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The Effectiveness of Quick Response (QR) Code in Helping Patients of KPJ Penang Specialist Hospital for Home Exercises Programme (HEP) at Physiotherapy Services

DASHVINDER SINGH SIDHU (Rehabilitation Services)
KPJ Penang Specialist Hospital, Penang, Malaysia

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INTRODUCTION

QR code is defined two-dimensional matrix barcode which can be read and scanned through the digital camera of a smartphone to deliver online information. It is being used widely and plays a significant role in our daily life.

QR code is being used by physiotherapists in KPJ Penang to provide an easy access and fast recognition for the home exercises programme among patients. It consists of a specific QR code that linked to short videos describing exercises and prescriptions with the correct techniques.

QR code and smartphone technology has helped the patient to improve their knowledge, keep the link securely, be more convenient and environmentally friendly.

AIM

Provide Convenient and Interactive- Using QR codes in exercise videos enhances the user experience, increases accessibility, and allows for better engagement, ultimately leading to a more effective and user-friendly physiotherapy workout content delivery system.

Cost Effective- Creating exercise videos and hosting them online is often more cost-effective than printing paper leaflets. Reducing paper consumption decreases the industry's overall carbon footprint and helps environmental sustainability.

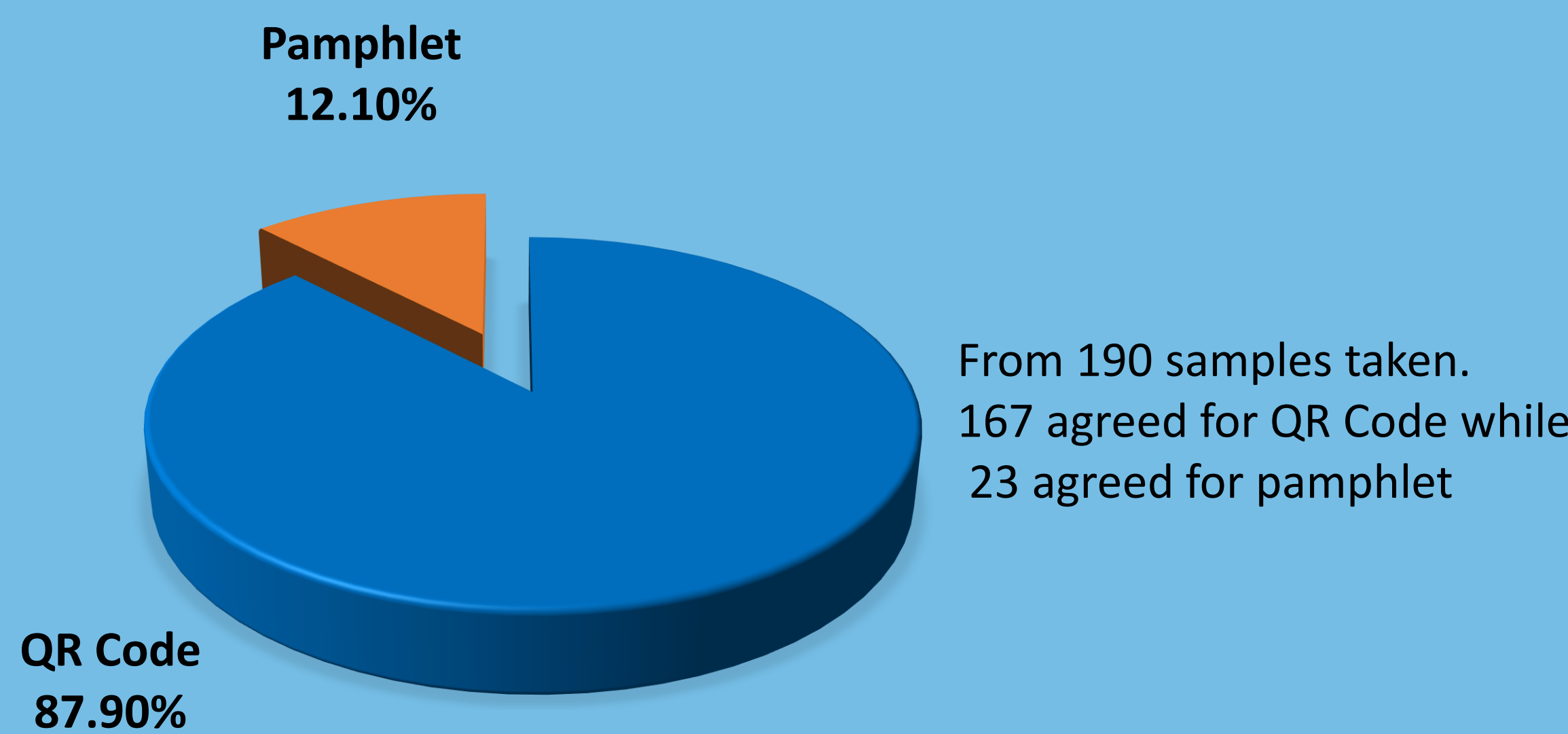
Digitization- Embracing digital alternatives to paper, can lead to increased efficiency and productivity. Digitization brings speed, cost savings, global connections, better decision-making, and numerous advantages that enhance our lives and the world we live in.

METHOD

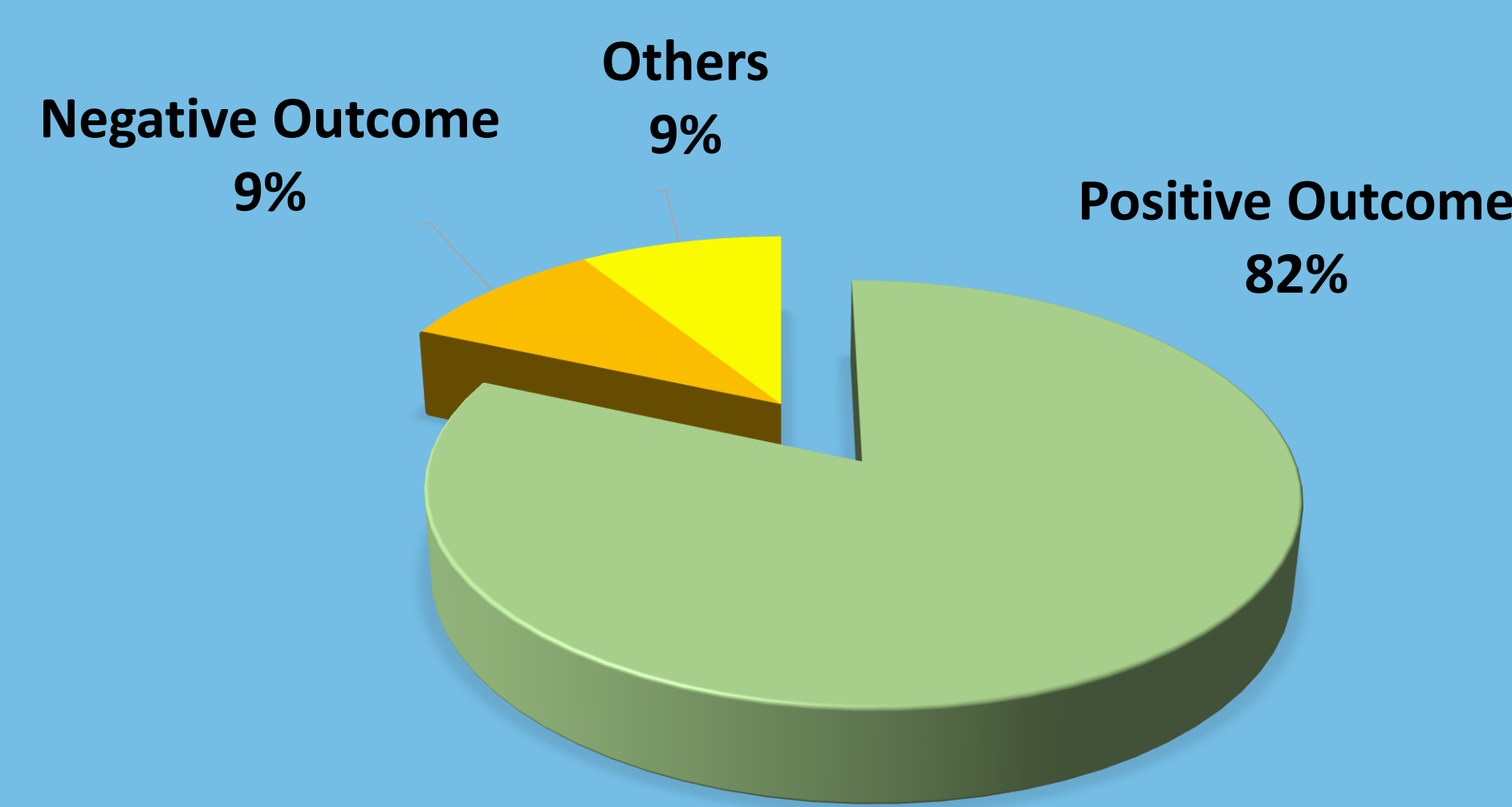
Generated QR Code will be printed out and laminated before placed outside of the treatment area. QR Code made assessable to both in-patients and out-patients. Upon choosing the preferred and most suitable QR code, clients will scan and the specific video will be downloaded into their smartphone device. Physiotherapist will guide the patient during the practical session on how to perform effective exercises. Lastly, Q&A will be carried out between Physiotherapist and patient regarding exercises performed for good outcome and understanding.

RESULTS

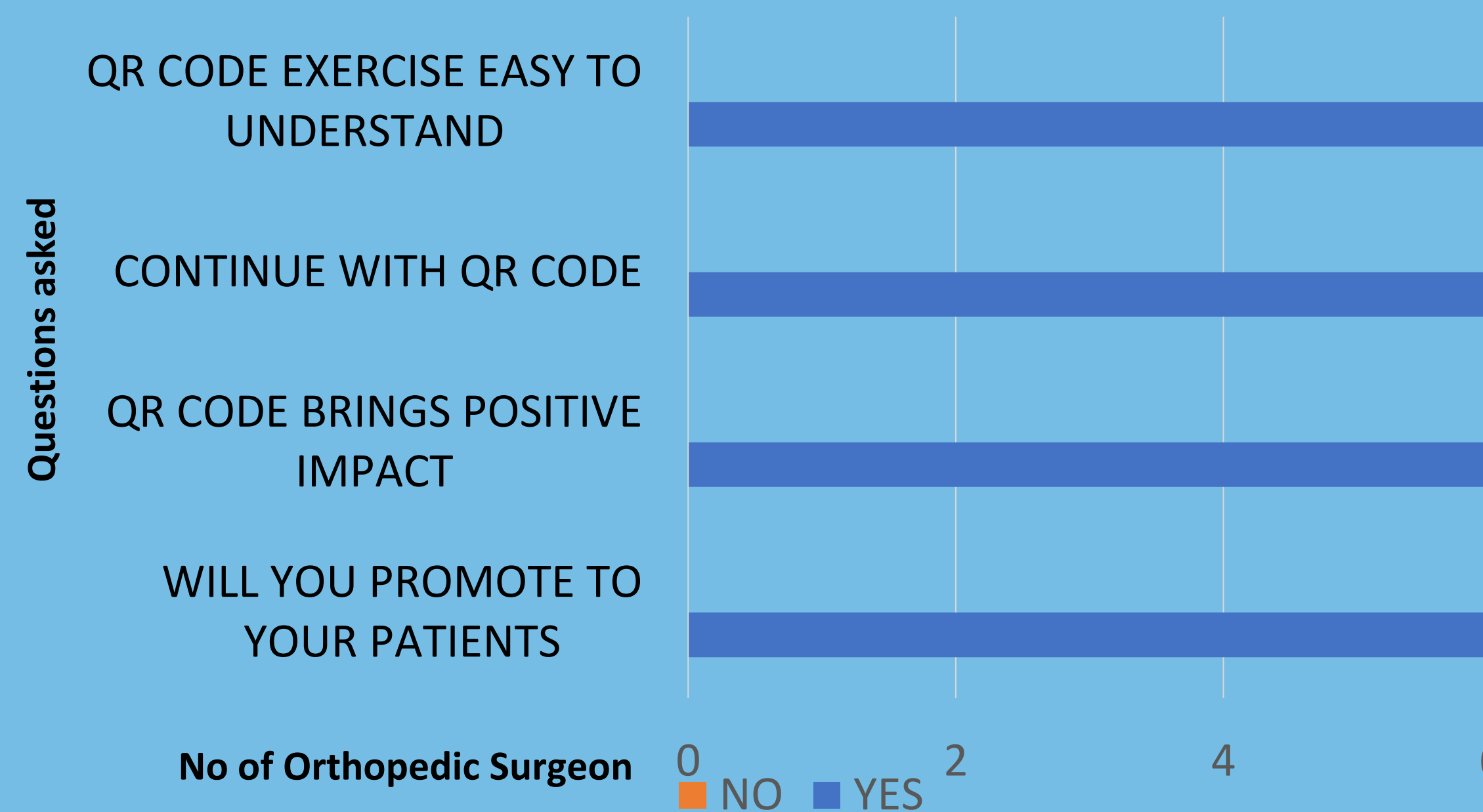
STUDY AFTER QR CODE WAS INTRODUCED STUDY PERIOD: 1 MONTH (n=190)



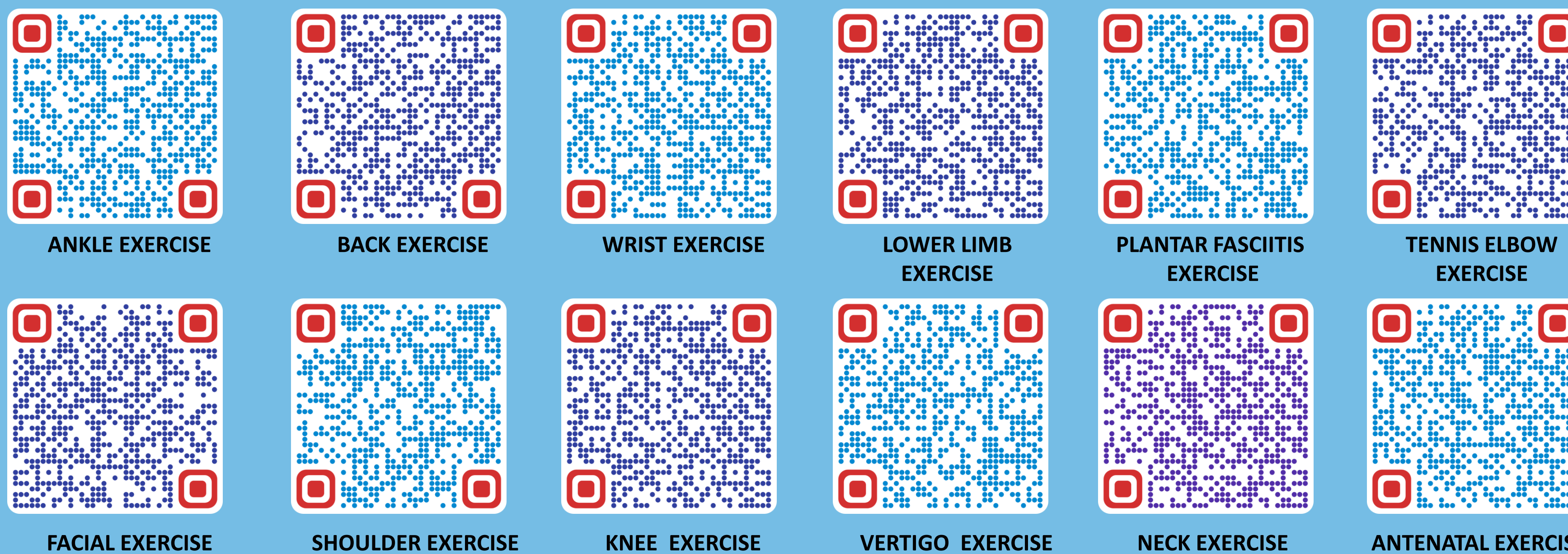
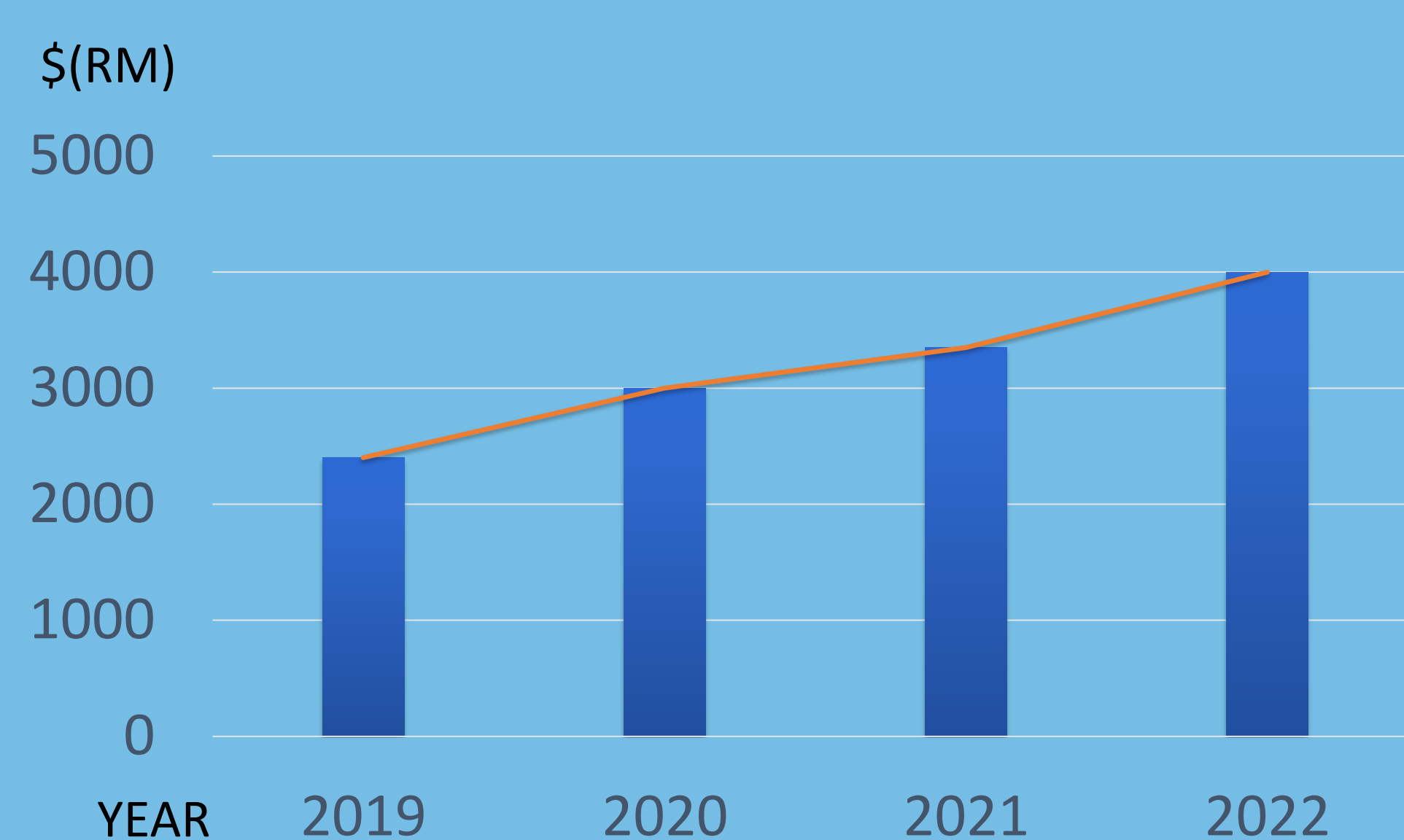
STUDY ON COMPLIANCE OF HEP (n=190)



SURVEY AMONG ORTHOPEDIC CONSULTANT



COST SAVING ON PRINTING



CONCLUSIONS

As a conclusion, **patient's satisfaction is our priority** at KPJ Penang Specialist Hospital. Most of the patients found QR Code to be **practical, convenient** and **preferred** them over paper leaflets. QR codes have also shown to be familiar, effective and touch-free technology. Overall it has also **reduced tremendous cost** for printing exercise pamphlets.

ACKNOWLEDGEMENT

We extend our heartfelt gratitude to the patients who supported and involved through this initiative. Besides that, we also highly appreciate the contribution of each individual and to our organization towards the success of this research. In KPJ Penang Specialist Hospital, we believe the quality of Healthcare Services can be enhanced by adopting technology and digitization towards a better patient care.

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CONTACT INFORMATION

Dashvinder Singh Sidhu
dashvinder@kpjpenang.com