 | 87.9 |
|  | M.Phil | 14 | 8.5 |
|  | Ph.D. | 1 | 0.6 |
| Family System | Nuclear | 85 | 51.5 |
|  | Joint | 80 | 48.5 |
| Locality | Urban | 92 | 55.8 |
|  | Rural | 73 | 44.2 |
| Work Experience (in years) | 1-12 | 63 | 38.2 |
|  | 13-24 | 68 | 41.2 |
|  | 25-36 | 34 | 20.6 |
| Monthly Income (PKR) | 40000-59000 | 46 | 27.9 |
|  | 60000-79000 | 60 | 36.4 |
|  | 80000 and Above | 59 | 35.8 |
| Unmarried with no children | - | 10 | 6.1 |
| Married with no children | - | 12 | 7.3 |
| Married with children | 1-4 | 116 | 70.3 |
|  | 5-8 | 27 | 16.4 |

Table 2. Levels of depression, anxiety and stress among school heads.

| Levels of Variables | Depression |  |  | Anxiety |  | Stress |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{f}$ | $\boldsymbol{\%}$ | $\mathbf{f}$ | $\boldsymbol{\%}$ | $\mathbf{f}$ | $\boldsymbol{\%}$ |  |
| Normal | 82 | 49.7 | 44 | 26.7 | 51 | 30.8 |  |
| Mild | 38 | 23.0 | 18 | 10.9 | 44 | 26.7 |  |
| Moderate | 27 | 16.4 | 41 | 24.8 | 28 | 17.0 |  |
| Severe | 3 | 1.8 | 29 | 17.6 | 33 | 20.0 |  |
| Extremely Severe | 15 | 9.1 | 33 | 20.0 | 9 | 5.5 |  |

Table 3. One way ANOVA of depression, anxiety and stress with respect to work experience.

| Variables | Work <br> Experience <br> in Years <br> $(1-12)$ |  | Work <br> Experience <br> in Years <br> $(13-24)$ |  | Work <br> Experience <br> in Years <br> $(25-36)$ |  | F | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{n}=63$ |  | $\mathrm{n}=68$ |  | $\mathrm{n}=34$ |  |  |  |
|  | M | SD | M | SD | M | SD |  |  |
| Depression | 11.31 | 7.95 | 12.85 | 9.16 | 9.29 | 6.98 | 2.12 | . 124 |
| Anxiety | 13.44 | 8.47 | 15.51 | 8.94 | 10.3 | 7.18 | 4.28 | . 015 |
| Stress | 19.04 | 7.59 | 20.94 | 8.51 | 15.61 | 5.70 | 5.48 | . 00 |

Post Hoc (Bonferroni) Analysis revealed no significant differences among the different experiential groups with respect to depression.

However, for anxiety and stress, significant differences exist between two groups ( 13 to 24 years and 25 to 36 years) in the context of work experiences (Table 3).

## DISCUSSION

The prevalence of moderate to severe level of anxiety ( $62.4 \%$ ) and depression (27.3\%) among school heads is greater in percentage than the estimates given by World Health Organization that are $3.6 \%$ and $4.4 \%$, respectively ${ }^{17}$ indicating a dire need to launch intervention strategies for this population. The percentage of anxiety was also found to be higher than the mean prevalence percentage estimated for general Pakistani Population that is $34 \%$. ${ }^{18}$
However, prevalence of moderate to extreme level of stress ( $42.5 \%$ ) was found to be relatively low in percentage as compared to the prevalence rate (59\%) of stress mentioned for working population. ${ }^{19}$ Similarly, stress in school heads was experienced to less degree as compared to other professionals such as Pakistani dentists having showed 80.9\% moderate to severe level of stress. ${ }^{20}$ Stress level had been found approximately consistent to the prevalence rate ( $43 \%$ ) of the one of the study conducted on 290 school heads of UK. ${ }^{14}$
The principals within work experience group of 13 to 24 years (mid-career group) suffered from more stress and anxiety as compared to the other two groups of 1 to 12 years (young career group) and 25 to 36 years (older career group) of work experience. Perhaps the reason might be that the principals in mid-career would have to fulfil other household responsibilities such as making marital settlements for their children and helping them to be independent in their family looking after. It has been observed that successful administration practices are not merely the outcome of training rather experiences also matter and played crucial role in overall administration process. ${ }^{21}$
Implications of the study suggest a need for the development of intervening strategies to enhance anxiety, stress and depression coping mechanisms among experienced secondary school heads. Further, workshops and seminars might be conducted to deliver awareness of fundamental
coping mechanisms to deal effectively with their psychological distress

## CONCLUSION

The study found prevalence of anxiety and depression among school heads was greater in percentage than the estimates given by World Health Organization. There is a necessity for provision of counselling services for school heads in District Gujrat.

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Conception and design: Sameera Shafiq, Rukhma shahzadi
Collection and assembly of data: Rukhma Shahzadi
Analysis and interpretation of the data: Sameera Shafiq, Rukhma shahzadi
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