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Mobile Health Applications: A Study on Awareness, Attitude and Practice among Medical Students in Sarawak

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Introduction

In tandem with the Fourth Industrial Revolution (4IR), integrated mobile Health (mHealth) applications (apps) are important for the rapidly evolving digital healthcare. However, there are limited studies exploring on mHealth apps especially among medical students. Thus, we aim to assess the awareness, attitude and practice of mHealth apps among medical students.

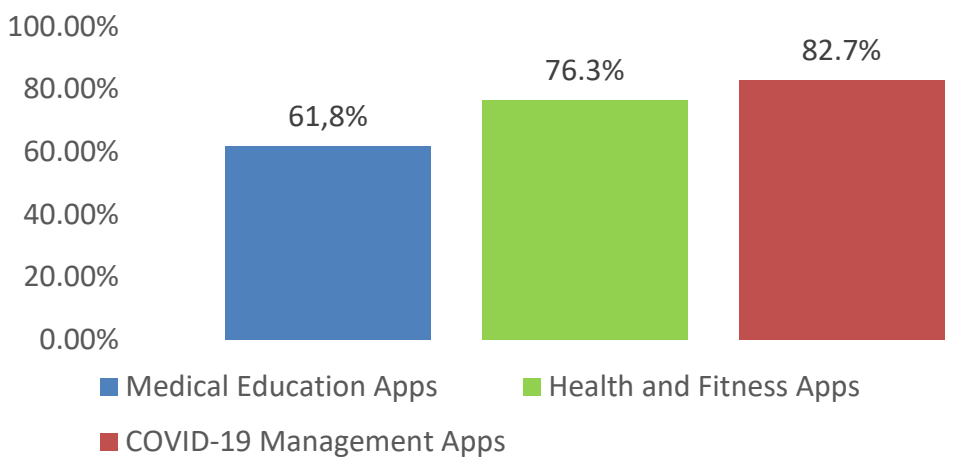
Methodology

We conducted a cross-sectional study among medical students in a government university in Sarawak from January to April 2021. Validated questionnaires on basic demographics, awareness, attitude and practice on mHealth apps (medical education, health and fitness and COVID-19 management) were administered to all consented students.

Results

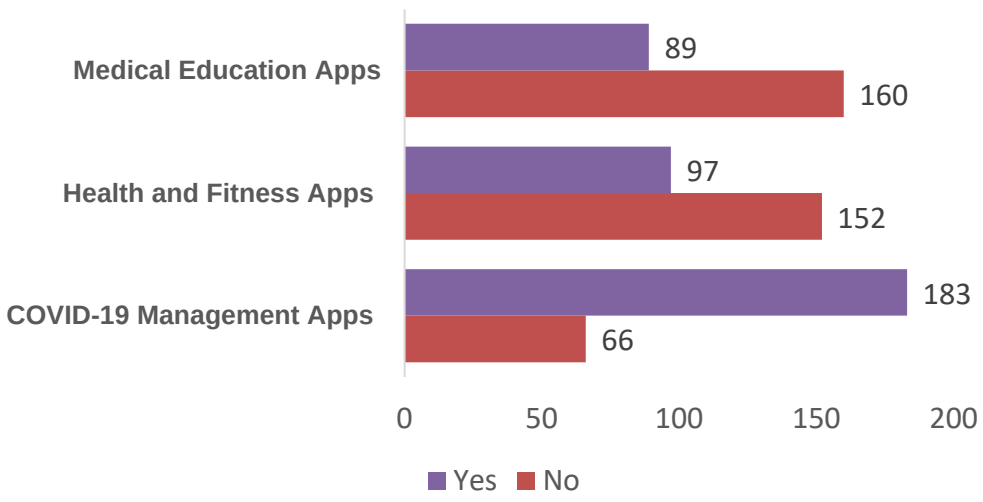
More than half of the respondents had high awareness for mHealth apps (medical education (61.8%), health & fitness (76.3%) and COVID-19 management (82.7%) **(Fig. 1)**.

Fig. 1 Respondents Awareness on mHealth Apps



Positive attitude towards these apps were observed (97.2%, 98.4% and 97.5% respectively). However, less than half of the respondents have installed the medical education apps (n=89, 35.7%) and health and fitness apps (n=97, 39%) **(Fig. 2)**. The practice of medical education apps was significantly associated with household income of the respondents ($p<0.05$) whereby the usage was seen most in T20 category **(Table 1)**.

Fig. 2 Number of Respondents Who Install and Use mHealth Apps



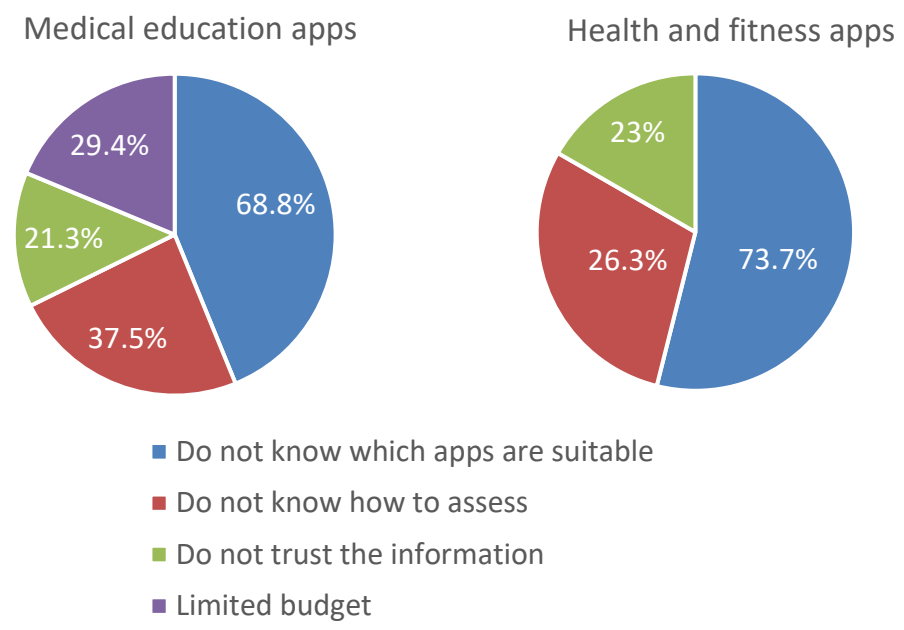
Results

Table 1 Practice of mHealth Among Household Income

Variables	Installed medical education apps, N (%)		P-value
	Yes	No	
Household Income			
<Rm4849 per month (B40)	19 (24.7)	58 (75.3)	
Rm4850-Rm10950 Per month (M40)	49 (39.8)	74 (60.2)	0.048
>rm10960 per month (T20)	21 (42.9)	28 (57.1)	

Respondents' uncertainty to choose suitable apps was the most common barrier reported to the use of medical education apps (n=110, 68.8%) and health and fitness apps (n=112,73.7%) **(Fig. 3)**.

Fig. 3 Barriers for Not Using Medical Education and Health and Fitness apps



Discussion/Conclusion

The medical students had good awareness and attitude towards mHealth apps. However, the practice of using mHealth apps was relatively low. Thus, efforts to address the barriers and the promotion of use of mHealth apps are necessary.

Acknowledgement

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