Tuijin Jishu/Journal of Propulsion Technology
ISSN: 1001-4055
Vol. 45 No. 2 (2024)

"A Descriptive Study to Assess the Use of Health Apps Among Youth from Selected Areas of Pune City."

Ray Suresh[1a*], Ms. Anshita Arora[2b], Ms. Anila Jins[3b], Mr. Ashish Phadtare[4b]
Ph.D. Nursing, Vice Principal, Bharati Vidyapeeth (Deemed to be University) College of Nursing, Pune.
B.Sc. Nursing Students, Bharati Vidyapeeth (Deemed to be University), College of Nursing, Pune.
**Corresponding Author*

Abstract

Introduction: The use of health apps or health applications is quickly becoming the new standard in the healthcare sector. Rapid technological development in the field of mobile health has opened up numerous avenues for remote care delivery and expedited care. Such apps on devices handle user provided or user-owned health related data. Anybody who is concerned about their well-being can utilize them to manage, enhance, or preserve own health.

Purpose of the study: to figure out how often youth utilize the health apps for their health benefits.

Material and Methods: The study conducted was non- experimental with Quantitative research approach. The population for the current study were the youngsters of age 18yrs – 25yrs. The data was collected from total of 200 samples using a self – structured questionnaire by non – probability sampling method. The informed consent was filled by the participants prior to filling the tool. The questionnaire consists of two sections mainly demographic section and main tool.

Result: The result shows that about 77% of the samples use the health applications for tracking, improving and maintaining their health. Among which 27.5 % uses fitness apps and 17.5% uses monitoring apps.

Conclusion: It was assumed that youth may be using the health app for improvement and management of their health and as per the findings that is 77% youth uses health app and they get benefited from using the same. The impact of the findings will spread more health awareness regarding usage of health apps and produces important health data for studies and public health campaign.

***Key words**:* assess, health apps, well-being, youth, usage

Introduction

Health apps, also known as healthcare or medical applications, are software programs designed to assist health status of the people. Mobile applications have are gaining attention as a tool for enhancing children condition and wellness as smartphones and tablets become more widely available.[1] These apps are categorized into two groups as stated , wholesome Health & health Management apps and telecare apps. alternatively there is another class of app focusing women health .[2] A study results ,specifies that at the time of COVID-19 epidemic, more Indian users used health and wellness applications. 40% of the repliers said they used fitness apps mostly during the outbreak, contrast to 21% of them who had just started using it.[3] The Global Lookout of the World Health Organization illustrates wireless technology as a community health intervention that is facilitated by mobile technologies, including smartphones . Personal digital assistants and patient monitoring devices together with additional gadgets. Apps for tracking symptoms and providing COVID-19 information have been developed in response to the widespread.[4] In Maharashtra, a population-based online survey was used to conduct a cross-sectional study on smartphone users who were at least 18 years old.the results depicts; 60% of respondents, in the majority, use the internet for about 4 hours per day. Just 28% of the survey participants were aware of GOI's m-

health applications. When compared to other apps, Arogya Setu, Cowin, UMANG, and ABHA showed the highest levels of awareness and usage.[5] Hence , the usage of health apps among youth is being enhancing reflecting a growing trend towards digital health engagement in young adults.

Need of the Study

Understanding how young people utilize health apps is essential due to their unique health needs and behaviors. Research in this area is crucial to assess the effectiveness and influence of these apps on healthcare quality and outcomes. Health apps empower users to manage, preserve, and improve their health, highlighting the increasing integration of technology in healthcare. The primary focus is on comprehending how individuals engage with these apps to support initiatives aimed at enhancing digital medical literacy. This understanding helps users make informed decisions about their health. Young people's use of health apps is particularly significant because their specific health demands and behaviors can profoundly impact their long-term well-being.

Previous studies have identified key factors influencing young people's adoption and use of health apps. These include the perceived usefulness of the apps, social influences, individual health goals, and the availability of features such as personalized feedback and social support. By investigating these aspects, researchers can gain insights into the motivations and preferences driving young people's engagement with health apps. For instance, understanding the perceived usefulness of these apps helps tailor app functionalities to better meet users' needs. Social influences highlight the importance of peer recommendations and social support networks in promoting app usage among young individuals.

Moreover, recognizing individual health objectives underscores the diversity of health goals among young users, emphasizing the need for customizable features within health apps. Features like personalized feedback and social support contribute significantly to user engagement and long-term adherence to health app usage. In summary, studying how young people utilize health apps is essential for improving healthcare delivery and outcomes. This research provides valuable insights into designing effective digital health interventions that cater to the diverse health needs and preferences of young individuals, ultimately empowering them to take charge of their health and well-being.

Scholar View: According to us the main goal of our study is to figure out how often young people utilize the medical apps for their health benefits and which of the app is highly used by them. With the help of these apps, users can control, preserve, and enhance their health.

Research Methodology

The objectives of the study were to assess the use of medical apps among youth and to associate the findings with selected demographic variables. The study design was non experimental descriptive research. Ethical Consideration: The title of the research work was approved from IRRC, BV[DU] College of Nursing, Pune. Total 200 youth [age 18-25 years] was selected for data collection. A non-probability purposive sampling technique was used to collect data from the samples. Tool was constructed to identify the demographic variables and 6 self-structured questionnaires. For reliability of the tool, 10% (20 samples) of the total population (200 samples) was taken. Test-retest method was used. Cohen’s kappa, r was found out to be r=1. Hence tool is reliable. For Pilot study, 20 samples were taken , it encountered no such issues, and the research was sufficiently practicable to move forward with the primary data gathering.

Results

Section 1: Description Of Demographic Traits According to the Frequency an$d Prportion o$f Their Individual Traits.

In demographic variables, most of the youth had age 20-21 years 38% and 18-19 years 36.5% and among them 58.5% were males. 47.5% youth had family monthly income above Rs 50,000. In education ,61% youth were pursuing graduation and among them 93.5 % were students. Mainly 40.5% youth had self-explored information

regarding health apps.77% of the users uses health apps and in that 27.5% and 17.5% uses fitness and monitoring apps. 30.5% and 25.5% users uses app less than a year and 1-2 years.

Section Ii (A): Use of Health Apps Among Youth = 154

ITEM	FREQUENCY	PERCENTAGE
2.1 On which platform do you use the app?		
A) mobile	154	100%
2.2 How often do you use the app?		
A) daily	36	23.4%
B) frequently	55	35.7%
C) rarely	63	40.9%
2.3 Purpose of using the app:		
A) fitness	66	42.9%
B) buying medicines	36	23.4%
C) to track menstrual cycle	28	18.2%
D) disease related updates	12	7.8%
E) doctor consultation	6	3.9%
F) monitor health	4	2.6%
G) skin improvement	2	1.3%
2.4 Time of use:		
A) anytime	111	72.1%
B) during workout	28	18.2%
C) throughout the day	13	8.4%
D) after having meals	2	1.3%
2.5 Do you get any benefit from using the app?		
A) yes	135	87.7%
B) no	19	12.3%
Benefit -		
a) Health fitness	27	17.5%
b) Helps tracking periods	18	11.7%
c) Helpful and informative	16	10.4%
d) Easy ordering of medicines	9	5.8%
e) Saves money on purchasing medicines	8	5.2%
f) Fast supply and delivery	6	3.9%
g) Helps tracking diet plan	5	3.2%
h) Easy consultation	3	1.9%
i) Good for continuous monitoring	3	1.9%
j) Stabilize mind	2	1.3%
2.6 What is your overall experience while using the app?		
a) Good	86	55.8%
b) Average	59	38.3%

c) Bad	9	5.8%

Table 2: A description of the frequency and proportion of use of health apps among youth.

All the youngsters who were using health apps, had mobile as a platform for those apps. Majority 40.9% of the users uses health app rarely and 42.9% of them uses for fitness also 72.1% uses health app anytime. Mostly 87.7% of the users were getting benefits from using the health app in which 17.5% of them had health fitness benefits. 55.8% of them had good overall experience while using the app.

Section Iii (B): Categorization of Health Apps Used

TREATMENT (20.1%)	**MONITORING (22%)**	**FITNESS (36.4%)**	**PERIOD APPS (18.2%)**	**ONLINE EXPERTISE (3.3%)**
Tata 1 mg	Asthma tracker	I fitness	Flora	Mediplus
Health kart	Arogya setu	Home fitness	Period tracker	Zeno health
Health	My fitness tracker	Health	My calendar	Medio consult
Amazon	Step pedometer	Apple fitness	Flo app	
Apollo 24/7	Heart rate monitor	Samsung fitness	Sironoa hygiene	
	Protein tracking	Apollo fitness	Pink bird	
	Cardihealth	Yoga for beginners		
	Active health	Google fit		
	Health tracker	Fitpass		
	Honor health	Home workout		
	Samsung health monitor	30days workout		
	Boatcrest	Health connect beta		
	Workout planner	Daily workout		
	Daily health tracker	Gym workout		
	MSN	Muscle blaze		
	Heartfullness	Mark lauren on demand		
	Step set go	Healtify me		
	Pedometer	Health fitness		
	Stress tracker			

Table 3: Categorization of apps based on the purpose of use of health apps

Section III: Statistical analysis of association between demographic characteristics and use of health apps.

Youth health app usage and a few chosen demographic factors are correlated. The frequency of health applications was shown to be significantly correlated with gender. It was noticed that the reason of using the app was significantly correlated with both gender and variable age. It was was also identified that education significantly correlated with the entire health app experience.

Discussion

The goals and presumptions of the current study were discussed in relation to the study's findings, which was conducted to assess the use of health apps among youth from selected areas of Pune city. A similar study finding that supports the study's conclusions also supports one of the study's findings. The study's objectives were to evaluate the impact, gauge awareness, and examine the use of health apps. A self-structured questionnaire was

used in the study, and the findings revealed that 61% of participants tracked their health with Fit Bit and healthify me 11. 36 percent of users use the app seldom. 37% of users gave their evaluations higher. The majority of users in the demographic segment were between the ages of 19 and 25. Students made about 62% of users.[6]

Conclusion

The study reveals that the majority of youngsters who used medical applications were between the ages of 18 and 21, primarily male, with half pursuing graduation. 77% of users utilized health apps for fitness and monitoring for less than two years. They employed mobile platforms and discovered that health apps were helpful, particularly for fitness objectives. The frequency, purpose and overall experience of app usage were found to be correlated with gender, age and education. It was assumed that youth people would use health apps to maintain and enhance their health; nevertheless, the results shows that these apps benefit users and enhance their quality of life. According to the statistics, more than 50% of young people use health apps and profit from them. The majority of them use the app rarely but nonetheless. The results will have the effect of raising health awareness regarding the use of health apps and generating significant health data for research and public health campaigns.

Conflict of Interest

The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

Funding Source: There is no funding Source for this study.

Acknowledgement

I most sincerely convey my deep sense of gratitude to my Guide for remarkable guidance and academic support during this study and the help we got throughout the research study from our Principal and participants contribute to accomplishing the research study successfully.

References

[1] Jamie Lee, Zhaoyuan Su, and Yunan Chen Mobile Apps for Children's Health and Wellbeing: Design Features and Future Opportunities AMIA Annu Symp Proc. 2023; 2023: 1027–1036. Published online 2024 Jan 11.

[2] How Healthcare Apps are Adding New Perspectives to the Healthcare Industry?Available from: https://www.delveinsight.com/blog/healthcare-apps

[3] Use of health and wellness apps among Indians as of August 2022, by level of usage Available from : https://www.statista.com/statistics/1344027/india-usage-of-health-and-wellness-apps

[4] Julian Valerie John Jembai, Yi Lin Charlene Wong, Nur Alia Muhammad Amir Bakhtiar,Siti Nursuraya Md Lazim, Hwei Sung Ling, Pei Xuan Kuan and Pin Fen Chua ' Mobile health applications: awareness, attitudes, and practices among medical students in Malaysia ' Jembai et al. BMC Medical Education (2022) 22:544 https://doi.org/10.1186/s12909-022-03603-4

[5] Mahajan Sangmeshwar, Chhaya Rajguru, Lalit Sankhe and Blessy Esther ' A CROSS-SECTIONAL STUDY TO ASSESS AWARENESS AND USAGE OF GOVERNMENT OF INDIA'S M-HEALTH APPS BY SMARTPHONE USERS IN MAHARASHTRA ' May 2023 International Journal of Scientific Research DOI:10.36106/ijsr/3000861.

[6] Mayer M, Rodríguez Blanco O, Torrejon A Correction: Use of Health Apps by Nurses for Professional Purposes: Web-Based Survey Study MIR Mhealth Uhealth 2020;8(4):e18516 URL: https://mhealth.jmir.org/2020/4/e18516 DOI: 10.2196/18516

[7] Mosa, A.S.M., Yoo, I. & Sheets, L. A Systematic Review of Healthcare Applications for Smartphones. BMC Med Inform Decis Mak 12, 67 (2012). https://doi.org/10.1186/1472-6947-12-67

[8] Kaur M, Kaur H, Rathi S, Ashwitha M, Joanna J, Reddy S, Idris B, Myrtle P, Kandamuru S, Fatima S, Joshi A. Apps on Google Play Store to assist in self-management of hypertension in Indian context: features

analysis study. Mhealth. 2022 Apr 20;8:14.. PMID: 35449503; PMCID: PMC9014236. doi: 10.21037/mhealth-21-25

[9] Safeer V S M, Gupta P, Behl S, Bansal D, Sahu JK. Mobile health applications for epilepsy in Indian app stores: A systematic review and content analysis using the mobile app rating scale. Epilepsy Res. 2024 Mar;201:107331. Epub 2024 Feb 22. PMID: 38442549. doi: 10.1016/j.eplepsyres.2024.107331.

[10] Milne-Ives M, Lam C, De Cock C, Van Velthoven MH, Meinert E. Mobile Apps for Health Behavior Change in Physical Activity, Diet, Drug and Alcohol Use, and Mental Health: Systematic Review. JMIR Mhealth Uhealth. 2020 Mar 18;8(3):e17046. PMID: 32186518; PMCID: PMC7113799. doi: 10.2196/17046.

[11] Parya Saberi, Robert Siedle-Khan, Nicolas Sheon, and Marguerita Lightfoot ' The Use of Mobile Health Applications Among Youth and Young Adults Living with HIV ' AIDS Patient Care STDS. 2016 Jun 1; 30(6): 254–260. PMCID: PMC 4913493 PMID: 27214751 doi: 10.1089/apc.2016.0044