Association between Sociodemographic Factors and Mental Health Status among Nurses in Public Hospitals in Malaysia

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ABSTRACT

This study assesses the mental health status of nurses in public hospitals in Malaysia, focusing on depression, anxiety, and stress, and examines the associations with sociodemographic factors. A cross-sectional design was used, involving 623 nurses from two public hospitals in Kuala Lumpur. Data were collected using the Depression, Anxiety, and Stress Scale 21 (DASS-21). The findings showed that most nurses had normal levels of depression (94.1%), anxiety (87.3%), and stress (98.2%), with a small percentage experiencing mild to moderate symptoms. Significant associations were found between age, gender, and mental health indicators, with younger nurses and females reporting higher levels of depression and anxiety. The study highlights the need for targeted mental health interventions for younger and female nurses to improve their psychological well-being and job satisfaction, ultimately contributing to better healthcare delivery.

Keywords: Mental health, nurses, public hospitals, Malaysia

INTRODUCTION

Mental health among nurses has become an increasingly important issue within healthcare settings, particularly in public hospital environments, which are often challenging. Nurses face high workloads, significant emotional stress, and the need to provide care to patients in high-risk situations, all of which can negatively impact their mental well-being [1], [2], [3]. In Malaysia, this issue is more pronounced in public hospitals, which often suffer from resource shortages and workforce constraints, making nurses more vulnerable to higher levels of depression, anxiety, and stress [4].

Although many studies have been conducted on the mental health of nurses internationally, research focusing on sociodemographic factors and their relationship with nurses' mental health in Malaysia remains limited. Factors such as age, gender, and marital status play a significant role in determining the mental health status of nurses. This study aims to determine the relationship between sociodemographic factors and the mental health status of nurses in Malaysia, highlighting the novelty of this study within the Malaysian context, which presents unique challenges in the healthcare system. This study is significant as it provides a clearer picture of the factors associated with the mental well-being of nurses and offers a basis for developing better interventions to enhance their well-being. It also has the potential to improve the quality of patient care in public hospitals in Malaysia.

LITERATURE REVIEW

Nurses' mental health is an issue of growing concern globally, largely due to the high work pressures and emotional demands they face. Past studies highlight that nurses are often exposed to issues such as depression, anxiety, and stress because of heavy workloads, rapid changes in healthcare systems, and lack of support at work [1], [3]. Additionally, research by Stavropoulou et al. [2] indicates that female nurses are more likely to experience mental health problems compared to their male counterparts, possibly due to higher domestic responsibilities and social roles that women play in society. Similarly, previous studies also emphasize that

younger nurses are more vulnerable to mental health issues due to their lack of experience in handling stressful situations at work [5].

However, research focusing on the mental health of nurses in Malaysia, particularly examining the relationship between sociodemographic factors and levels of depression, anxiety, and stress, is still very limited. Most existing studies have focused on Western countries or nations with more established healthcare systems. Previous studies suggest that nurses in Malaysia, particularly in public hospitals, are often subjected to higher mental stress due to heavy workloads, staff shortages, and tensions within the healthcare system [6], [7], [8].

This study provides novelty by focusing on the sociodemographic factors within the Malaysian context, particularly age, gender, marital status, and living arrangements with family, factors that have been rarely discussed in local studies. These factors are important because nurses in Malaysia, particularly younger nurses and women, often face unique challenges in balancing work pressures and personal life. For example, Yasin et al. [9] found that younger nurses (aged 21-30) in Malaysia are more likely to experience anxiety and depression, potentially due to a lack of experience in managing stress from heavy workloads and challenging work environments. Additionally, living with family has been reported as a protective factor that reduces mental stress among nurses, as evidenced by past studies, who examined the impact of social support in reducing stress among healthcare workers [10], [11].

This study fills a gap in the literature on nurses' mental health by focusing on the sociodemographic factors that are associated with the mental health of nurses in Malaysia. It also demonstrates how Malaysian culture, particularly family support, plays a key role in shaping the levels of stress, anxiety, and depression among nurses. Unlike studies in Western countries, where social support often comes from colleagues or formal support programs, in Malaysia, family support plays a more significant role in nurses' mental well-being [2]. Therefore, this study provides a new perspective on understanding the factors affecting nurses' mental health in the Malaysian context, which could lead to more effective support strategies.

METHODOLOGY

Study Design

This study employs a quantitative cross-sectional design to assess the mental health status of nurses in two public hospitals in Kuala Lumpur, Malaysia. The study began in May 2023, with data collection starting in August 2023 and concluding in December 2023. This design allows for the collection of data at a specific point in time, providing a clearer picture of the levels of depression, anxiety, and stress among nurses. Kuala Lumpur was selected as the study location due to its representation of a diverse population and a hospital environment that reflects the conditions of most public hospitals in Malaysia. Furthermore, Kuala Lumpur serves as the centre for many major public hospitals offering various healthcare services, making it a relevant site for this study.

Study Population

The study population consists of 623 nurses working at two public hospitals in Kuala Lumpur. The inclusion criteria for participants were nurses who had been employed for at least three months and were involved in patient care. Nurses engaged in management roles or those receiving psychiatric treatment were excluded from the study. Simple random sampling was employed to ensure that each eligible nurse had an equal chance of being selected, aiming to enhance the validity and reliability of the study's findings. The sample size was calculated to ensure accuracy in generalizing the results to the population of nurses in public hospitals in Kuala Lumpur. Although the random sampling method reduces bias, there is still potential for measurement bias, depending on participants' self-reports and perceptions regarding their mental health.

Data Collection

Data for this study were collected using two primary instruments. The first instrument was the Depression, Anxiety, and Stress Scale 21 (DASS-21), which was used to measure the levels of depression, anxiety, and

stress among the nurses. This instrument utilizes a 4-point Likert scale (0 to 3), with each subscale (depression, anxiety, and stress) being multiplied by two to provide the final score. The reliability coefficient for the Malay version of the DASS-21 in previous studies has ranged from 0.8 to 0.9, indicating very good reliability [12], [13]. The second instrument was a sociodemographic questionnaire, which collected information on participants' background, including age, gender, educational level, work experience, and marital status. All participants were asked to complete both instruments, providing accurate and honest information about themselves.

Data Analysis

The data obtained from the questionnaires were analysed using SPSS version 27. Descriptive analysis was conducted to calculate frequencies, percentages, and mean scores for each variable, while Fisher's Exact Test was used to examine the relationships between sociodemographic factors (such as age, gender, and work experience) and mental health levels (depression, anxiety, and stress). Fisher's Exact Test was chosen because it is particularly suitable for categorical data with small sample sizes in certain categories, ensuring accurate results even when the assumptions for the Chi-Square Test are not met. This test provides precise insights into relationships in cases where the frequency of responses is low in specific cells of a contingency table.

Ethical Considerations

This study adheres to the ethical guidelines established by the Medical Research Ethics Committee of Malaysia (MREC) (NMRR ID-23-01962-MBN) and has obtained official approval from the Ministry of Health Malaysia. Before participating, all participants were given a clear explanation of the purpose of the study and any potential risks involved. Written consent was obtained from each participant, who was assured that all information collected would remain confidential and used solely for research purposes. Participants' identities will not be disclosed in any reports or publications of the study.

RESULTS

Socio-Demographic Characteristics of Respondents

Table 1 shows the sociodemographic factors of the study participants, involving 623 nurses. Based on the data, 92.1% are female (574 participants), while 7.9% are male (49 participants). The most common age group is between 31 to 40 years, comprising 43.0% (268 participants). In terms of work experience, 32.3% of the nurses have 1 to 5 years of experience (201 participants). Most respondents hold a Nursing Diploma, representing 66.1% (412 participants). Regarding departments, Obstetrics and Gynaecology recorded the highest percentage at 31.0% (193 participants). In the position category, Nurses U29 represent the largest group with 74.0% (461 participants). In terms of marital status, 69.0% are married (430 participants), and 88.3% report having non-communicable diseases (550 participants). Meanwhile, 57.1% of respondents choose to live independently (356 participants).

Table 1: Sociodemographic Background (N=623)

Sociodemographic background	n (%)
Gender:	
Male	49 (7.9)
Female	574 (92.1)
Ages (mean, SD=33.70,7.17):	
21 years-30 years	254 (40.8)
31 years-40 years	268 (43.0)

41 years- 50 years	101 (16.2)
Experiences (mean, SD=9.88,7.06):	
1-5 years	201 (32.3)
6-10 years	169 (27.1)
11-15 years	125 (20.1)
16-20 years	76 (12.2)
>21 years	52 (8.3)
Education level:	
Nursing Certificate	23 (3.7)
Diploma	412 (66.1)
Post-basic	162 (26.0)
Degree/	24 (3.9)
Master/PhD	2 (0.3)
Position:	
Community nurse	26 (4.2)
Staff Nurses	461 (74.0)
Senior nurses/ Sister/ Matron	136 (21.8)
Marital Status:	
Single	180 (28.9)
Married	430 (69.0)
Divorced/Widowed	13 (2.1)
Non-communicable diseases:	
Yes	550 (88.3)
No	73 (11.7)
Living with family:	
Yes	267 (42.9)
No	356 (57.1)

Level of Depression, Anxiety and Stress

Table 2 shows the levels of Depression, Anxiety, and Stress (DASS-21) among the study participants. Based on the data, 586 participants (94.1%) were in the normal depression level, with 27 participants (4.3%) experiencing mild depression, 9 participants (1.4%) experiencing moderate depression, and only 1 participant (0.2%) experiencing severe depression. For anxiety, 544 participants (87.3%) reported a normal level, while 39 participants (6.3%) experienced mild anxiety, 32 participants (5.1%) experienced moderate anxiety, and 7 participants (1.1%) experienced severe anxiety. For stress, 612 participants (98.2%) were at the normal stress level, with only 10 participants (1.6%) reporting mild stress, and 1 participant (0.2%) reporting moderate stress.

Table 2 Level of Depression, Anxiety, and Stress (N=623)

Level	n (%)		
	Depression	Anxiety	Stress
Normal	586 (94.1%)	544 (87.3%)	612 (98.2%)
Mild	27 (4.3%)	39 (6.3%)	10 (1.6%)
Moderate	9 (1.4%)	32 (5.1%)	1 (0.2%)
Severe	1 (0.2%)	7 (1.1%)	0 (0.0%)

Association between socio-demographic and Depression level

Table 3 shows the relationship between sociodemographic factors and the level of depression among the study participants (N=623). Based on the data, only age and living with family have a significant relationship with the level of depression. The p-value for age is 0.037, indicating that younger nurses (aged 21-30 years) are more likely to experience mild depression. In the category of living with family, 343 nurses (96.3%) who live with their family reported a lower level of depression compared to those who live independently (243 nurses or 91.0%), with a significant p-value of 0.004.

Table 3: Association between Socio-Demographic and Depression Level (n=623)

Sociodemographic	Level of Depression, n (%)				
	Normal	Mild	Moderate	Severe	p-value
Gender:					0.669
Male	46 (93.6)	3 (6.1)	0 (0)	0 (0)	
Female	540 (94.1)	24 (4.2)	9 (1.6)	1 (0.2)	
Ages					****0.037**
21-30 years	230 (90.6)	16 (6.3)	7 (2.8)	1 (0.4)	
31-40 years	256 (95.5)	10 (3.7)	2 (0.7)	0 (0)	
41- 50 years	100 (99.0)	1 (1.0)	0 (0)	0 (0)	
Experiences					0.122
1-5 years	183 (91.0)	10 (5.0)	8 (4.0)	0 (0)	
6-10 years	158 (93.5)	9 (5.3)	1 (0.6)	1 (0.6)	
11-15 years	119 (95.2)	6 (4.8)	0 (0)	0 (0)	
16-20 years	75 (98.7)	1 (1.3)	0 (0)	0 (0)	
>21 years	51 (98.1)	1 (1.9)	0 (0)	0 (0)	
Education level:					0.658
Certificate	21 (91.3)	2 (8.7)	0 (0)	0 (0)	
Diploma	385 (93.4)	18 (4.4)	8 (1.9)	1 (0.6)	
Post-basic	156 (96.3)	5 (3.1)	1 (0.6)	0 (0)	

Degree	22 (91.7)	2 (8.3)	0 (0)	0 (0)	
Master/PhD	2 (100)	0 (0)	0 (0)	0 (0)	
Position:					0.429
Community nurse	24 (92.3)	2 (7.7)	0 (0)	0 (0)	
Staff Nurses	430 (93.3)	21 (4.6)	9 (2.0)	1 (0.2)	
Senior nurses/ Sister/ Matron	132 (97.1)	4 (2.9)	0 (0)	0 (0)	
Marital Status:					0.606
Single	167 (92.8)	10 (5.6)	2 (1.1)	1 (0.6)	
Married	406 (94.4)	17 (4.0)	7 (1.6)	0 (0)	
Divorced/Widowed	13 (100)	0 (0)	0 (0)	0 (0)	
NCD:					0.186
Yes	69 (94.5)	2 (2.7)	1 (1.4)	1 (1.4)	
No	517 (94.0)	25 (4.5)	8 (1.5)	0 (0)	
Living with family:					**0.004
Yes	343 (96.3)	12 (3.4)	1 (0.3)	0 (0)	
No	243 (91.0)	15 (5.6)	8 (3.0)	1 (0.4)	

Notes: Fisher Test; and **Statistically significant ($p<0.05$)

Association between socio-demographic and Anxiety level

Table 4 shows the relationship between sociodemographic factors and the level of anxiety among the study participants (n=623). Gender, age, and living with family have significant relationships with the level of anxiety. The p-value for gender is 0.016, indicating that women are more likely to report higher levels of anxiety compared to men. In the age category, 208 nurses (81.9%) aged 21-30 years reported higher levels of anxiety compared to older nurses, with a p-value of 0.026. Additionally, 322 nurses (90.4%) who do not live with their family were more likely to experience anxiety, with a significant p-value of 0.013.

Table 4: Association between Socio-Demographic and Anxiety Level (n=623)

Socio demographic	**Level of Anxiety, n (%)**					
	Normal	**Mild**	**Moderate**	**Severe**	**Extreme Severe**	**p-value**
Gender:						**0.016
Male	42 (85.7)	6 (12.2)	0 (0)	0 (0)	1 (2.0)	
Female	502 (87.5)	33 (5.7)	32 (5.6)	7 (1.2)	0 (0)	
Ages		18 (7.1)	22 (8.7)	5 (2.0)	1 (0.4)	**0.026
21-30 years	208 (81.9)	15 (5.6)	8 (3.0)	2 (0.7)	0 (0)	
31-40 years	243 (90.7)	6 (5.9)	2 (2.0)	0 (0)	0 (0)	

41- 50 years	93 (92.1)					
Experiences						0.209
1-5 years	164 (81.6)	17 (8.5)	16 (8.0)	3 (1.5)	1 (0.5)	
6-10 years	146 (86.4)	8 (4.7)	11 (6.5)	4 (2.4)	0 (0)	
11-15 years	115 (92.0)	7 (5.6)	3 (2.4)	0 (0)	0 (0)	
16-20 years	71 (93.4)	4 (5.3)	1 (1.3)	0 (0)	0 (0)	
>21 years	48 (92.3)	3 (5.8)	1 (1.9)	0 (0)	0 (0)	
Education level:						0.119
Certificate	21 (91.3)	0 (0)	2 (8.7)	0 (0)	0 (0)	
Diploma	350 (85.0)	28 (6.8)	27 (6.6)	6 (1.5)	1 (0.2)	
Post-basic	151 (93.2)	8 (4.9)	2 (1.2)	1 (0.6)	0 (0)	
Degree	21 (87.5)	2 (8.3)	1 (0.6)	0 (0)	0 (0)	
Master/PhD	1 (50.0)	1 (50.0)	0 (0)	0 (0)	0 (0)	
Position:						0.068
Community nurse	24 (92.3)	0 (0)	2 (7.7)	0 (0)	0 (0)	
Staff Nurses						
Senior nurses/ Sister/ Matron	394 (85.5)	30 (6.5)	29 (6.3)	7 (1.5)	0 (0)	
	126 (92.6)	9 (6.6)	1 (0.7)	0 (0)	0 (0)	
Marital Status:						0.436
Single	150 (83.3)	15 (8.3)	12 (6.7)	2 (1.1)	1 (0.6)	
Married	382 (88.8)	23 (5.3)	20 (4.7)	5 (1.2)	0 (0)	
Divorced/ Widowed	12 (92.3)	1 (7.7)	0 (0)	0 (0)	0 (0)	
NCD:						0.551
Yes	480 (87.3)	35 (6.4)	29 (5.3)	5 (0.9)	1 (0.2)	
No	64 (87.7)	4 (5.5)	3 (4.1)	2 (2.7)	0 (0)	
Living with family:						**0.013
Yes	222 (83.1)	21 (7.9)	20 (7.5)	4 (1.5)	0 (0)	
No	322 (90.4)	18 (5.1)	12 (3.4)	3 (0.8)	1 (0.3)	

Notes: Fisher Test; and **Statistically significant ($p<0.05$)

Association between socio-demographic and Stress level

Table 5 shows the relationship between sociodemographic factors and the level of stress among the study participants (N=623). Only age has a significant relationship with the level of stress, with a p-value of 0.042. 245 nurses (96.5%) aged 21-30 years were more likely to experience moderate stress compared to older nurses. Other factors such as gender, work experience, education level, marital status, non-communicable diseases, and living with family did not show significant relationships with the level of stress.

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Table 5: Association between Socio-Demographic and Stress Level (n=623)

Socio demographic	**Level of Stress, n (%)**			**p-value**
	Normal	**Mild**	**Moderate**	
Gender:				0.597
Male	48 (98.0)	1 (2.0)	0 (0.0)	
Female	564 (98.3)	9 (1.6)	1 (0.2)	
Ages				****0.042**
21-30 years	245 (96.5)	8 (3.1)	1 (0.4)	
31-40 years	267 (99.6)	1 (0.4)	0 (0.0)	
41- 50 years	100 (99.0)	1 (1.0)	0 (0.0)	
Experiences				0.306
1-5 years	194 (96.5)	6 (3.0)	1 (0.5)	
6-10 years	166 (98.2)	3 (1.8)	0 (0.0)	
11-15 years	125 (100.0)	0 (0.0)	0 (0.0)	
16-20 years	76 (100)	0 (0.0)	0 (0.0)	
>21 years	51 (98.1)	1 (1.9)	0 (0.0)	
Education level:				0.519
Certificate	22 (95.7)	1 (4.3)	0 (0.0)	
Diploma	403 (97.8)	8 (1.9)	1 (0.2)	
Post-basic	161 (99.4)	1 (0.6)	0 (0.0)	
Degree	24 (100.0)	0 (0.0)	0 (0.0)	
Master/PhD	2 (100.0)	0 (0.0)	0 (0.0)	
Position:				0.271
Community nurse	25 (96.2)	1 (3.8)	0 (0.0)	
Staff Nurses	451 (97.8)	9 (2.0)	1 (0.2)	
Senior nurses/ Sister/ Matron	136 (100.0)	0 (0.0)	0 (0.0)	
Marital Status:				0.418
Single	175 (97.2)	5 (2.8)	0 (0.0)	
Married	424 (98.6)	5 (1.2)	1 (0.2)	
Divorced/ Widowed	13 (100.0)	0 (0.0)	0 (0.0)	
NCD:				0.207
Yes	542 (98.5)	7 (1.3)	1 (0.2)	

No	70 (95.6)	3 (4.1)	0 (0.0)	
Living with family:				0.516
Yes	261 (97.8)	5 (1.9)	1 (0.4)	
No	351 (98.6)	5 (1.4)	0 (0.0)	

Notes: Fisher Test; and **Statistically significant ($p<0.05$)

DISCUSSION

This study aims to assess the mental health status of nurses in public hospitals in Malaysia, focusing on the levels of depression, anxiety, and stress, and examining the association between sociodemographic factors such as age, gender, and living arrangements with their mental health. The findings provide essential insights into the mental health challenges faced by nurses within the Malaysian healthcare context. These results not only highlight the mental health status of nurses but also offer a deeper understanding of the factors influencing their psychological well-being by comparing findings with existing literature.

Prevalence of Depression

The results of this study revealed that most nurses (94.1%) exhibited normal levels of depression, with only a small percentage experiencing mild (4.3%) and moderate (1.4%) depression. These findings align with Grey et al.[3], who also found that most nurses did not report significant depressive symptoms despite experiencing high levels of occupational stress. The prevalence of mild depression in some nurses aligns with Hong et al. [1], who emphasized that while many nurses maintain normal mental health levels, a subset experiences emotional strain that could impact their overall well-being. Younger nurses, particularly those aged 21 to 30 years, were found to be more likely to experience mild depression compared to their older counterparts. This observation is consistent with Yasin et al. [14], which indicated that younger nurses are more vulnerable to mental health challenges due to their limited experience in navigating high-pressure work environments. Furthermore, nurses who lived with their families reported lower levels of depression, supporting Stavropoulou et al. [2], who highlighted the critical role of social support in mitigating depressive symptoms among healthcare workers.

Prevalence of Anxiety

The study findings regarding anxiety revealed that 87.3% of nurses reported normal levels of anxiety, while 6.3% and 5.1% experienced mild and moderate anxiety, respectively. Severe and extremely severe anxiety levels were reported by only 1.1% and 0.2% of the respondents. These results are consistent with past studies, who documented the significant emotional disturbances faced by nurses globally during the COVID-19 pandemic, with rising workloads exacerbating anxiety symptoms [10]. The gender differences observed in this study, where women were more likely to experience higher anxiety levels than men, are statistically significant ($p=0.016$) and are consistent with Mekonen et al. [5], who posited that female nurses often face greater societal and domestic responsibilities, which may elevate their levels of anxiety.

Socio-demographic influencing Anxiety

Anxiety levels were also notably higher among younger nurses (21-30 years), as similarly observed by Yasin et al.[9]. This heightened vulnerability may be attributed to their relative inexperience and lower resilience in handling high-stress job demands. Additionally, nurses who did not live with family were more prone to higher anxiety levels, a finding consistent with Cruz-Ausejo et al. [15], who underscored the importance of social support in alleviating anxiety among healthcare professionals. Specific anxiety symptoms, such as dry mouth, were frequently reported, with a prevalence rate of 50.9%. This finding aligns with Chand et al.[16], who demonstrated that stress and anxiety could lead to reduced salivary flow, manifesting as dry mouth. However, many respondents did not report other severe anxiety symptoms, such as trembling hands (68.4%), difficulty breathing (71.7%), or feelings of being close to panic (67.3%), which suggests effective coping mechanisms

among most nurses.

Prevalence of Stress

Stress levels among nurses in this study were predominantly normal, with 98.2% of respondents reporting no significant stress. Only 1.6% experienced mild stress, and 0.2% reported moderate stress. These results indicate a more stable mental state compared to findings from Elengoe (2020), which reported increased stress among nurses during the peak of the COVID-19 pandemic. The current findings may reflect improved stress management strategies or reduced pandemic-related pressures. Younger nurses, however, were more likely to report moderate stress levels, consistent with Abdullah & Nusari, [17], who observed that less experienced nurses were more susceptible to stress due to a lack of developed coping skills for managing demanding job requirements. This underscores the importance of integrating stress management training into professional development programs for newly graduated nurses.

Association between Sociodemographic Factors and Mental Health

The association between sociodemographic factors and mental health was further analyzed in this study. Age and living arrangements were significantly associated with depression levels, supporting Lee & Kang,[18], who identified work-family conflict as a primary factor influencing depression among nurses. Fatigue was also noted as a contributing factor, emphasizing the interconnectedness of occupational and personal stressors. Similar findings were observed in Heidarijamebozorgi et al. [19], where age among second-line nurses was significantly associated with depression. Contrarily, some studies reported no significant association between age and depression, suggesting that cultural and workplace context may mediate these relationships [20], [21].

For anxiety, gender and age emerged as significant factors. Female nurses experienced higher anxiety levels, a pattern corroborated although the role of gender as a determinant of anxiety has been debated in some studies [5]. Similarly, the impact of age on anxiety was highlighted, with younger nurses displaying higher susceptibility to anxiety symptoms. This aligns with findings from Alrashedi & Boshra, [22], who emphasized that younger healthcare professionals often exhibit heightened anxiety due to insufficient coping mechanisms.

Stress levels were primarily influenced by age, with younger nurses reporting higher stress levels, particularly those involved in high-stakes environments like hospital settings. This finding resonates with Sansó et al. [23], who identified younger nurses working in end-of-life care as more prone to stress compared to their older counterparts or those in less demanding roles.

The findings of this study align with previous research,, which consistently emphasize the mental health challenges faced by nurses globally [10], [11].. The observed associations between sociodemographic factors and mental health in this study validate the findings of past studies reinforcing the significance of age and social support as determinants of mental well [5], [15].

Implications for Nursing Practice

This study shows that age and living with family significantly influence the mental health of nurses, with younger nurses and those not living with family more likely to experience depression, anxiety, and stress. Therefore, hospitals should introduce social support programs for younger nurses and provide stress management training to help them manage high job demands. Additionally, hospital policies should offer more family support, such as childcare facilities and flexible working hours, to help nurses balance personal and work life. Counselling services and mental wellness programs should also be introduced in the workplace, along with regular mental health assessments, to ensure nurses' well-being is maintained. These steps could improve nurses' mental well-being and, indirectly, enhance patient care quality and job satisfaction.

CONCLUSION

Mental health among nurses has emerged as a critical issue in healthcare settings, particularly in public hospitals that face resource constraints and heavy workloads. This study highlights the prevalence of normal levels of depression, anxiety, and stress among nurses, but a small proportion still experiences mild to

moderate mental health challenges, with younger nurses being particularly vulnerable. Sociodemographic factors such as age and living arrangements were found to significantly influence mental health outcomes, underlining the importance of social and family support systems.

Future research should explore long-term interventions and organizational factors to better support nurses in challenging healthcare environments.

Conflict of Interest

The authors declare that there are no conflicts of interest arising from the conduct of this study. This research was carried out independently, without the influence of any third parties or organizations that could affect the objectivity and integrity of the research. All participants provided voluntary consent, and their confidentiality was ensured throughout the research process.

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