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Original Research Article

Awareness and sources of the digital transactions schemes: a cross sectional study in a rural block of Jabalpur, Madhya Pradesh, India

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ABSTRACT

Background: India is a developing country and is on the road of rapid progress, in every aspect. So, to further boost the development process, India joined many other developing countries and showed an intent to promote a cashless economy. However, this penetration is not much in the rural areas which constitute the building blocks of the country. Awareness regarding digital transaction schemes of government of India is imperative to success of such schemes. Hence, the current study for assessing the awareness of the digital transaction schemes and finding out the sources in their implementation will help cater these issues.

Methods: A descriptive cross sectional study was conducted among 60 respondents belonging to different age groups, socio economic strata and with different education status, to explore the awareness and acceptance percentage of respondents in rural block Paragraph in relation to digital transaction schemes and methods and the their sources of information. Study was done in three-month duration from 1st July 2018 to 30th September 2018.

Results: It was found that the awareness for mobile banking among all the age groups was a massive 93.36% while that of the Digital Dakiya scheme is a meagre 8.30%. It was inferred from the study that social interaction was the major information source (51%) and there was a significant association between the use of mobile banking and younger age of the individual.

Conclusions: Awareness among the older population and rural females is lesser as compared to counterparts and was massive for mobile banking. Disparity about awareness the of schemes points that overall usage needs to be promoted.

Keywords: Awareness, Digital transactions, Rural, Schemes, Sources

INTRODUCTION

India is a developing country and is on the road of rapid progress, in every aspect. So, to further boost the development process, India joined many other developing countries and showed an intent to promote a cashless economy. So, to further boost the development process, India joined many other developing countries and showed an intent to promote a cashless economy. Going digital has its benefits. In an age where almost every individual is equipped with a smart phone, payment through mobile

banking is a better option than carrying cash around all the times The Digital India Initiative is the flagship programme of the Government of India to transform India into a digitally empowered society and economy. According to the studies done between 2008-2013, only 2% of the total payments were made by digital methods in India. In the year 2015,12,965 per capita was the amount of cash in circulation at the end of the year. However, after this major step taken by the government in 2015, the percentage of digital transactions have increased from a mere 254.5 crore (2013-14) to 865.9

crore (2016-17) and further to 1928 crore (April 2017) digital transactions, indicating the success of this campaign. ^{2,3} Going digital has its benefits. Avoiding long bank queues, option of 24x7 transactions, safety, security and convenience are among only a few benefits among many of digital methods of payment.

However, most of the progress is limited to urban areas. Rural India is home to 68.84% of the country's population, according to the 2011 census, and is a major contributor to the economic development of the country.⁴ However, as of now internet penetration in rural India is a mere 17%.⁵ It is estimated that by 2020, they will contribute to almost half of the country's internet users.⁶ The participation of women and aged individuals is also low and unsatisfactory.

It is hence essential for the population in the rural areas to be aware of the technological advances, that facilitate easy payments so that the economic and overall development of the country is not hampered. Also, it is more than essential to study the knowledge of the various digital schemes among the residents of rural areas and note the trends regularly to trace the progress of the initiative. Furthermore, sources if information and the barriers in implementation of these schemes among the rural masses is essential to enable appropriate measures to be taken and implemented. Hence, the current study for assessing the awareness of the digital transaction schemes and finding out the sources in their implementation will help cater these issues.

METHODS

A descriptive cross sectional study was carried out in three months duration i.e. 1st July 2018 to 30th September 2018 in a rural block Panagar. Panagar being the nearest rural block from Nagar Nigam Jabalpur was selected and two village one nearest and one farthest village form Nagar Nigam purposively selected for study. A sample of 60 was obtained for determining the awareness of digital transaction using the formula ZPQ/L2 (taking prevalence of 7% as the total rural population of India using digital transactions (6) and taking 10% non-respondent rate, 95% confidence interval). Sixty families who were using mobile phones and access to internet were surveyed. To select study population simple random sampling was done.

Inclusion and exclusion criteria

One respondent from each family whose age was more than 18 and internet friendly using mobile phones included as study subject and those not using mobile phone and no access to internet and not willing to participate were excluded from study. A total such 60 respondent from 60 families were randomly picked up from Panagarh block. Predesigned semi structured questionnaire prepared by discussing with faculties of department of community medicine. Data on socio-

demographic (age, gender, education, occupation, and income), schemes (awareness and source), use and hurdles of utilization digital transaction were collected. The data were coded and validated. Both the descriptive and inferential data analysis was applied using appropriate statistical test. Data entry and analysis were using MS Excel 2007 software. Generation of descriptive Statistics was done. Ethical clearance was taken from the ethical committee of the Institution. The study was done according to world Helsinki declaration and informed oral consent was obtained from the participants before administrating questionnaire. Anonymity of participants was maintained by avoiding any information revealing the identity of the participants in the questionnaire.

RESULTS

A total of sixty families using mobile phones and access to internet were surveyed in Panagarh block, of which 60% respondents were males and 40% were females.

Table 1: Distribution of Socio-demographic variables among the study subjects.

Particulars	Frequency	Percentage
Gender		
Male	36	60%
Female	24	40%
Total	60	100%
Age group (in years))	
18-29	23	38.33%
30-39	18	30.00%
40-49	10	16.66%
50-59	6	10.00%
>60	3	5.00%
Total	60	100%
Education status		
Illiterate	3	5%
Primary	7	11.66%
Secondary	14	23.33%
Higher secondary	12	20%
Graduate	19	31.66%
Postgraduate	5	8.33%
Total	60	100%
Socio economic status		
Upper middle	2	3.33%
Middle	18	30%
Lower middle	6	10%
Lower	34	56.66%
Total	60	100%
Type of Family		
Nuclear Family	23	38.33%
Joint Family	37	61.66%
Total	60	100%

Data wise 38.33% of the respondents had nuclear families while 61.66% lived in a joint family, 95% of study

population was literate primary or above, 31.7 % were graduate. 38.33% of the respondents were 18-30 years old while 5% individuals were over 60 years old. The mean age of the study population was 34 with SD ± 13 . Maximum study population belonged to lower middle class 56% followed by middle class 30% (Table 1).

When the awareness among different age groups regarding various digital transaction schemes and methods seen it was found overall awareness regarding digital transaction schemes and methods were Maximum among age group 18-29 i.e. 38.37% followed by 30 to 39 yrs age group i.e. 34.28%. A declining trend of awareness regarding different schemes and methods were noticed with increase of age (Figure 1). The younger individuals below 30 years are the most aware while the older individuals above 60 years are the least aware. Age was found to be significantly associated with usage of mobile banking with a p value <0.05 (Table 2).

When awareness regarding different schemes compared It was found that the awareness for mobile banking among all the age groups was a massive 93.36% while that of the Digital Dakiya scheme is a mearge 8.30%. 80% individuals are aware about the POS machines, 41.7% and 21.66% have some knowledge in respect to BHIM and IMPS respectively. (Table 2) Age trend of different

types of digital transaction schemes and methods was found to be the same as age trend of overall awareness that is more prevalent among younger population

Figure 2 illustrates the different sources that helped raise awareness among the masses regarding the technological advances in payment methods. Majority of the individuals pointed out that their major source of information was social interaction with other individuals 51% followed by television 42% and newspapers 32%.

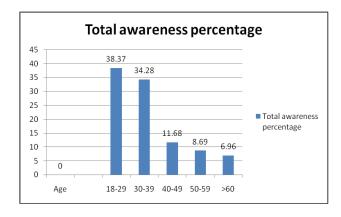
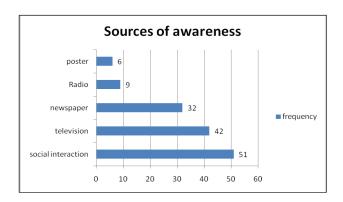


Figure 1: Age wise distribution of awareness of digital transactions.

Awareness (in %) **Total awareness** Age **Digital Mobile POS** Frequency **Aadhar BHIM IMPS** percentage **Dakiya** banking machines pay 18-29 23 16.7 10 3.33 36.7 13.3 38.37 30 30-39 18 18.33 8.33 1.66 30 25 15 34.28 40-49 10 3.34 1.67 0 13.36 11.79 3.34 11.68 50-59 1.66 6 0 0 8.3 8.3 6.66 8.69 >60 3 3.33 1.66 1.66 5 3.33 6.96 93.36 Total 60 41.7 21.66 8.31 80.09 41.63

p < 0.05

Table 2: Awareness among different age groups regarding various digital transaction schemes and methods.



p > 0.05

p > 0.05

p > 0.05

Figure 2: Sources of information for awareness of digital transactions.

DISCUSSION

p > 0.05

The study indicated that among the respondents, the maximum awareness was with respect to mobile wallets and POS machines and the people were least aware about the Digital Dakiya Scheme of the Madhya Pradesh Government. This trend can be backed by the lack of promotional programmes organized by the government for the scheme in comparison to various mobile wallet service providers like Paytm, that actively organize such programmes regularly.

p > 0.05

Furthermore, this awareness is variable among different age groups, with the younger age groups being more in

touch with the recent transformations in the payment methods. A significant association was found between the usage of mobile wallets and the different age groups with the younger age groups having more knowledge than the older age group in this regard. A similar association was also made by Jain C in her study where the middle age group of 26-45 years and 18-25 years were found to make digital payments more frequently.7 Also, Vally KS et al, in their study found that there is a significant relationship between the age groups and the corresponding use of digital transactions by them.⁸ This may be supported by the fact that younger individuals accept and are more attracted towards easy and hassle free digital transactions. However, there is a feeling of insecurity among the elder individuals in respect to these methods and their trust on conventional "paper money" seems to be unshakable. This also explains why, in this study, the preferred mode of payment for respondents <30 years is mobile wallets while the >50 years age group prefers cash payment. The major source of information for the respondents in the study is interaction with other individuals followed by television, newspapers and radios. In a study conducted by Rajanna KA a similar conclusion on the role of television and print media in spreading awareness among the masses was made.^{9,10} Social interaction among rural population is quite prevalent and responsible for spread of awareness is due to reason more mixing and gathering still persist among rural population.

Despite, all the precautions taken to select a population that represents a rural population, due to limitation of resources, a small sample of 60 respondents was interviewed. Extrapolation of this study for a larger study population will provide better results and a better understanding of significant associations which will enable adequate steps to be taken for the betterment of the society and the Digital India Campaign.

CONCLUSION

Awareness among the older population and rural females is lesser as compared to counterparts and overall usage needs to be promoted so that an important part of the society is not left behind and lots of disparity among awareness of schemes was seen as of maximum with mobile banking. The major source of information among the masses is social interaction followed by television and newspapers. Lack of awareness and difficulty to operate, are hurdles that must be overcome. On the basis of study, it can be recommended to run schemes for dissemination of information and creating awareness as well as enhancing acceptance can be done.

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