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## 1. Introduction

- Depression, anxiety and stress (DAS) are common types of mental disorders that influence individual productivity, sleep behaviour as well as motivation to work.<sup>1</sup>
- Workplace spirituality ensures employees to have an inner life and are nourished by meaningful work that takes place in the context of community.<sup>2</sup>
- This study aimed to determine the prevalence of DAS among pharmacists and pharmacy assistants working in Perlis and the associations with sociodemographic factors and workplace spirituality.

## 2. Materials & Methods

Study design	Cross-sectional study	Duration	January – March 2019	
Study settings	Public and private healthcare settings in Perlis	Sampling method	Universal sampling	
Study population	Pharmacist and pharmacy assistants	Sample size	n=250	
<b>Inclusion Criteria:</b> <ul style="list-style-type: none"> <li>• Pharmacists or pharmacy assistants working in Perlis</li> </ul>			Study instrument	A validated self-administered questionnaire containing 52 questions.
			Part A	Sociodemographic
			Part B	DASS-21 <sup>3</sup>
			Part C	Workplace Spirituality <sup>4</sup>
<b>Exclusion Criteria:</b> <ul style="list-style-type: none"> <li>• Subject diagnosed with depression and/or anxiety</li> </ul>				

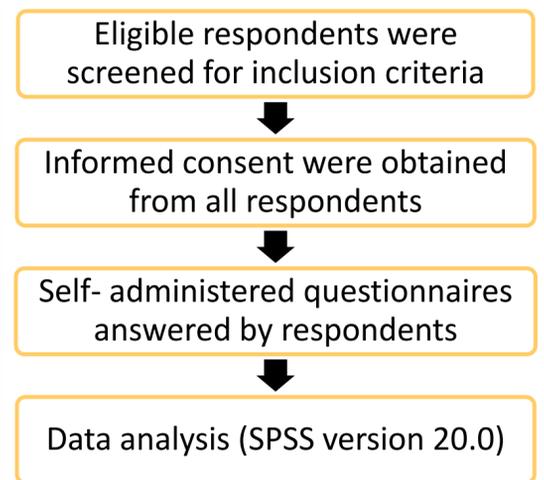


Figure 1: Flow of study

## 3. Results

- Response rate = 95.2%; total respondents, n=238.

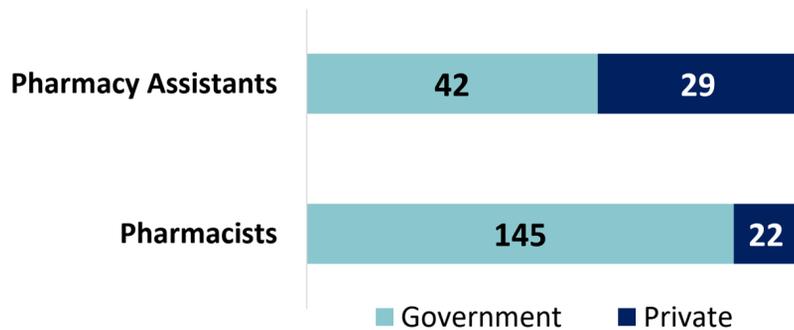


Figure 2: Distribution of pharmacists and pharmacy assistants in government and private settings

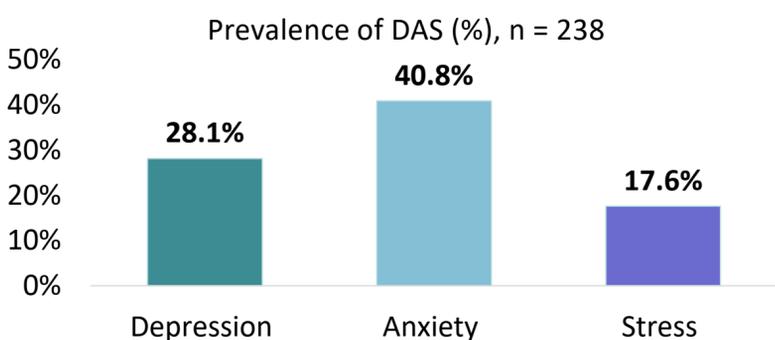


Figure 3: The prevalence of DAS among pharmacists and pharmacy assistants working in Perlis

Table 1: Factors significantly associated with DAS

Variable	Depression	Anxiety	Stress
Factors significantly associated with the outcome variable (p<0.05)*	<ul style="list-style-type: none"> <li>• Age (p=0.041)</li> <li>• Working experience (p=0.030)</li> <li>• Occupation (p=0.003)</li> <li>• Sleep time (p=0.020)</li> </ul>	<ul style="list-style-type: none"> <li>• Age (p=0.025)</li> <li>• Working experience (p=0.021)</li> <li>• Race (p=0.027)</li> <li>• Occupation (p=0.034)</li> </ul>	<ul style="list-style-type: none"> <li>• Age (p=0.034)</li> <li>• Working experience (p=0.031)</li> <li>• Working hours (p=0.042)</li> </ul>

\*One-way ANOVA

## 4. Discussion & Conclusion

- Mental illness is a major concern in healthcare industries.
- Poor mental health conditions may lead to reduced job performance and resulting in low-quality patient care.<sup>5</sup>
- The result of this study showed that the prevalence of depression and anxiety among pharmacists and pharmacy assistants are concerning.
- Depressive symptoms were common among pharmacist and pharmacist assistants with a prevalence rate of 28.1%, compared to only 4.3 % of the general adult population in Perlis.<sup>6</sup>
- Age and working experience were significantly associated with depression, anxiety and stress (p<0.05).
- Workplace spirituality was reported to be associated with psychological well-being and inversely influencing stress.<sup>7</sup> However, it was not significantly associated with depression, anxiety and stress in this study.
- Early recognition and effective interventions such as providing appropriate mental health support to the healthcare workers at their workplace is essential.
- Further studies with advanced analysis could be performed for more conclusive outcomes.

## 5. Acknowledgements

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## 6. References

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