



KEMENTERIAN KESIHATAN  
MALAYSIA

# Recognizing The Impact of Financial Burden and Transfer Anxiety On Household In The Transfer From District to Tertiary Hospital for Surgical Care



JH Fu<sup>1</sup>, SW Wong<sup>1</sup>, NN Deser<sup>1</sup>, IB Chua<sup>1</sup>, JQ Lau<sup>1</sup>, ZH Tay<sup>1</sup>, SA Theivendran<sup>1</sup>, CY Soon<sup>1</sup>, SL Siow<sup>1</sup>

<sup>1</sup> Department of General Surgery, Sarawak General Hospital, Sarawak, Malaysia

## Introduction

Accessibility to Essential Surgical Care remains inadequate in Sarawak and patients need to travel to State Hospital for surgical care.<sup>1,2</sup> However, the impact of the travel is unknown. This study aims to characterize the expenditure and emotional burden experienced by patients and their household when transferred from district centers to Sarawak General Hospital.

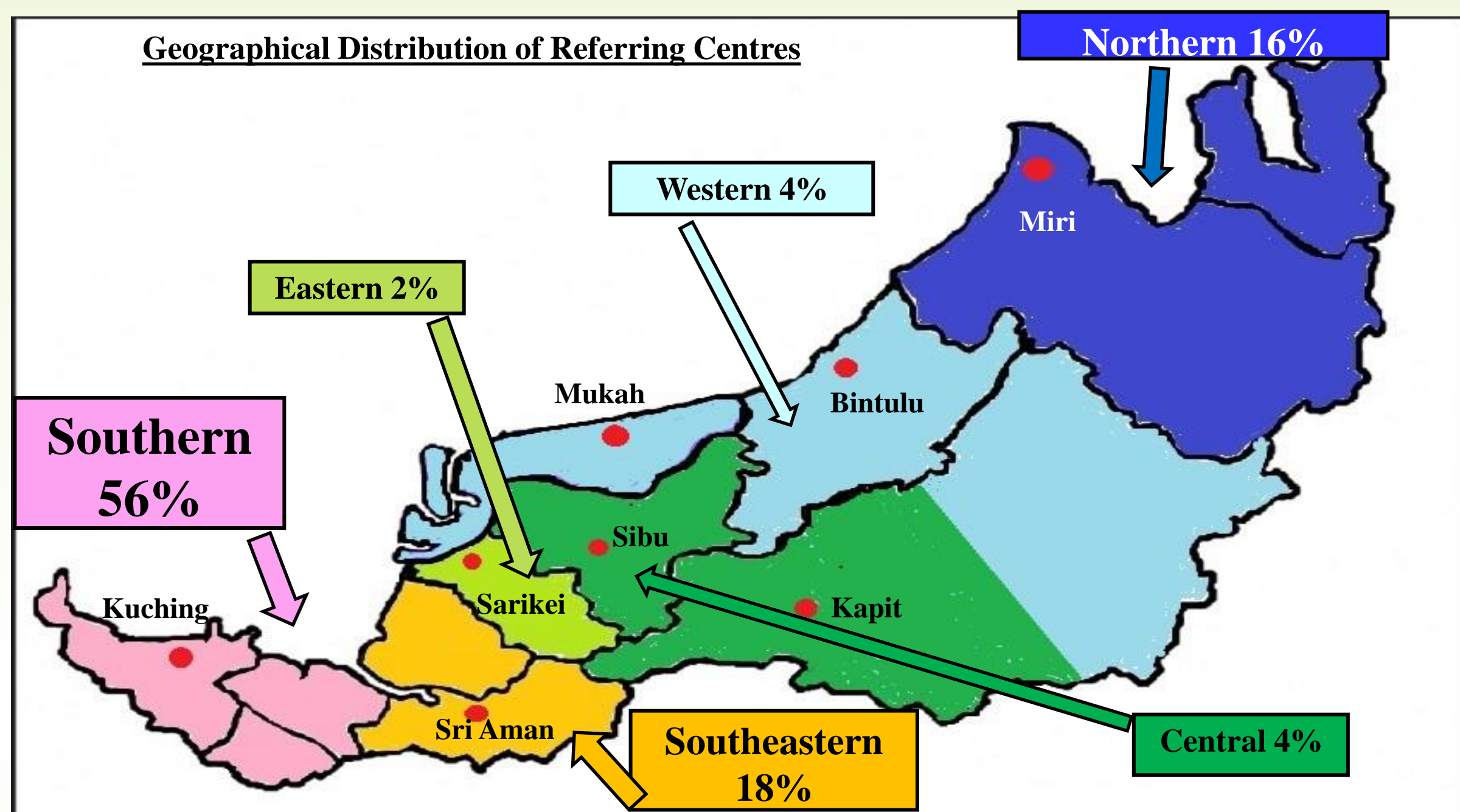
## Method

This is a prospective audit study. Consecutive patients transferred from district centers to Sarawak General Hospital over the 4-week period from 18 January 2023 to 14 February 2023 were included. Each of them was required to fill up a self-reported questionnaire. Epidemiology, clinical characteristics, expenditure and emotional burden of patients were obtained and tabulated. Data analysis performed with data presented in means, percentages and in descriptive figures.

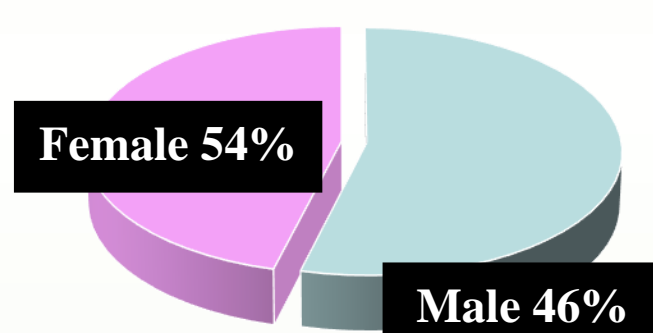
## Result

This study included 50 patients from all regions of Sarawak. The median age was 57 years old. 54% female and 70% Dayak. 76% were married, 10% widowed, 14% single. 60% of them were admitted emergently. The mean duration of admission was 7.5 days. 22% patients were managed with bellwether procedures. 2 patients experienced minor post-operative complications of Clavien-Dindo grade 1. Another patient underwent a failed procedure of chemoembolization. 86% had accompanying caretakers. 86% belonging to B40 category. 24% patients received social welfare. Mean value for the total expenditure for this journey, including the cost of district and tertiary hospital care, travel, food and accommodation is RM110.33 per patient. 88% patients were stressed out about the transfer. Overall, 88% patients were more satisfied with the surgical care provided at tertiary center compared to 32% in district centers.

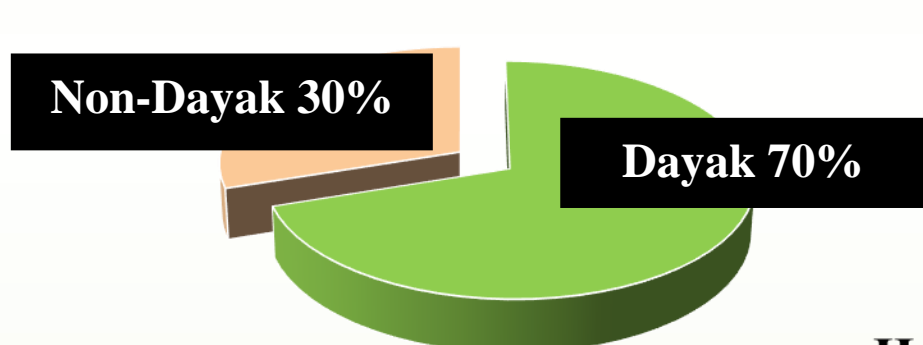
Basic data	
Median Age	57
Median family size	5 people
Mean duration of stay	7.5 days
Patients with Medical Insurance	6%
Patients who received social welfare	24%
Bellwether Procedures	22%
Average of total expenditure for transfer journey and hospitalization	RM110.33 per patient
86% patients have at least 1 caretaker	
Median monthly income is RM1500	



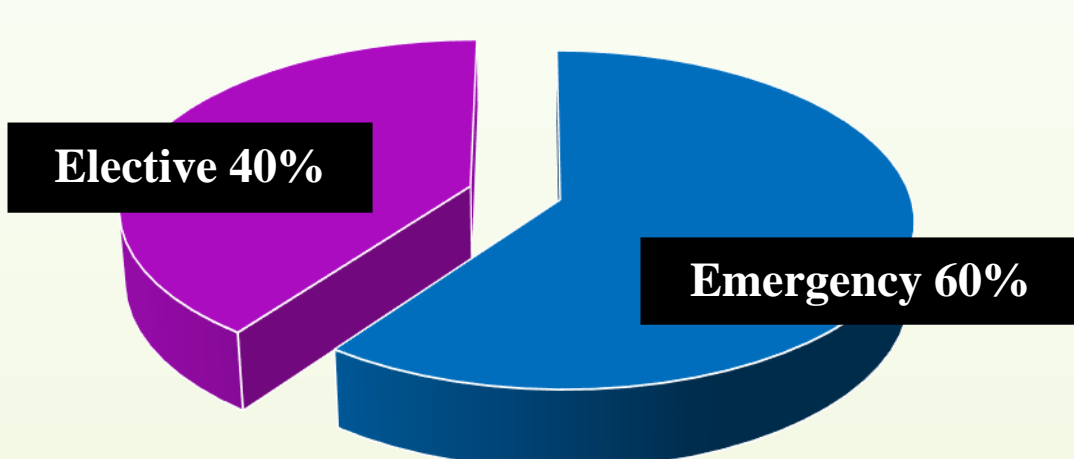
### Patient's Gender



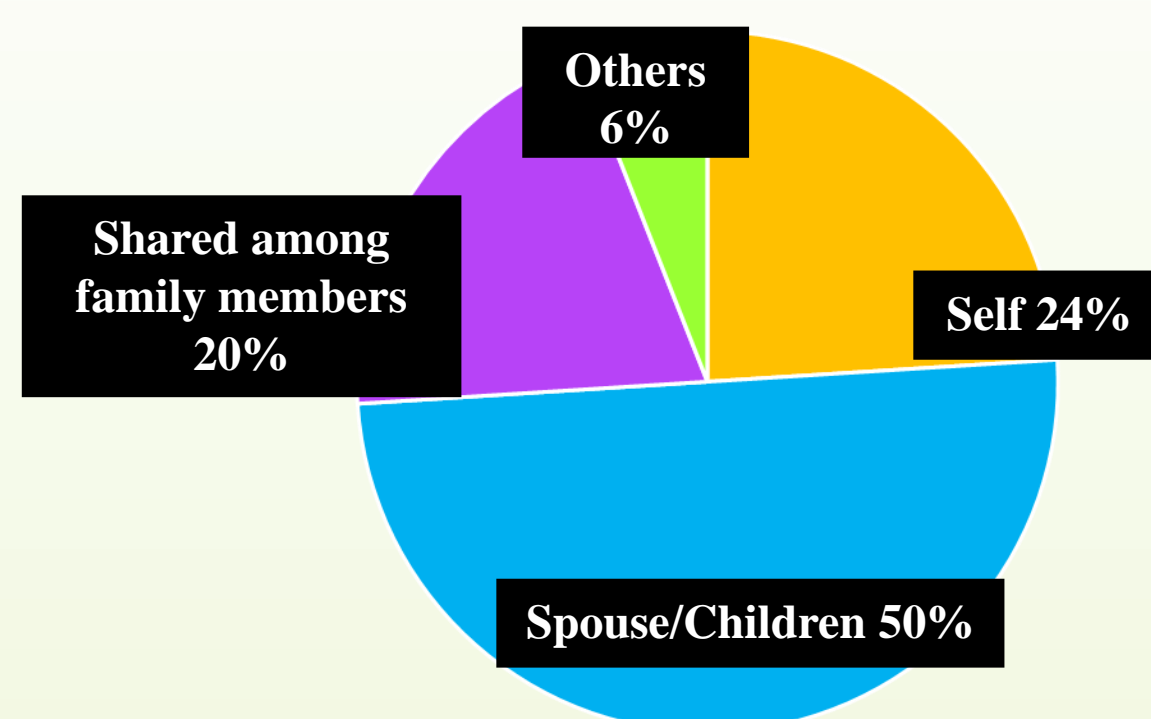
### Ethnicity



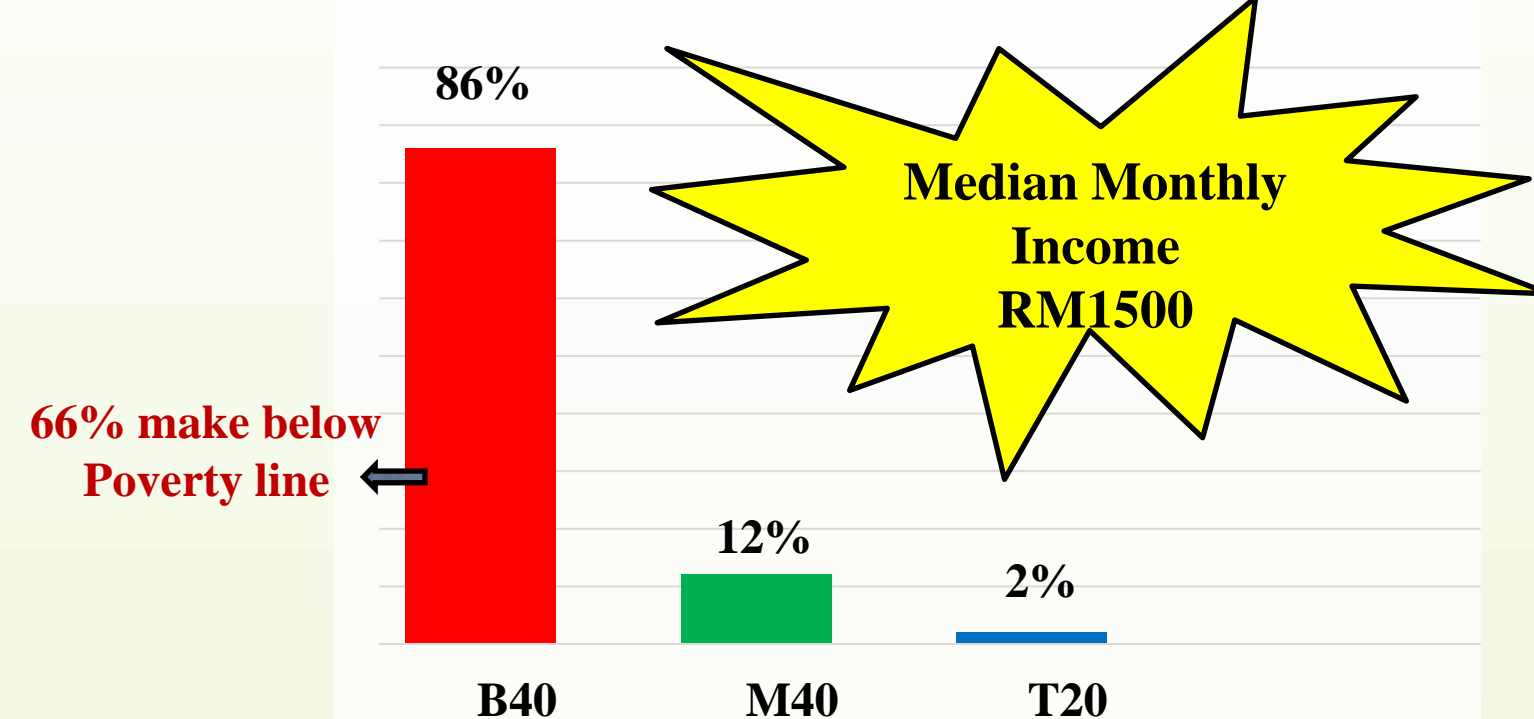
### Urgency of Presentation



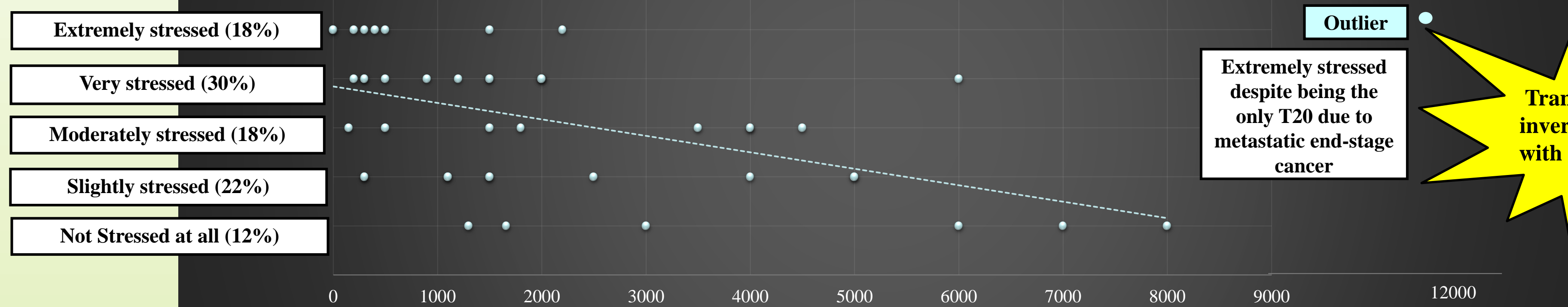
### Household Income Generation



### Income Group



### How stress you feel in terms of financial expenditure for this transfer?



## Discussion

Sarawak General Hospital is the largest and the only tertiary centre in Sarawak that offers the most subspecialty surgical and radiological services like Whipple's procedure, stereotactic biopsy and transarterial chemoembolization. Notably, 60% patients were referred emergently and 22% patients were transferred to receive Bellwether procedures. This signifies that the referring centres may not be equipped with surgical capability to provide Essential Surgical Care.<sup>2</sup> This can be attributed to the lack of surgical facilities or doctors trained to perform surgery in the district centres. As Kuching is in the most Southern and Western part of Sarawak, people need to travel the distance to receive care in our centre. They may face barrier in transportation and long commute.<sup>1,3</sup> This is further complicated by the low family income. In our study, 66% patients' household monthly income is below the national poverty line of RM2208.<sup>4</sup> Half are completely dependent on their family for financial support. Importantly, our study demonstrated an inverse linear relationship between household income and the level of transfer anxiety. There may also be unmet financial needs. Although the median income of our patients is RM1500, only 24% received social welfare. We believe that this discrepancy is due to the opt-in approach. Patients need to request to be enrolled in welfare programs, Those who are in need but unaware of these systems may not have accessibility to welfare.

## Conclusion

This study demonstrated that a majority of patients and their household experienced transfer anxiety when they were referred from district to tertiary center for surgical care. To meet the strong public demand, surgical capability of district hospitals must be upgraded.<sup>2</sup> The healthcare administrators should prioritize upgrading the surgical facilities in district centers and to enhance surgical training in these areas. More studies can be done to map out the experience of transfer journey for essential surgical care in Sarawak.

## References

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