



Original Research Article

Anxiety, depression and insomnia in laboratory technicians: A study in a tertiary care hospital in Central India

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ARTICLE INFO

Article history:

Received 03-03-2024

Accepted 27-06-2024

Available online 13-08-2024

Keywords:

Laboratory technicians

Anxiety

Depression

Insomnia

ABSTRACT

Background: Working conditions in hospitals are a challenge to health care workers including laboratory technicians. Due to this, they have many psychological issues such as anxiety, depression and insomnia. The study was planned to assess anxiety, depression and insomnia in laboratory technicians at a tertiary care setup in central India.

Material and Method: A cross-sectional study of 51 laboratory Technicians was carried out using hospital anxiety and depression scale [HADS] and Athens criteria.

Result: 67 % of lab technicians have anxiety, 63% had depression and 44% had mild insomnia.

Conclusion: The laboratory technicians have varied levels of anxiety, depression and insomnia due to which their health may be adversely affected. It is necessary to take parallel measures and find out ways for interventions and management to improve sleep quality and thus mental wellbeing through psychological and emotional support.

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1. Introduction

It is known that health and social care workers exhibit high rates of pre-existing mental health disorders.¹ The evaluation of mental health has been measured in numerous studies.² The laboratory technicians being one of the Health care workers place themselves at immense risk in the combat against exposures both infectious and occupational. The problems which have been accounted are in patterns of sleep, eating and life style. A very few also do not receive psychological support from near and dear ones. Hence, overall they are exposed to stretched working hours, psychological as well as occupation associated stress.³ If elaborated stress might be initiated due to their work surroundings, deficient perceptive knowledge, extensive

work load, high takings of patients, deficiency of medical shielding equipments, short of getting breaks during work, noteworthy routine changes because of which they are under bigger pressure and said to be in greater distress.⁴ All factors ultimately contribute to physical and psychological exhaustion which leads to a burn out syndrome.⁵

Since less is known about these in our region the present study was conducted so that futuristic goals could be setup to prevent Interpersonal conflict with other stakeholders and also to create a healthy environment.

2. Materials and Methods

After the approval from institutional ethical committee, the cross sectional study was conducted among the laboratory technicians working for collection and processing of samples in a tertiary care hospital located in central India.

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Total 51 laboratory technicians were included in the study. Laboratory technicians were briefed about the study and their written consent was taken. Once they accepted to take the survey a Questionnaire was given to them. We confirmed that the participants understood all the questions. If the individual did not understand the question we explained the question to them.

Measures of psychological distress-depression anxiety and insomnia-as dictated by HADS scale and Athens insomnia scale were evaluated. HADS scale comprised of 14 items, each item was coded from 0 to 3 and the scores for anxiety and depression from 0 to 21 were evaluated from no to severe anxiety and depression. Athens 8 structured questionnaire insomnia index scale scores ranged from 0 to 24 where if the score was above 6 the participants were marked as insomniacs.

3. Result

The HADS criteria showed that 38 (74.5%) laboratory technicians suffered from anxiety (Table 1), 27(52.9%) suffered from depression (Table 2) as per the HADS Scale and 44 (88.6%) suffered from insomnia

Table 1: No of technicians as per HADS scale for anxiety

Scoring	Total no of technicians	Percentile
Normal (0-7)	13	25.49%
Borderline (8-10)	31	60.78%
Abnormal (11-12)	07	13.73%

Table 2: No of technicians as per HADS scale for depression

Scoring	Total no of technicians	Percentile
Normal (0-7)	24	47.05%
Borderline (8-10)	20	39.21%
Abnormal (11-21)	07	13.70%

Table 3: No of technicians as per ATHENS insomnia index

Scoring	Total no of technicians	Percentile
No Insomnia	07	13.7%
Mild insomnia	29	56.8%
Moderate Insomnia	15	29.41%
Severe Insomnia	00	00

4. Discussion

Laboratory technicians and health care workers are exposed to a swift and changeable situation in health care and the lack of means on account to this circumstances entails an augmented likelihood of suffering different consequences

like the burnout syndrome, to which, usually, these people are vulnerable.^{6,7} This can hamper their capability to distinguish vulnerabilities or distribution of their distressing experiences and increases manifold their mental health risk in all the health care workers.^{8–10}

These individuals also face lonesomeness during the work hours which could be a reason for frustration and psychological impedance.¹¹ Studies have elaborated that emotional distress in the health care workers may be due to various factors which include hazard of exposure, extreme work load, honorable and ethical problem. A similar study in Pakistan reported moderate to severe psychological anguish in which the dominance of depression was 23%. Also, 34-39% of laboratory technicians had symptoms of insomnia.¹² These findings collaborate with our study. Another study also suggested psychological distress among laboratory personnel. However the same was during te period of COVID-19.^{13,14}

Our study emphasized that psychological fallout from the conditions that healthcare workers operate in may not only have an impact on the workers personally but may also exacerbate the previously mentioned burnout and worsen the health system.¹⁵

5. Conclusion

The development of proficient referral paths and the provision of screening, counseling or psychotherapy should be provided to the supporting staff of the laboratory. These ought to have attention by developing interventions of the staff at frequent intervals.

6. Source of Funding

None.

7. Conflict of Interest

None.

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Cite this article: Thorat S, Gupta M, Kadwe P, Kasulkar A. Anxiety, depression and insomnia in laboratory technicians: A study in a tertiary care hospital in Central India. *Panacea J Med Sci* 2024;14(2):342-344.