



A STUDY ON CLIENTS PERCEPTION ON USAGE OF MOBILE PHONES AMONG HEALTH CARE PROFESSIONALS DURING THERAPEUTIC INTERACTION IN A SELECTED HOSPITAL, MANGALURU

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ABSTRACT A Descriptive exploratory survey design was used to assess the perception of clients on usage of mobile phones among health care professionals during therapeutic interaction. The main aim of the study was to identify the level of perception of clients regarding the usage of mobile phones during therapeutic interaction and to find association between the clients perception and selected demographic variables. About 250 clients seeking health care were recruited using purposive sampling method. The perception of clients were assessed using a Five point Likert Rating Scale. Majority (75.6%) of clients had a positive perception towards usage of mobile phones among health care professionals during therapeutic interaction. There was a significant association between the perception of client and selected demographic variables such as gender (0.029), place of residence (<0.001), education (<0.001), occupation (<0.001) and monthly income in rupees (<0.001).

KEYWORDS : Perception

Introduction:

Mobile phones, now has become a necessity for life, without this gadget, we are not able to think ourselves as complete. In our day-to-day life, we heavily depend on mobile phones for quick communication, appointment, dealing with clients etc. Therefore literally Mobile phones have become fundamental and almost have become a part of our daily apparels.

Evidence on harm caused by mobile technology is sparse but as more doctors pick up smart phones the potential for personal distractions are much higher and rising. Physicians are interrupted nearly five times an hour by phone calls, emails and face-to-face interactions, according to a study in the Journal of Medical Internet Research. (Gill, P.S 2012)

These distractions might worsen health care. The health professionals are using their phones while delivering care. For example, nurses who are interrupted by an e-mail while preparing and administering medications are 12% likely to make procedural or clinical mistakes, according to Archives of Internal Medicine study. A survey conducted in the year 2010 found that more than 400 perfusionists used their cell phones during cardiopulmonary bypasses, 21% of them with smartphone users found to be checking email, 15% using the Internet and 3% found to be posting to social networking websites. (West brook, J.I, 2010)

Objectives:

1. To identify the level of perception of clients regarding the usage of mobile phones during therapeutic interaction.
2. To find association between the clients perception with selected demographic variables.

Materials and methods:

Descriptive exploratory survey design was adopted for the study. The study was conducted in wards (general and private) and outpatient departments of Father Muller Medical College Hospital, Mangaluru. About 250 clients seeking health care were recruited using purposive sampling method. The data collection instruments used in the study were: Baseline proforma of the client and Rating scale (5 point likert) to assess the perception of client on usage of mobile phones among health care professionals during therapeutic interaction.

The tool was validated by 11 experts from various fields of Medical Surgical Nursing and Clinical Nursing experts to establish content validity. The reliability obtained by Cronbach Alpha method was $r=0.9$, hence the tool was considered to be reliable for the present study. The investigator obtained permission from the institutional authority and the ethical clearance committee. An informed consent was obtained

and special care was taken to establish rapport and maintain the confidentiality of the subjects.

Results:

The obtained data was tabulated, analysed and interpreted using descriptive and inferential statistics on the basis of objectives and hypothesis formulated for the purpose of the study.

Description of baseline characteristics:

Among 250 clients, majority (48%) were between the age group of 40-59 years, 42% were in the age group of 20-39 years and 10% of clients were in the age group of 60-79 years. 57.6% were females and 42.4% were males. 64.8% of clients were residing in rural area and 35.2% were residing in urban area. 40.8% of clients had primary education, 28.8% of clients had degree and above education and rest of the clients had high school education and pre university education. Majority (34%) of clients were homemakers and others were employed. Majority (71.6%) of clients had a monthly income of Rs \leq 25000/- and rest of the clients were financially stable. 66% of clients had an experience of previous hospitalization whereas 34% of clients did not have an experience of hospitalization.

Distribution of clients perception on usage of mobile phones among health care professionals during therapeutic interaction.

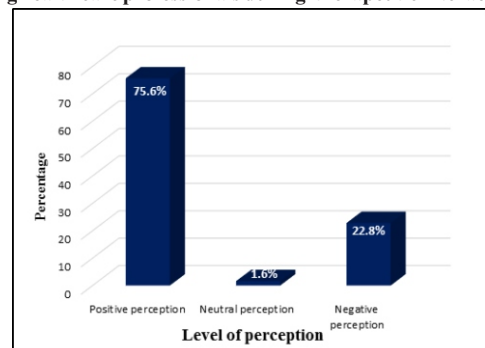


Figure 1: Bar diagram showing the distribution of clients level of perception on usage of mobile phones among health care professional during therapeutic interaction

The data in figure 1 shows that majority (75.6%) of clients have positive perception whereas 22.8% of clients reported to have negative perception. However 1.6% of clients' response was neutral.

Association between the perceptions of clients with selected demographic variables

Table 1: Association between the perceptions of clients with selected demographic variables

N=250				
S. No.	Variable	Median (<86.5)	Median (>86.5)	P value
1	Age in years			0.8
	a. 20-39	54	51	
	b. 40-59	60	60	
2	Gender			0.029*
	a. Male	62	44	
	b. Female	63	81	
3	Place of residence			<0.001*
	a. Urban	69	19	
4	b. Rural	56	106	<0.001*
	Education			
	a. No formal education	3	2	
	b. Primary education	29	73	
	c. High School	20	27	
	d. PUC	12	11	
5	e. Degree and above	61	11	<0.001*
	f. Others	0	1	
	Occupation			
	a. Unemployed	1	6	
	b. Homemaker	30	55	
	c. Unskilled	35	45	
6	d. Semi skilled	4	9	<0.001*
	e. Skilled	4	0	
	f. Professionals	51	10	
	Monthly income in Rupees			
	a. ≤25000/-	67	112	
7	b. 25001-50000/-	27	7	<0.001*
	c. 50001-75000/-	14	2	
	d. 75001-100000/-	11	4	
	e. ≥100001/-	6	0	
8	Were you previously hospitalized			1.0
	a. Yes	82	83	
9	b. No	43	42	0.4
	Have you experienced health care professionals using mobile phones during interaction			
	a. Yes	125	125	
	b. No	0	0	

The data in Table 1 shows the calculated P value is lesser than the table value at 0.05 level of significance showing there is a significant association between the perceptions of clients and selected demographic variables such as Gender (0.029), Place of Residence (<0.001), Education (<0.001), Occupation (<0.001) and Monthly income in Rupees (<0.001). Hence the null hypothesis is rejected and research hypothesis was accepted.

Discussion:

Section 1: Baseline characteristics:

In the present study majority (57.6%) of clients were females. This is in congruent with a study conducted by Nicole Koehler et al. to assess health care professionals use of mobile phones and the internet in clinical practice were most of the participants were females (n=29). (Kochler, Vujovic 2013)

In the present study majority (64.8%) of clients were residing in rural area. This is in contrast to a study conducted by Nicole Koehler et al. where the majority (n=42) participants were residing in Urban area (Victoria, Australia). (Kochler, Vujovic 2013)

In the present study the educational qualification of clients are as follows: About 40.8% of clients had primary education, 34% were homemakers, and 28.8% had degree and above education whereas 24.4% were professionals. This is in contrast to the study conducted by Nicole Koehler et al. where all the participants were professionals who had obtained a healthcare qualification and was practising professional for the last two years. (Kochler, Vujovic 2013)

Section 2: Major findings

In the present study majority (75.6%) of clients had a positive perception towards usage of mobile phones among health care professionals during therapeutic interaction. The clients appreciated the benefits of mobile phone usage to improve health care. Majority (85.6%) perceived that mobile phone apps aid in update the knowledge. The phone usage was reported to be righteous for health care professionals by 60% of clients, availability of data on fingertips was reported by 72.8% of clients. Whereas 67.6% perceived that health care professionals can use technology to implement advanced concepts of care. This is in congruent to the studies conducted by Rosenfield D on being smarter with smartphones recognized that smartphones could facilitate learning, treatment, and communication by capturing interesting diagnostic images or recording procedures (Rosenfield, Hebert 2011). About 79% study subjects accepted that they would use an internet to search for an unfamiliar clinical condition. (Kochler, Vujovic 2013)

In the present study about 44.8% of clients reported that the apps used for recording the data would be confidential and it would not be exposed to others. This is in contrast to a study conducted by Olga V et al. on health care professionals use of mobile phones and the internet in clinical practice highlighted concerns pertaining to patient confidentiality in the study majority of subjects used their own personal mobiles to store patient private information and is likely to be interspersed and thus it is possible that a photograph of patient's wound is unintentionally shown to family or friends. Therefore in the study it was suggested that privately owned mobile phones should not be used in clinical setting. (Kochler, Vujovic 2013) The study also enlightened the concern of health care professional that when the clients are not aware that smartphones can be used for medical purposes, patients may erroneously perceive the device is being used for non-work purposes. (McBride, D.L., 2015)

Conclusion:

The increased awareness about the perception of client on usage of mobile phones among health care professional during therapeutic interaction and treatment, helps to aid the nurse administrators to collaborate with higher authorities to modify the policies/ protocols on usage of mobile phones in the clinical work environment. Nurse administrators can implement the professional etiquette in usage of mobile phones in clinical work environment.

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