

STRESSORS AND RESILIENCE: A STUDY OF ORTHOPAEDIC SURGEONS IN PUERTO RICO



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INTRODUCTION

• **In Puerto Rico, orthopaedic surgeons face an increased risk for burnout.** This vulnerability stems not only from a low surgeon-to-population ratio but also from the island's healthcare system's challenges.

• Challenges include physician migration, economic disparities, privatization, and a predisposition for natural disasters.

• This study aims to investigate the prevalence and impact of burnout among orthopaedic surgeons in Puerto Rico.

METHODS

• **Approach:** Administered an anonymous survey.

• **Instrument:** Utilized the Maslach Burnout Inventory-Human Services Survey (MBI-HSS) and additional questions related to the local healthcare system.

• **Key Metrics:** Subscale scores for Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA).

RESULTS

• **Participation:** 67 surgeons, over 60% of orthopaedic surgeons in Puerto Rico.

• **MBI-HSS Score Averages (Fig. 1):**

• Emotional Exhaustion (EE): 30.25 (high)

• Depersonalization (DP): 11.61 (moderate)

• Personal Accomplishment (PA): 48.19 (high)

• **Primary Stressor (Fig. 2):** 67.16% identified "Puerto Rico's Healthcare System".

• **Most Stressful Component (Fig. 3):** 66.67% identified "Health insurance restrictions" from a follow-up question.

CONCLUSIONS

• The determined prevalence of burnout among orthopaedic surgeons in Puerto Rico uncovers a complex interplay between resilience and healthcare system challenges.

• The high personal accomplishment rate suggests protective factors but does not mitigate significant emotional exhaustion and depersonalization.

• These results emphasize the need for further research on targeted interventions and policy changes in Puerto Rico's healthcare system.

Fig. 1 MBI-HSS Results (n=67)

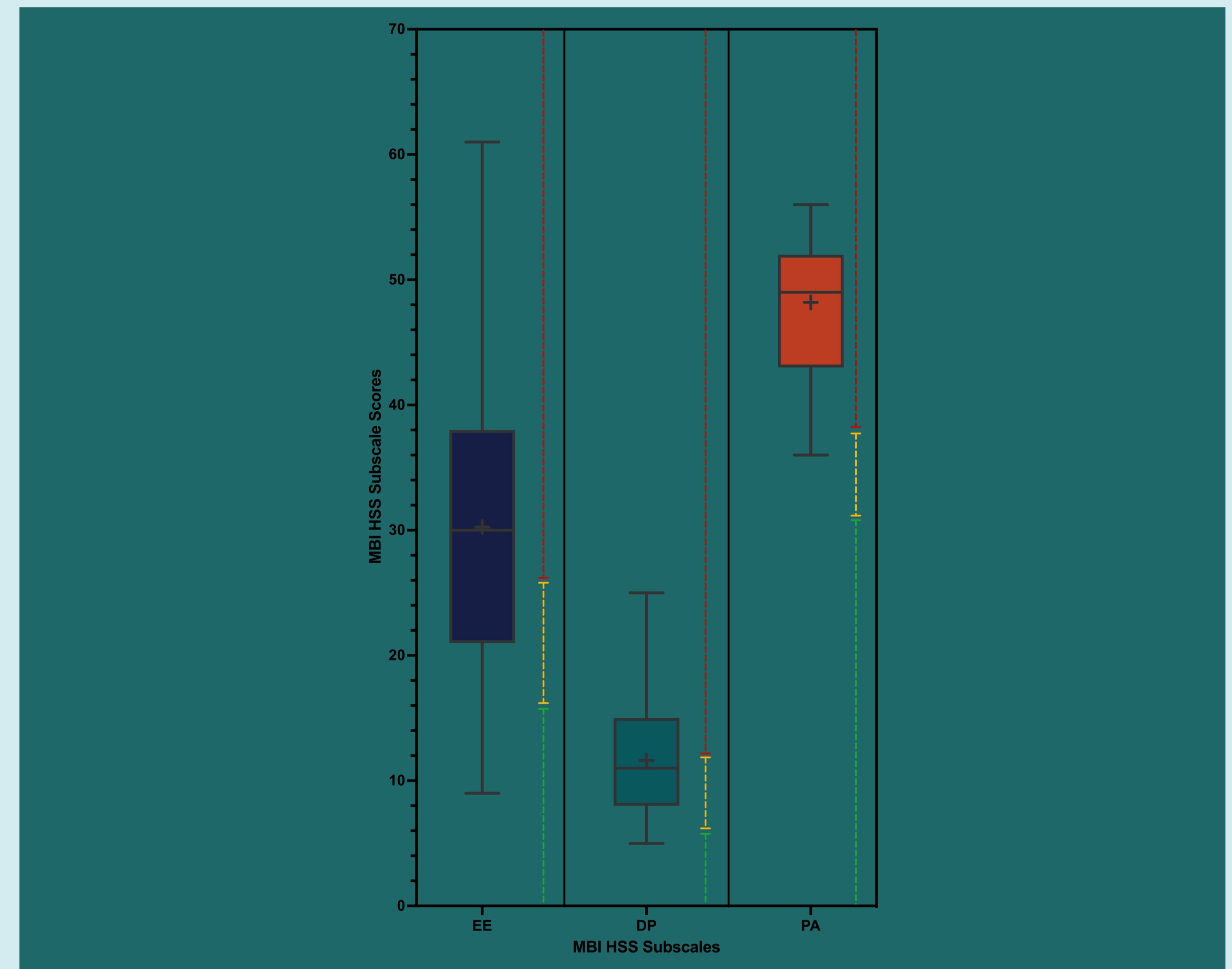


Figure 1: Box-and-whisker plots representing the MBI HSS results among orthopaedic surgeons in Puerto Rico (n=67). The boxes depict the interquartile range (IQR) with the median score represented by the horizontal line within each box. The whiskers extend to the minimum and maximum data points. The '+' symbol indicates the mean score for each subscale. The colored dashed lines represent the MBI HSS levels for each subscale: green indicates low levels, yellow indicates moderate levels, and red indicates high levels.

Fig. 2 Perspectives on Main Stressors (n=67)

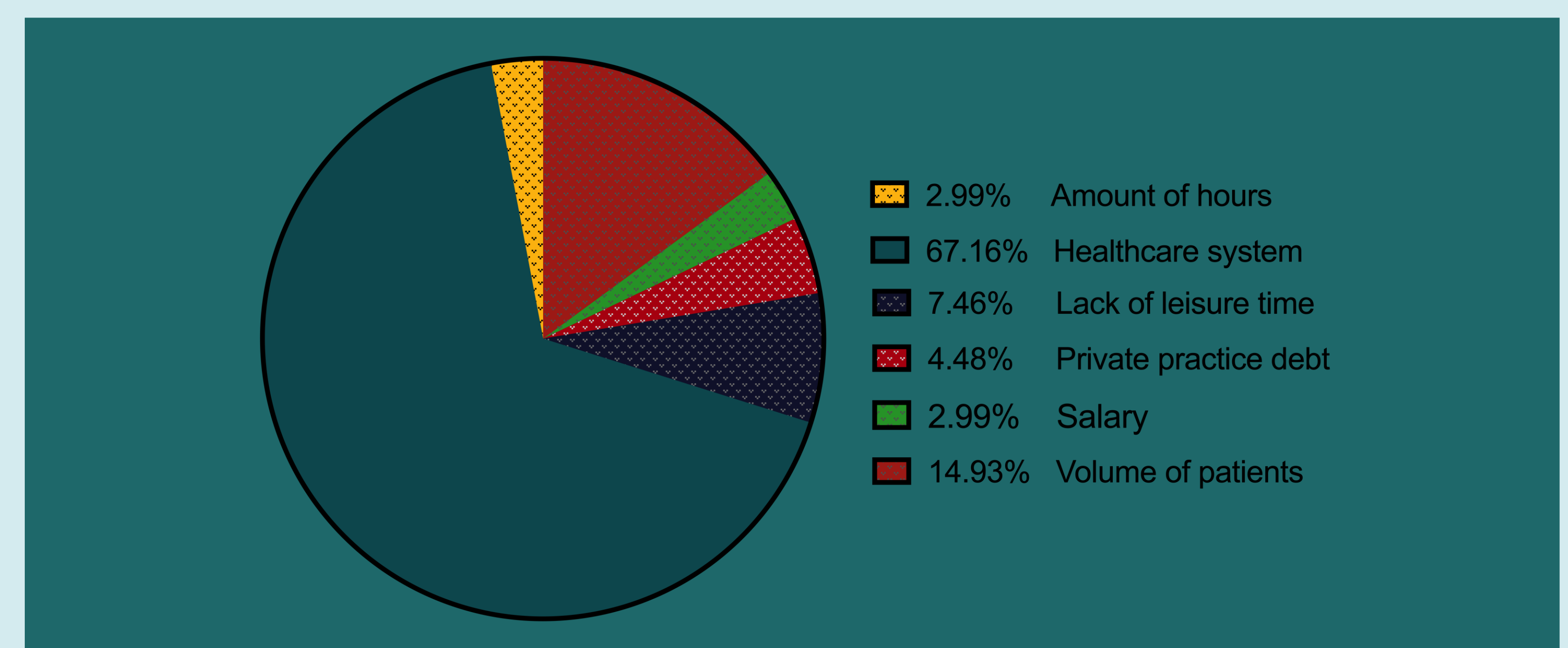


Figure 2: A pie bar chart displaying the perspectives of 67 respondents on the primary stressor associated with practicing in Puerto Rico. The sectors of the chart correlate with each corresponding stressor. The most prominent concern reported was "Puerto Rico's Healthcare system" with 45 respondents.

Fig. 3 Perspectives on Healthcare System Stressors (n=45)

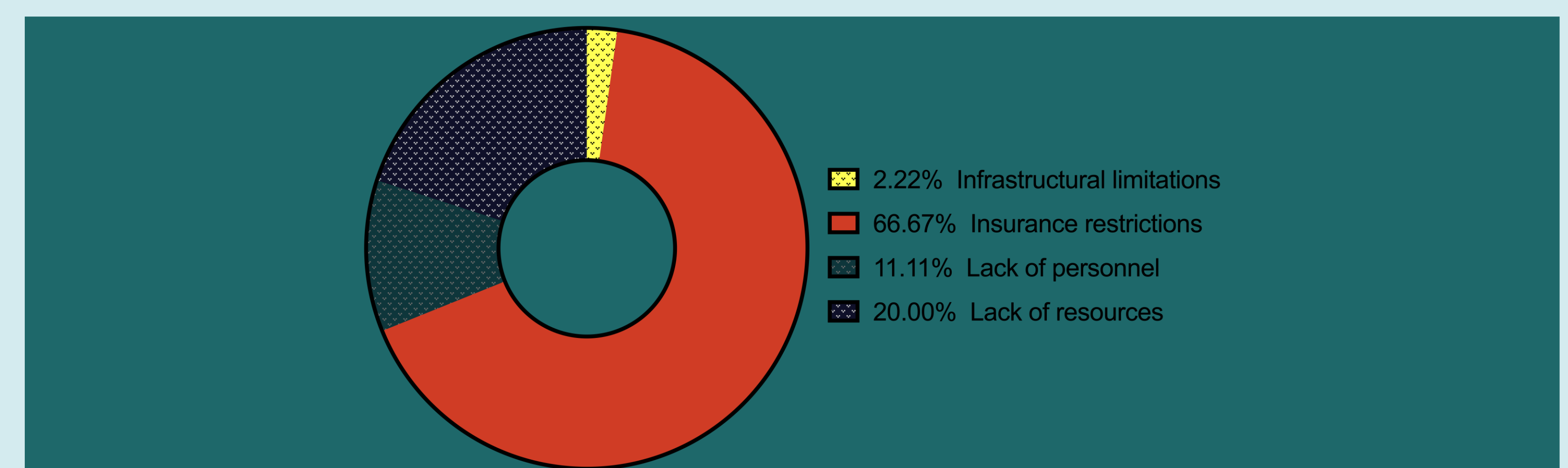


Figure 3: A donut chart illustrating the perspectives of 45 respondents regarding the most stressful component of the healthcare system, as reported by those who answered "Healthcare System" in Fig. 2. Health insurance restrictions was identified by 30 out of 45 respondents.