

PRACTICE OF M-HEALTH APPS AMONG MANAGEMENT STUDENTS IN TIER-II CITY OF CENTRAL INDIA, INDORE (M.P.) - A CASE STUDY (2016)



Health care

KEYWORDS : m-health, Practice of mobile health apps, Management students

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ABSTRACT

This exploratory research aims to explore the m-health apps practices by the management students of a management institute in Indore. The representative primary data has been collected from 50 students of the management institute through a Questionnaire with convenience sampling. The appropriate statistical tools were used and charts were prepared with help of MS-Office software. The findings of this paper conclude that the management students have low awareness about m-Health apps with very poor utilization of them despite very high use of smart mobile phones. This poor utilization can be linked with inadequate information regarding benefits of m-Health apps among students coupled with limited practice and lack of training. Recommendations emphasize on training with more information on specific benefits of m-Health apps. There is a further scope for investigation on the factors affecting the adoption of m-Health apps.

INTRODUCTION

M-Health is an application of information communication technology with mobile telephony for a structured health care information and delivery. M-Health allows integration of telecommunication technologies for providing mobile health care services (Jain, Dr. A. K. & Choube, Dr. S. K, 2015). The usage of mobile phones is huge among students and they are more engaged in mobile phones than any other basic communication in comparison to elderly age group (Vasudev, A. & et.al. 2012). Social media and e-commerce activities have further increased the mobile usage among students in India. The mobile service providers are focusing on segment between 16 years to 30 years by bringing reasonable mobile usage plan and strong mobile infrastructure. As per Linked In, India stands fifth among the mobile app markets in the world in terms of profitability and growth. Along with Android apps, apple's improved value added services and mobile applications are being introduced for Indian Mobile users (Fakhrudin, H. 2014). The role of m-Health may be critical as the health problems in youth are not only entirely different but are of the nature that can be addressed only through moving fast technology. This paper aims at exploring the awareness and utilization of m-Health applications among the Under Graduate & Post Graduate students of health and e-com streams of management. Students under study represent both urban and rural demographics and are from different academic backgrounds. As information technology is acquiring increasing importance in management courses this study becomes highly relevant.

LITERATURE REVIEW

Mobile phones are used to enhance and improve the health care quality and delivery (Leamaire, J, 2011). Awareness through mobile application allows remote access to health services, personal interaction and a faster transfer rate (Singh, A. & Khanna, A., 2014). "Technology and students are inseparable and channelizing a proper technological advancement for health awareness. We can educate them on precaution from dreadful diseases such as HIV- AIDS (Mr. J. P. Nadda, EP New, 2015). M-health's apps allows interactive platform for students to seek complete information about a specific disease or complication and avail required remedial action. Poor condition of health of Indian students can affect the future health care structure (Pandya, M & Bhatt, D, 2014). National Students Policy, 2014 focuses on enhancing the health care initiatives for students and seek a bigger scope of improvement for efficient health care delivery. Health problems among Indian students are due to overweight and obesity, nutrition deficiencies, sexually transmitted diseases, alcohol consumption and drugs & tobacco intake. **HealthifyMe** is a mobile app which helps to monitor the proper calorie count and nutrition value with an exact data of protein & fat in the given food. A

dedicated team of doctors and nutritionist enable the app users to evaluate the calorie and nutrients at macro level directly through picture of the food dish which is soon going to be launched as a default app in their fitness based wearable device – **YUFit**. An initiative **m-Cessation** by the Union Ministry of Health of India through awareness about the ill effects and consequences of tobacco intake. One can simply enroll through giving a miss call and answering few questions after which he/she will receive daily three to four sms over mobile phone for counseling and guidance to quit tobacco. M-health apps such **DrinkControl** monitor the intake of alcohol over a permissible limit assuring a safe drive over roads. This app is readily available over Google and apple play store. M-health apps can be an interactive way for students to gain proper preventive information about sexually transmitted disease specifically HIV/AIDS. In South Africa and Uganda, under Project Masiluleke and Text to Change, SMS texting over mobile device is used to provide education regarding HIV/AIDS. Campaign includes awareness and counseling. Recently a m-health app for HIV/AIDS was launched by Ministry of Health and Family Welfare in collaboration with AIDS Healthcare Foundation, Department of Telecommunications and National AIDS Control Organization launched in Mumbai.

RESEARCH METHODOLOGY

Rationale

A lot of literature is available stating m-health services and delivery of such services in a particular geography or under a specific project. But a study describing the Utilization of m-Health among students and evaluating the actual status of the utilization with special reference to management students is lacking. This paper expects to fill the gap.

Objective-To do survey study of

- a) The awareness about m-Health apps
- b) Utilization of m-Health apps among management students.

Methodology- Research Design -Present research is exploratory in nature and performed through primary data collection from students of management institute within an age bar of 18 to 22 years. **Sampling Technique**- The convenience sampling technique is opted for the research with respect to time availability and resource concern. **Sample Size would be of 50 students.** **Sampling Unit**- Individual MBA student of a management institute in Indore. **Research Duration:** January 2016 to March 2016. **Research Tools** – Simple percentage tool with MS-Excel for making charts and graphs.

OBSERVATIONS AND INTERPRETATIONS

BACKGROUND ANALYSIS OF DATA OF RESPONDENTS

All the respondents are the students of a management institute and between the age group of 17 -25 years. All the management students' respondents use mobile devices and 98 % of the respondents use Smartphone as mobile device and 100 % of the students access the mobile internet. It can be interpreted that 80 % of students use mobile internet for social media and 30% for e-commerce. About 56 % of students use mobile usage is medium and 30% uses mobile internet extensively. Out of 50 students 47 students know about Mobile health services, 2 students are unaware about mobile health services while 1 student has not responded. Out of 50 students maximum of 34 students are connected to mobile health services through mobile application.

SOURCE OF INFORMATION ABOUT M-HEALTH

Observation & Interpretations: Out of 50 students 86% students got information about m-Health services through a single source and 12% through multiple sources while 2% student did not respond. Internet is the biggest source of information (54%) followed by newspaper (16%). Only 12% students had more than one source of information about m-Health.

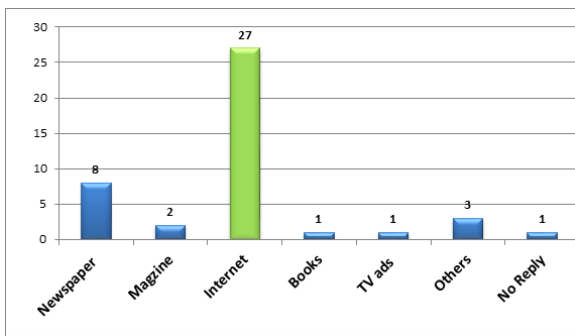


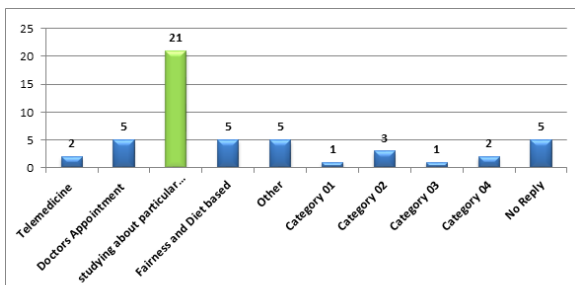
Chart 1- Showing Sources providing information on m-Health

TYPE OF m-HEALTH APPLICATIONS

Observation & Interpretations: Out of 50 students 90% of students are using mobile applications. 42% students are using m-Health application for knowing about a particular concerned symptom, 10% students are using mobile app for doctors' appointment, 10% students are using for fairness and diet based program and 10% students are using for some other purpose.

Chart 2- Usage of m-health apps among respondents

(Category 1: Telemedicine & Doctor appointment -01, Category 2- Doctor Appointment & Studying about a particular symptom-03, Category 3- Doctor Appointment & Fairness and diet based-01, Category 4- Studying about a particular symptom & Fairness and diet based- 02 nos



IN -PERSON AWARENESS ABOUT MOBILE HEALTH APPLICATION:

Observation & Interpretations: Out of 50 students only 60% students had in-person awareness about m-Health apps. Among 30 students maximum 26% students got in person awareness through Hospitals, 12% students got awareness through con-

sultants/faculties, 10% students got awareness through peer, 6% students got awareness through doctors and 6% students got awareness through pharmacist. Hospitals, Consultants/faculties and peer are the main sources of information for awareness.

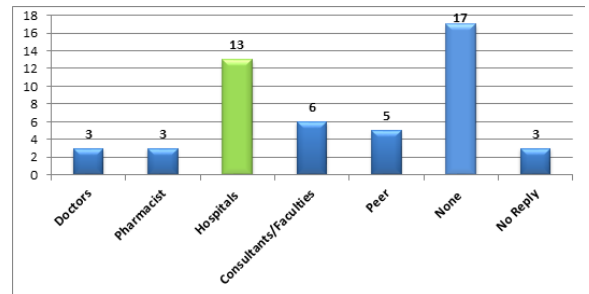


Chart 3- Sources for In-person awareness for mobile health application among respondents

MOBILE HEALTH APPLICATION CURRENTLY IN USE

Table 1: Showing current usage types of m-Health apps among respondent students

Usage type	Number of students	Mobile Application
Doctor appointment	3	Practo, Mydoctor
Hospital information	2	Ayush, medapp, webmd
Telemedicine	4	Medics, drug dictionary, netmed
Personal Health Care	6	Fitness tracking, water drinking reminder, 7-min workout, D care
Personal diagnostic	1	Medd
Blood donor availability	1	Blood Bank

Observation & Interpretations:

Out of 50 students only 36% students are currently using m-Health apps enumerated in table. Most prevalent usage type is for personal health care (12%), relating to fitness, workout and water intake management. The usage of rest of m-Health apps is 4% or less than 4%.

AWARENESS ABOUT THE MOBILE APPLICATION PROVIDED BY NATIONAL HEALTH PORTAL

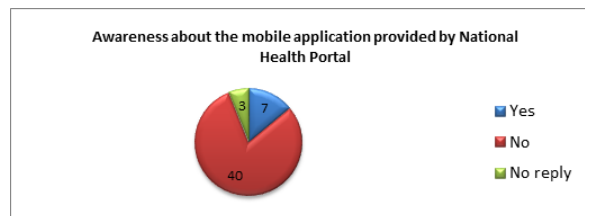


Chart 4: Showing awareness about National Health Portal

Observation & Interpretation: National health portal launched by GOI, provides many m-Health apps free of cost. Only 14% students are aware of FREE mobile health application provided by National Health Portal rest 86% students are not aware about it. **The awareness is very poor for NHP among students.**

AWARENESS ABOUT NETMED AND 108 MOBILE

HEALTH APPLICATION

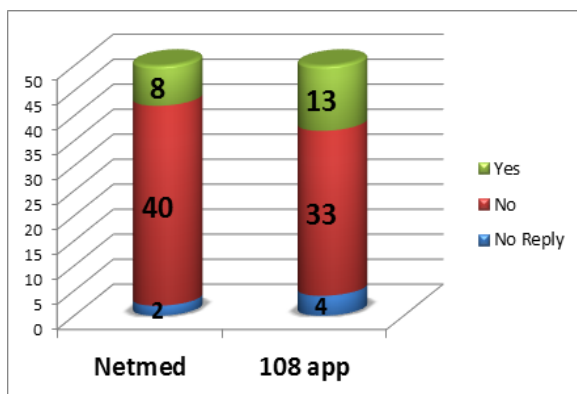


Chart 5: Showing awareness about NETMED and 108 m-health app among respondents

Observation & Interpretations: Out of 50 students maximum 8 and 13 students are aware about NETMED and 108 mobile applications respectively. The awareness about NETMED and 108 mobile applications is also very poor among students.

REASONS FOR NOT USING MOBILE APPLICATIONS

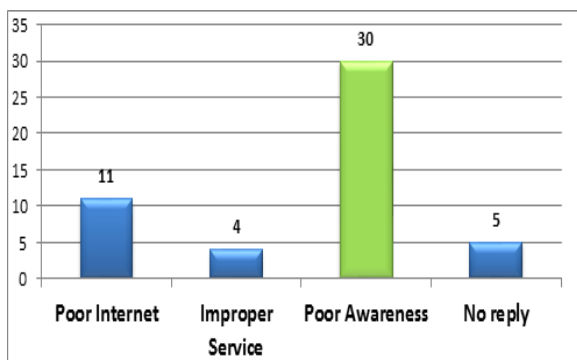


Chart 6: Showing reasons for not using m-health application

Observation & Interpretations: Out of 50 students major reason (60%) for poor use of m-Health apps is **poor awareness** among students. The other reasons include improper & poor internet services.

CONCLUSIONS

Majority of students use smart mobile phones for communication and entertainment. The majority of students are aware about the term 'm-Health'. They can relate to various uses and acquired from internet. The awareness about real m-health apps is very poor like for NHP, NETMED and 108 etc. The very poor utilization of m-Health apps is associated with poor awareness about m-Health apps and their use.

RECOMMENDATIONS

- Increasing in-person awareness among students through the groups
- associated with it like faculties, doctors, physicians, pharmacist and consultants.
- Customization of the m-Health apps providing for providing a user friendly experience.
- Training of students, health care personnel and technocrats about healthcare benefits associated with m-Health apps.
- Incentive for adoption of m-Health services and technology.
- National Health Portal need to advertise more regarding the FREE m-Health apps.

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