

HEALTH STUDENTS



UNIwersytet Medyczny
IM. PIASTÓW ŚLĄSKICH WE WROCLAWIU

TOWARDS TELEMEDICINE

AUTHORS

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INTRODUCTION

The COVID-19 pandemic has altered how telemedicine is viewed. Research and observation carried out in this field indicates that telemedicine is notably efficient in diagnosing i.e. upper respiratory tract infections or telerehabilitation has a positive impact on Long-COVID patients, irrespective of the methodology employed. Furthermore, the swift advancement of technology in the 21st century is poised to enhance telemedicine's efficacy even further. Health workers' attitude is the central element of a successful therapy. Telemedicine - a form of providing medical services and health care that combines elements of telecommunications, IT and medicine. Telemedicine is an increasingly common method of providing medical services, especially since the outbreak of the Covid-19 pandemic, when everyone was kept at home for longer and a solution was needed that would enable the treatment and rehabilitation of patients remotely, without exposing them to contact with the virus. With the construction of the Internet of things, apps for mobile health management have become more and more popular. The role of medical personnel in promoting telemedicine and pro e-health attitudes seems to be of a key importance for adopting these solutions in practice. Medical students play a key role in promoting telemedicine and health attitudes. Therefore, the frequency of using telemedicine, as well as their experiences, opinions and trust in this form of providing medical services will influence the use of telemedicine in the future.

AIM

This study aimed to explore the utilization, experiences, and perceptions of telemedicine among medical and paramedical students, particularly in the wake of the COVID-19 pandemic, which significantly accelerated the adoption of remote healthcare services. It also sought to assess the willingness of these students to incorporate telemedicine into their future professional practice.

CONCLUSIONS

The study suggests a generally positive attitude towards telemedicine among medical and paramedical students, highlighting its potential in future healthcare delivery. However, concerns about the reliability of telemedicine indicate a need for further education and evidence-based reassurances to foster trust among future healthcare professionals. The notable interest in telemedicine's application in psychology and the use of technology like smartwatches for health monitoring suggests areas for further development and integration into healthcare curricula. Encouraging the adoption of telemedicine in future professional practice requires addressing technological and ethical competencies, ensuring the upcoming generation of healthcare providers is well-equipped to leverage telemedicine effectively.

METHODS

An online survey consisting of 22 questions was developed to gauge current feelings towards telemedicine and the inclination towards its future application. A total of 51 students responded to the survey, with a majority (71%) being female. The survey explored the frequency of telemedicine use, types of services accessed, the effectiveness and reliability of telemedicine consultations, and the specific technologies employed. Participants included students from various healthcare-related disciplines, with the survey distributed via Facebook to departments of Public Health, Nursing, Emergency Medicine, and Medicine all from Wrocław Medical University.

RESULTS

The survey revealed that 31% of participants rarely used telemedicine services, while 23% sometimes did. Visits were most commonly conducted with general practitioners. About half of the respondents rated their telemedicine experiences positively. The effectiveness of telemedicine was viewed favorably by many, though opinions on its reliability were mixed. Interestingly, a significant portion of students expressed interest in participating in future telemedicine projects and applying telemedicine in their careers, with a particular interest in projects related to online medical consultations and data collection for scientific purposes. We found that females are substantially higher in accepting and trusting telemedical solutions.

STATISTICAL ANALYSIS

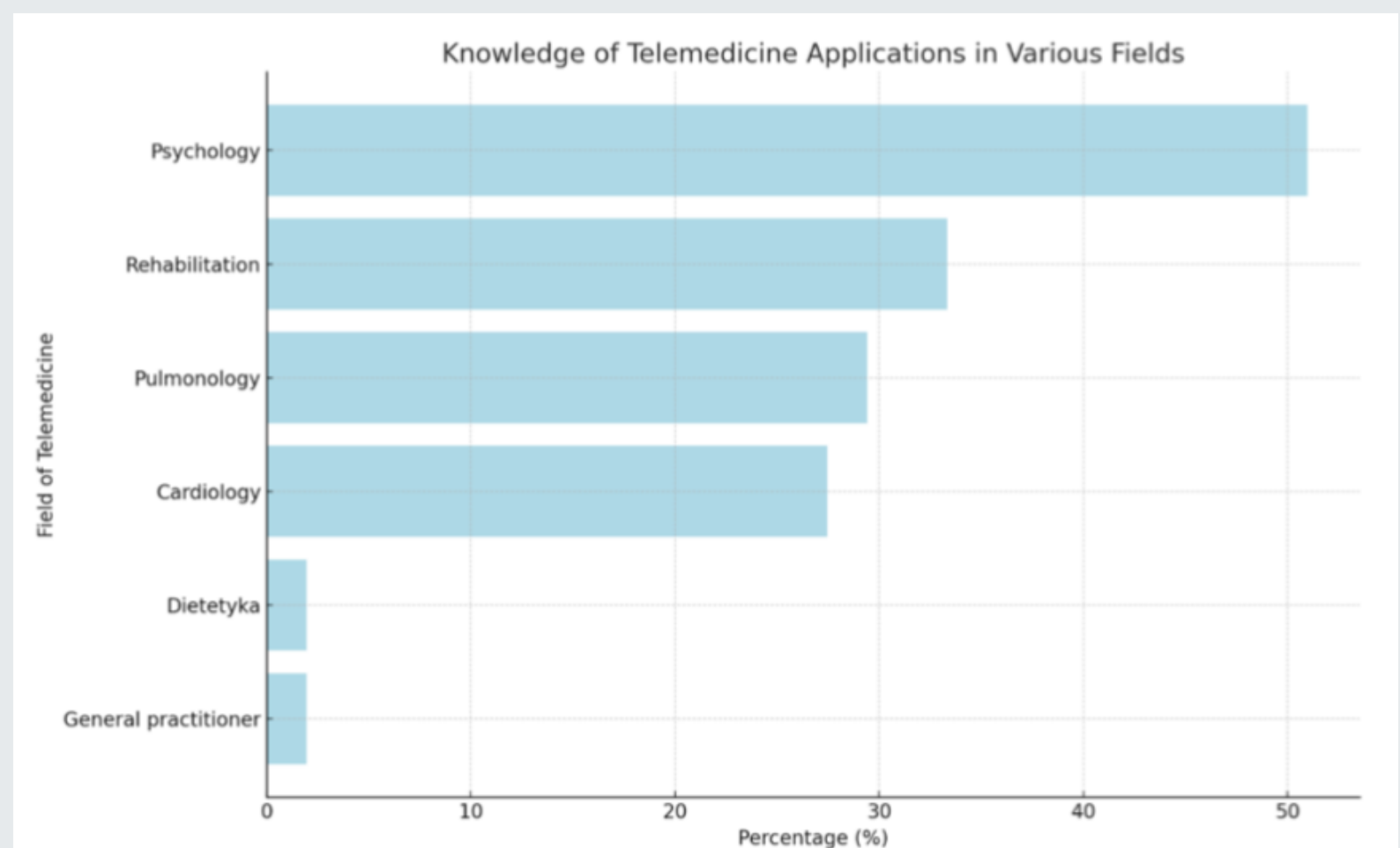
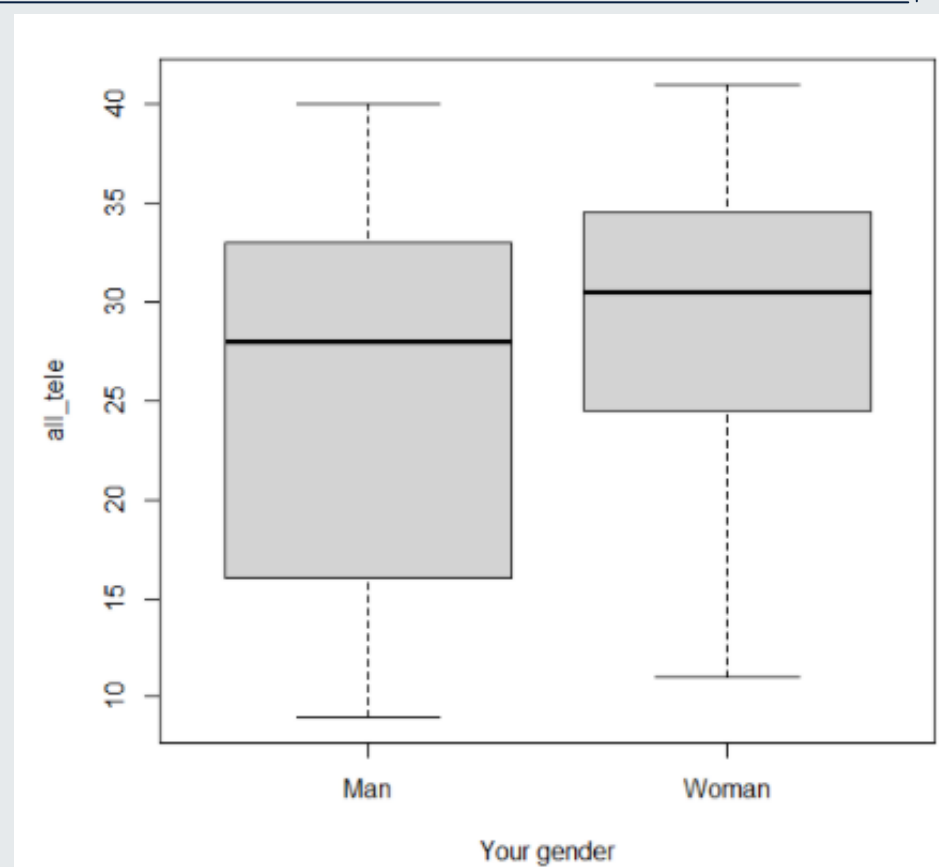
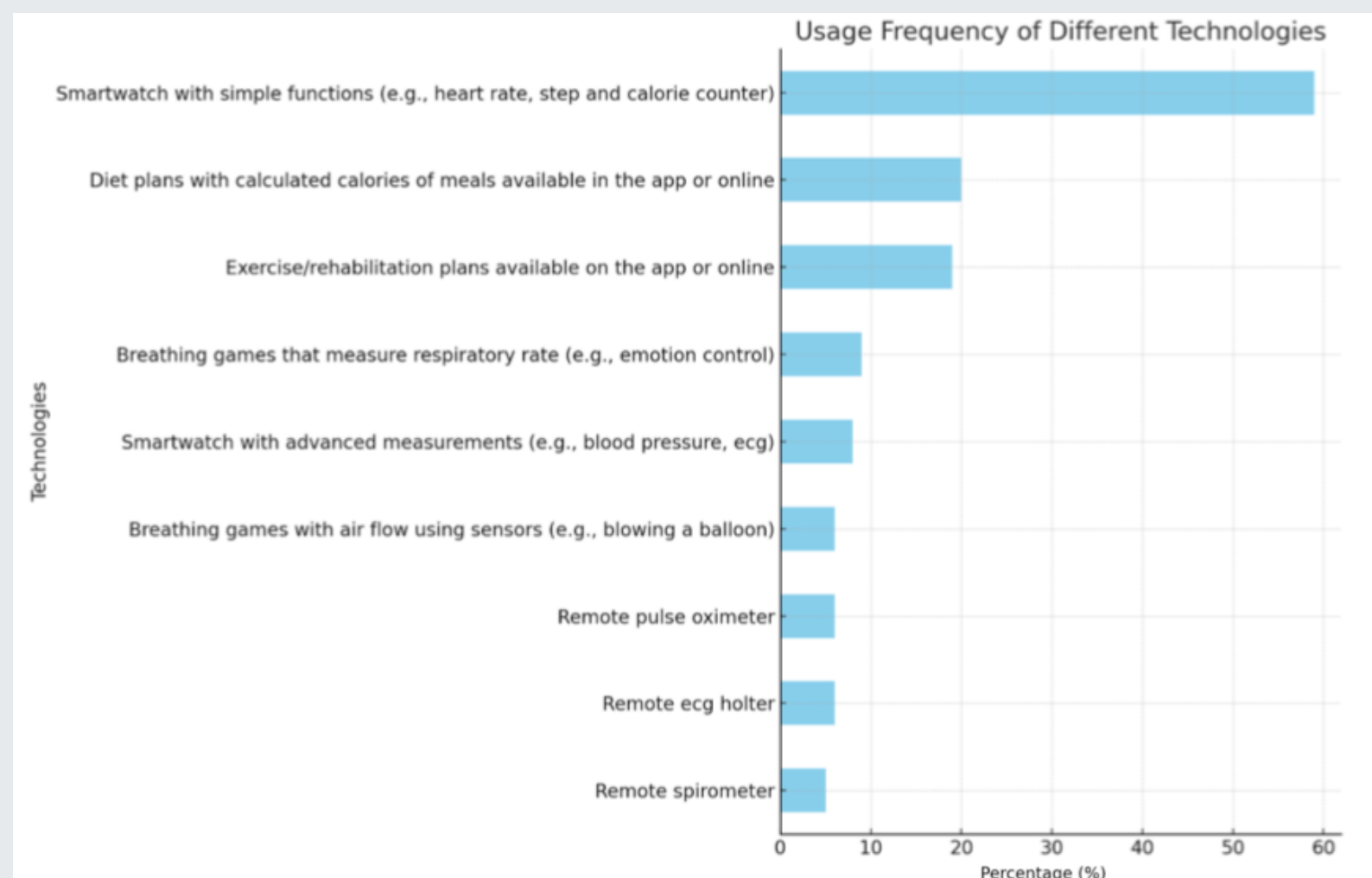
Welch Two Sample t-test. 104 case (study + pilot) How do you evaluate the use of telemedicine technology? by Gender $t = 2.278$, $df = 44.589$, p -value = 0.03
3.5 (women) 3.0 (man) :

Attitude towards telemedicine (LINEAR REGRESSION)

Factor	AOV for index all_tele	Df	Sum Sq	Pr(>F)
How often have you used telemedicine so far?	1	1456.1	1.4e-07 ***	
Cardiology	1	95	0.1114	
What is your field of study?	7	622.1	0.0326 *	
Your gender	1	56.9	0.2148	
Residuals	40	1433.1		

TAKE HOME MESSAGE

- Young women are driving change in telemedicine as they are significantly more enthusiastic about telemedicine. There is currently no gender difference in current use of IT technology and telemedicine, but the future is in girls' hands.
- Psychological chatbots are the most popular medical intelligent/distance solutions among health students, which may be an effect of distance learning during the pandemic.



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