

**Research Article** 

Available online www.ijsrr.org

ISSN: 2279-0543

# International Journal of Scientific Research and Reviews

# Impact of Mobile Phone Training Session on Mobile Practices and Psychological Hazards among Staff Nurses using Mobile Phone at Selected Hospital of Jaipur

Swami Omprakash<sup>\*</sup>, Sharma Bhartendra and Soni Giriraj Prasad

Mahatma Gandhi Nursing College, Sitapura, Jaipur, (Raj.) India

#### ABSTRACT

As per technological advancement it becomes a challengeregarding safe and right use of mobile phone during working time in health care department. Personal use of mobile phone in clinical setting has passed a policy and code of practices. Quasi experimental design (Nonequivalent control group design) was use in this research study. Study conducted at DH Hospital, Indus, Shalby & Jaipur Hospital, Jaipur on 400 staff nurses. For the collection of data Convenient Sampling Techniques were used.

Severity of mobile phone uses in control group in excessive user in pre-test was 63.5% in post-test 65% were found, moderate use in pre-test was 36.5% in post-test 35% were found. In the experimental group data present to excessive user in pre-test was 86.5% and in Post group of experimental group excessive users is 4%, Moderate users is 13.5% in pre-test and after treatment 4% were found. Mild user is 0% of mild uses found in pre-test and in post-test 34.5% of mild uses was found and normally uses increased up to 52% normal user was 04 (100%).Present research study summarized an immediate to evolved policy on usability of mobile phone during working clinical working hours.

**KEYWORDS:** Impact, Training, practices, use, mobile phone, psychological hazards

#### \*Corresponding Author:-

#### Swami Omprakash

Mahatma Gandhi Nursing College, Sitapura, Jaipur, (Raj.) India

Email: <u>opswami@mgumst.org</u>

#### **INTRODUCTION:**

For the present scenario, mobile phones provide full access of Internet for the healthcare personnel with substantial important benefit. It is more risk that due to mobile phone distraction will be occurs. Provision will be made for patient care during working hours by health care professional.<sup>1</sup>

Evidence by the data mobile phone hazards "health care provider's distractions occurs from mobile phone was in the ninth place in the ranking from mobile phones" was the ninth place in healthhazards due to current mobile technology. Trainee nurse transient to RN-RM nurse working on clinical task. Main force on clinical nurses in the health care setting in the same time mobile phone hazard to occurs in novice's nurses more because they are unaware of the mobile phone hazards. Due to deficient knowledge about proper use of mobile phone it is more chances that adverse effect occurs in new nurses.<sup>2</sup>

Survey of the study reveals that young age group person more dependent to their mobile phone and show some signs of addiction. Survey reveals that majority of youngster depend on mobile phone with addiction hence, young people can't control their addiction to mobile phones in a classroom setting, and use their mobile phones or their minds are preoccupied with mobiles during the course.<sup>3</sup>

Now a day's Smartphone is an important part of our day-to-day activities. In the area of health sector mobile phone is the matter of privacy & sources of obstruction. In the hospital setting mobile phone develop a great risk. Errors in health care work setting could have fatal result .<sup>4</sup>

Due to more communication and interaction via mobile phones leads to adverse ill effects to the individual. It's important to review possible negative health effects of mobile exposure. Mobile exposure variables included continuously use, but also more qualitative variables: demands on availability, perceived stressfulness of accessibility, being awakened in the dark by the mobile phone along with excessive of the mobile phone.<sup>5</sup>

Excessive mobile phone effects on human included stressful life sleep disturbances and depression. In the analysis it is show that more use of mobile phone was associated with stress and other disorder and high accessibility stress was associated with stress, sleep disturbances, and symptoms of

depression for both men and women. It is more chances to develop psychological symptoms among those who use excessive mobile phone they have more chances to develop stress via mobile phone.<sup>6</sup> Increasemobile phone effects on individuals includes stressful situation, sleeping difficulty with or without depression. Mobile phone practices  $\geq 2$  hours/day on weekdays and  $\geq 5$  hours/day on weekends more likely to report poor development and scored significantly lower on Mathematics and English compared with those who used mobile phone <1 hour/day on weekdays and <2 hours/day on weekends, respectively. The mediating effects of reduced sleep duration, insomnia, and depression on the association between prolonged mobile phone users and academic performance was quite small.<sup>7</sup>

During the cognitive work mobile phone could be a major source of distraction hence result in longer time hours, less focus on work, and low performance occurs. In particular, smartphone use in healthcare settings may effect on health worker during the discharge of patient care, potentially leading to adverse events that threaten patient safety found that 19% of medical residents and 12% of physicians reported that they had missed important information because they were distracted by smartphones. Developing concern that adverse effects of smartphone use during working hours in clinical setting may force to develop a policy regarding use of smartphone during working hours.<sup>8</sup>

About 80% of nurses use the smartphone in the workplace both for personal purposes. Findings identify the smartphone as a generator of stimuli capable of diverting the attention of the person from the priority activities and absorbing the cognitive resources useful for carrying out these activities. Studies aimed to show the restriction policies. This review highlights how the free and indiscriminate use of the smartphone can negatively affect patient safety and the nurse-patient relationship through the dehumanization and depersonalization of care.<sup>9</sup>

A study was conducted on students. Survey was direct to students during on placement in a range of health care settings in two Australian states. Use of a mobile device away from, related with throughout WIL, were observed for non-work-related activities such as messaging (P<.001), social networking (P<.001), shopping on the Internet (P=.01), conducting personal business online (P=.01), and checking or sending non-work-related texts or emails to co-workers (P=.04). Study-related activities were administered more regularlyfar-offthe workplace and included accessing University sites for information (P=.03) and checking or sending study-related text messages or emails to friends or coworkers (P=.01). Nurses limit their access to non-work-related information to ensure safe and competent care.<sup>10</sup>

Community-based cross-sectional study was conducted in Kottakuppam, a town panchayat in Villupuram district of Coastal Tamil Nadu, Southern India. It is a semi-urban area with a population of about 16,000. Majority of the residents are Muslim by religion and belong to different socio-economic status. A total of 2121 study staff nurses were interviewed by the pre-final medical students through house-to-house survey using a pretested structured questionnaire. The questionnaire included the variables such as socio demographic profile, mobile phone usage and pattern, selected health problems, perceived benefits and threats and blood pressure. The p-value < 0.05 was considered as statistically significant. The prevalence of mobile phone usage was 70%. Calling facility (94.2%) was used more than the SMS (67.6%). Health problems like headache, earache, tinnitus, painful fingers and restlessness etc., were found to be positively associated with mobile phone usage.<sup>11</sup>

This study was conducted in the Department of Physiology, College of Medicine, King Saud University, Riyadh, Kingdom of Saudi Arabia. In the present study, a total of 437 subjects (55.1% male and 39.9% female) were invited, they have and had been using mobile phones. A questionnaire was distributed regarding detailed history and association of mobile phones with health hazards. The results of the present study showed an association between the use of mobile phones and health hazards. The overall mean percentage for these clinical findings in all groups were headache (21.6%), sleep disturbance (4%), tension (3.9%), fatigue (3%) and dizziness (2.4%). Use of mobile phones is a risk factor for health hazards and suggest that long term or excessive use of mobile phones should be avoided by health promotion activities such as group discussions, public presentations and through electronic and print media sources.<sup>12</sup>

Cross-sectional method in which 320 students were selected via cluster sampling. Data collection tools included a nomophobia and smartphones use questionnaires. Data were analyzed using SPSS 22 software in two sections: descriptive statistics and inferential statistics. The incidence rate of nomophobia among the students was moderate (3.1), and 73% of the students were moderate smartphone users. Nomophobia had a significant relationship with gender, age group, and level of education; and the frequency of using smartphones had a significant relationship with age group and level of education. There was a positive correlation coefficient between nomophobia and the frequency

of using smartphones. The mobile phone use predicted nomophobia with a beta coefficient of 0.402 (P < 0.05). Given the incidence rate of nomophobia disorder was moderate, it is necessary to make preventive decisions and plan educational programs in this regard for the health of university students. Alternative actions are recommended for the treatment in low rate of nomophobia, but drug therapy should be used in more advanced stages; therefore, it is suggested that more attention to be paid to students' free time and entertainments.<sup>13</sup>

Descriptive cross-sectional study Conducted on 234 students from one School of Nursing in Spain completed the survey in 2017. The use of personal smartphones is a reality in healthcare settings. Current research is allowing us to understand in what ways they help with communication and decision making at the point of care and their impact on patient safety. While 23.3% of staff nurses using their smartphone for personal reasons at least once during their practicum, they perceived that their own level of distraction was low (6.9%). Notably, the level of distraction associated with others' smartphone use was perceived to be higher than that associated with their own use. Students' opinions about policies were significantly related to the frequency of witnessing other students and nurses being distracted (r = 0.139, p < 0.05), but not to their own distraction experiences (r = 0.114, p = 0.084). Nurse educators, students and nurse mentors need to work together to introduce strategies to facilitate care delivery through the use of mobile devices but at the same time must be aware of the risks associated with distractions, including to patient safety.<sup>14</sup>

An observational studyconductedbetween nurses and students the abuse of technical devices can be considered a form of addiction that is defined in current literature as Nomophobia. The phenomenon appears to be quite widespread in-between nurses and students, and nomophobicbehaviours of professionals can lead to a reduction in the quality of the care. An observational study was conducted with a questionnaire using a sample of nursing students and nurses. It is important to develop an educational project which maintain the use of smartphones.<sup>15</sup>

# AIM AND CLEAR RESEARCH OBJECTIVES OF STUDY

#### Aim:

The study is aim to identified the impact of practices and psychological hazards of mobile phone among staff nurses using mobile phone at selected hospital of Jaipur.

# **Objectives:**

- 1. To assess the pre& post interventional mobile phone practices & psychological hazards among staff nurses.
- 2. To compare the mobile phone use practices & psychological hazards in experimental & control group.
- 3. To find out the association of mobile phone practices & psychological hazards with selected socio-demographic variables.

# METHODOLOGY OF THE PROPOSED RESEARCH

**Research Approach:** The research approach was used in this study is Quantitative Research Approach **Research Design:** The research design was be used in this study is Quasi Experimental Research Design-Nonequivalent control group design.

**Research Setting:** Selected Hospital at Jaipur. (Indus Hospital,HCG Hospital, Jaipur Hospital, Shalby, Hospital, Jaipur & DH Hospital, Jaipur)

**Population:** Target population (Staff Nurse of selected hospitals of Jaipur)

Accessible population: (Staff Nurses Available during data collection) Sample: Staff Nurses in DH Hospital, Indus, Shalby & Jaipur Hospital, Jaipur Sample size: The sample consists of 400 (four hundred) Staff Nurses Indus Jaipur hospital, Jaipur Hospital, HCG Hospital, Shelby Hospital & DH Hospital, Jaipur.

# SAMPLE SIZE CALCULATION WITH JUSTIFICATION

 $n=Z^{2}p(1-p)/(d)^{2}$  n= (sample Size) Z=confidence level at 95% (01.96 Standard Value) constant value p=estimated prevalence population proportion = .5 d=range of confidence interval = .05  $n=1.96^{2}X.5X.5/.05^{2}$  3.8416X.5X.5/.0025 384.16 sample size in roundup uses size is 400 samples for this study

# CRITERIA FOR THE SELECTION OF SAMPLE (INCLUSION & EXCLUSION):

#### Inclusion criteria

- 1. Staff nurses working in selected hospital of Jaipur& who are Available during time of data collection.
- 2. Staff nurses who are willing to participate & given consent.
- 3. Staff nurses who are using the mobile phone during duty hours.

#### **Exclusion criteria**

- 1. Staff nurses who are not willing to participate in this study.
- 2. Staff nurses who are not using the mobile phone.
- 3. Staff nurses who are not available during data collection, long leave & sick Leave

# **TOOLS & TECHNIQUES:**

Appropriate mobile phone practice assessment tools Modified Problematic Mobile Phone Use Questionnaire (PMPUQ-SV; Billieux, Van der Linden, & Rochat,2008)& Appropriate Psychological Assessment tools modified smartphone addiction scale (SVS;Kim,Lee,Lee, Nam, Chung,2014) was used by the investigator for the data collection.

Sampling Technique: Convenient sampling

**Intervention:** Teaching plan is the plan of action of a teacher, which includes the working philosophy of a teacher, his knowledge, information about and understanding of his pupils, his comprehension of the objectives of education, his knowledge of the material to be taught and his ability to utilize effective methods.

#### Steps involved in the development of training programme:

Session I.- Introduction to the mobile use training programme

- Session II. Effects of smartphone uses in the hospital or duty hours
- Session III.– Health concerns over mobile phone use:
- Session IV. Can nurse live without cell phones?
- Session V.-Solution to impact of excessive use of mobile phones on human health

Session VI. Conclusion

# **RESULT:**

# Section I

Sr.no.	. Variables Control Group		l Group		rimental roup	Z – test	P – Value	Significance
1.		n	%	n	%	(χ <sup>2</sup> )	(df = 198)	
	Age (In years)							
		1	1		1			
	21 - 30	86	43.0%	110	55.0%	-2.418	0.0156	Significant
	31 - 40	86	43.0%	78	39.0%	0.814	0.4157	Not significant
	41 - 50	28	14.0%	9	4.5%	2.691	0.0071	Significant
	Above 50	0	0.0%	3	1.5%			
2.	Gender							
	Male	97	48.5%	88	44.0%	0.903	0.36628	Not significant
2	Female Education al statut	103	51.5%	112	56.0%			
3.	Educational status	108	54.0%	99	49.5%	0.901	0.36734	
	GNM Nursing	71	35.5%	65	49.5% 32.5%	0.634	0.36734	Not significant
	P.B. B.Sc. Nursing							Cignificant
	B. Sc. Nursing	19	9.5%	36	18.0%	-2.487	0.01287	Significant
4.	M. Sc. Nursing	2	1.0%	0	0.0%	1.421	0.15522	Not significant
4.	Types of Family Nuclear	120	60.0%	111	55.5%	0.912	0.36179	Not significant
	Joint	64		60				Not significant
			32.0%		30.0%	0.433	0.66535	Significant
=	Extended	16	8.0%	29	14.5%	-2.068	0.03863	Significant
5.	Family Income per mont							
	> 17500	30	15.0%	23	11.5%	1.034	0.30127	All are not
	13500 - 17499	57	28.5%	43	21.5%	1.622	0.10483	significant
	8500 - 13499	57	28.5%	68	34.0%	-1.189	0.23456	_
	5000 - 8499	56	28.0%	66	33.0%	-1.088	0.27677	
6.	What kind of mobile pho			100	00.5%	0.500	0 5 ( 20 7	All and mat
	Android iPhone	198	99.0%	199	99.5%	-0.580	0.56207	All are not significant
	Both	1	0.5%	1	0.5%	0.000	1	Significant
7.		-		0	0.0%	1.003	0.31610	
<i>'</i> •	What kind of hand free 1							
	Headphone	15	7.5%	5	2.5%	2.309	0.02092	Significant
	Bluetooth	40	20.0%	53	26.5%	-1.543	0.12276	Not significant
	Both	144	72.0%	141	70.5%	0.331	0.74029	4
	Manual	1	0.5%	1	0.5%	0.000	1	
0	None	0	0.0%	0	0.0%	Na	Na	NA
8.	How much time you use	the mobil	e phone pe	r day?				
	< 30 Minutes	0	0.0%	1	0.5%	-1.0025	0.158049	Not significant
	30 - 60 Min.	8	4.0%	56	28.0%	-6.9282	0.00001	Significant
	> 60 Minutes	192	96.0%	143	71.5%	7.04071	0.00001	
9.	Since how long have yo	u started u	sing mobil	e phone?				1
	Below 8	47	23.5%	84	42.0%	-4.021	0.00006	Significant
	8 - 10	67	33.5%	32	16.0%	4.141	0.00004	Jighinteant
	8 - 10 10 - 12	42	21.0%	<u> </u>	22.0%	-0.243	0.80767	Not significant
	10 - 12	35	17.5%	36	18.0%	-0.243	0.80767	
	12 - 14 Above 14	35 9						-
10.	What is the main purpo	-	4.5%	4	2.0%	1.413	0.15755	
10.	what is the main purpo	be of using	g moone pi	ione:				

#### Table no. 1 Socio-demographic Variable

	Emergency	131	65.5%	184	92.0%	-6.847	0.00001	Significant
	Keep in touch with others	57	28.5%	14	7.0%	5.864	0.00001	-
	My need	4	2.0%	2	1.0%	0.823	0.410288	Not significant
	For leisure time	8	4.0%	0	0.0%	2.887	0.003892	Significant
11.	Which is the most com	nonly used	feature?					
	Voice communication	89	44.5%	119	59.5%	-3.037	0.002391	Significant
	SMS	0	0.0%	0	0.0%	NA	NA	NA
	Internet	81	40.5%	51	25.5%	3.231	0.00123	Significant
	Games	0	0.0%	1	0.5%	-1.003	0.31610	Not significant
	Music	0	0.0%	1	0.5%	-1.003	0.31610	Not significant
	Social Media	30	15.0%	28	14.0%	0.284	0.77638	Not significant
12.	Which ear do you prefe	obile phon						
	Left	0	0.0%	12	6.0%	-3.573	0.00035	All are
	Right	1	0.5%	14	7.0%	-3.473	0.00052	significant
	Both	199	99.5%	174	87.0%	5.145	0.00001	-
13.	Do you know the negati	s of mobile						
	Yes	21	10.5%	29	14.5%	-1.212	0.22563	Not significant
	No	179	89.5%	171	85.5%			_
14.	Where did you learn ab phone use?	Where did you learn about the negative impacts of mobile phone use?						
	Newspaper	15	7.5%	12	6.0%	0.598	0.54974	All are not
	Magazines	0	0.0%	3	1.5%	-1.745	0.08095	significant
	Social media	4	2.0%	6	3.0%	-0.641	0.52163	
	Internet	2	1.0%	8	4.0%	-1.930	0.05355	

#### Section B

Table 2: Comparing treatment effect of PMPUQ-sv in control & experimental groups (Mean  $\pm$  Sd)n=400

Group	Pre -test & Mean score	Post-test & Mean Score	Paired t-test	P - Value	Significance	df
<b>Control Group</b>	$61.69\pm3.45$	$61.82\pm3.47$	-2.401	0.00864	Significant	198
Experimental Group	$63.22\pm4.97$	$30.28 \pm 10.99$	37.07	0.000001	Highly significant	

Above table (2), shows that in control group total mean scores in pre-test were 61.69 and Post-test 61.82. it is evident that mean post-testincontrol group no major changes were found. In experimental group total mean scores in pre-test were 63.22 and Post-test 30.28. it is evident that mean score in post-test in experimental group treatment effect were found highly significant.

#### Section C

```
Table 3: Comparing treatment effect of mobile phone addiction in control & experimental groups (Mean ± Sd)n=400
```

Group	Pre-test & Mean score	Post-test & Mean Score	Paired t-test	P - Value	Significance	df
Control Group	$46.66 \pm 4.6$	$45.8\pm 6.37$	2.459	0.014777	Significant	198
<b>Experimental Group</b>	$45.39\pm3.31$	$19.16\pm5.65$	59.04	0.000001	Highly significant	

Above table (3), shows that in control group total mean scores in pre-test were 46.66 and Posttest 45.8. Table also shows that SD in control group before intervention was 4.6 & after Intervention SD was 6.37. It is evident that mean post-testin control group no major changes were found. In experimental group total mean scores in pre-test were 45.39 and Post-test 19.16. Table also shows that SD in control group before intervention was 3.31 & after Intervention SD was 5.65. It is evident that mean score in post-test in experimental group treatment effect were found highly significant.

Tools	Control Group (Mean ± Sd)	Experimental Group (Mean ± Sd)	t - test	P - Value	Significance	df
PMPUQ	$0.125\pm0.736$	$32.94 \pm 12.57$	-37.14	0.000001	Highly	198
Smart phone addiction	$0.855 \pm 4.92$	$26.23 \pm 6.28$	-44.98	0.000001	significant	

Table 4: Comparing change in score between control and experimental group (Mean ± Sd)

Above table (4), Shows Comparing change in score between control and experimental group (Mean  $\pm$  Sd) that in both the group treatment effect were found highly significant. In the PMPUQ scale t- test value was 37.14 & In the Smart Phone Addiction scale t- test value was 44.98.

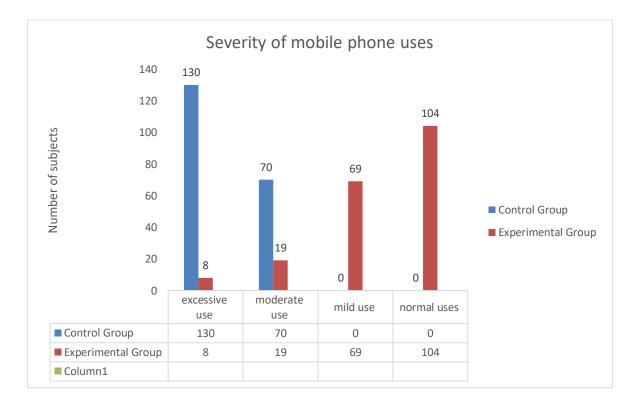


Figure: 1 Severity of mobile phone uses in control & experimental group

	Control	group	Exp	erimental group
Characteristics	Pre-test f(%)	Post-test f(%)	Pre-test f(%)	Post-test f(%)
Excessive uses (>75%)	127 (63.5%)	130 (65%)	173 (86.5%)	8 (4%)
Moderate uses (50% - 75%)	73 (36.5%)	70 (35%)	27 (13.5%)	19 (9.5%)
Mild uses (30% - 50%)	0	0	0	69 (34.5%)
Normal uses (≤ 30%)	0	0	0	104 (52%)

Table 5: Severity of mobile phone uses

Above table (5) &figure (1) depicts that out of 400 subjects (200 hundred from Control Group & 200 From experimental Group). In control group 63.5% percent of staff nurses were found excessive user (>75%) characteristics,36.5 percent of staff nurses were found Moderate uses (50% - 75%) characteristics were found both in mild uses and normal uses characteristics. In experimental group8 % percent of staff nurses were found excessive user (>75%) characteristics, 9.5% percent of staff nurses were found Moderate uses (50% - 75%) characteristics, 9.5% percent of staff nurses were found mild uses (30%-50%) & 52% of staff nurses were found mild uses (<30%)

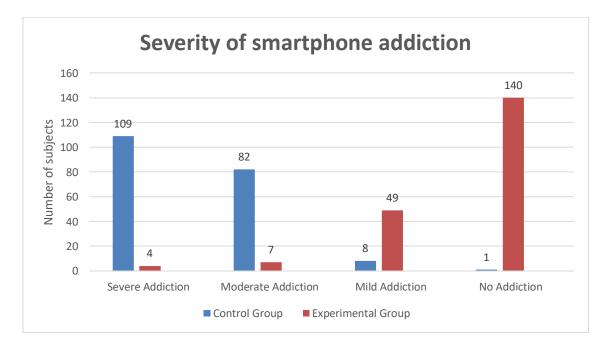


Figure: 2 Severity of smartphone addiction in control & experimental group

Characteristics	Contr	ol group	Experimental group		
Characteristics	Pre-test % Post-test %		Pre-test %	Post-test %	
Severe Addiction (>75%)	144 (72%)	109 (54.5%)	145 (72.5%)	4 (2%)	
Moderate Addiction (50% - 75%)	53 (26.5%)	82 (41%)	54 (27%)	7 (3.5%)	
Mild Addiction (30% - 50%)	3 (1.5%)	8 (4%)	1 (0.5%)	49 (24.5%)	
No Addiction (≤ 30%)	0	1 (0.5%)	0	140 (70%)	

Table 6: Severity of smartphone addiction

Above table (6) & figure (02) depicts that out of 400 subjects (200 hundred from Control Group & 200 From Experimental/experimental Group). In control group pre-test data show that 72% percent of staff nurses were found severe addiction, 26.5% percent of staff nurses were found Moderate addiction, 1.5% percent of staff nurses were found Mild addiction& 0% percent of staff nurses were found no addiction. In control group post test data show that 54.5% percent of staff nurses were found severe addiction, 82% percent of staff nurses were found Moderate addiction, 8% percent of staff nurses were found Mild addiction& 1% percent of staff nurses were found no addiction.

In experimental grouppre-test data show that 72.5% percent of staff nurses were found severe addiction, 27% percent of staff nurses were found Moderate addiction, 0.5% percent of staff nurses were found mild addiction & 0% percent of staff nurses were found no addiction. In experimental group post test data show that 2% percent of staff nurses were found severe addiction, 3.5% percent of staff nurses were found Moderate addiction, 70% percent of staff nurses were found Mild addiction % 70% percent of staff nurses were found no addiction.

## **DISCUSSION:**

The study concluded an urgent to develop a policy regarding use of mobile phone during working hours. The prevalence of mobile phone usage was used more than the SMS. Health problems like headache, earache, tinnitus, painful fingers and restlessness etc., were found to be positively associated with mobile phone usage. therefore, an urgent need to update the information regarding effective use of mobile phone during working hours and also decrease the psychological hazards. minimizes the usability of mobile phone during emergency and critical work also minimize the addiction of mobile phone by the nurses can able to provide effective nursing care to the patient.

#### **CONCLUSION:**

The study concluded an urgent to develop a policy regarding use of mobile phone during working hours. The prevalence of mobile phone usage was used more than the SMS. Minimizes the usability of mobile phone during emergency and critical work also minimize the addiction of mobile phone by the nurses can able to provide effective nursing care to the patient.

#### **REFERENCES:**

- 01. MatherC, CummingsE, AllenP, Nurses' use of mobile devices to access information in health care environments in australia: a survey of undergraduate students: MIR MhealthUhealth; 2014 Dec 10;2(4):e56
- 02. Ma H, He JQ, Zou JM, Zhong Y. Mobile phone addiction and its association with burnout in Chinese novice nurses: A cross-sectional survey. Nurs Open. 2021 Mar;8(2):688-694.
- 03. DayapogluN, Kavurmaci M, Karaman S, The Relationship between the Problematic Mobile Phone Use and Life Satisfaction, Loneliness, and Academic Performance in Nursing Students; International Journal of Caring Sciences May– August 2016 Volume 9 | Issue 2| Page 647
- 04. Gill PS, Kamath A,Gill TS. Distraction an assessment of smartphone usages in health care work settings. Risk ManagHealthc policy, 2012; 5:105-114.
- 05. Thomée S, Härenstam A, Hagberg M. Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults--a prospective cohort study. BMC Public Health. 2011 Jan 31; 11:66.
- 06. Liu X, Luo Y, Liu ZZ, Yang Y, Liu J, Jia CX. Prolonged Mobile Phone Use Is Associated with Poor Academic Performance in Adolescents. CyberpsycholBehav Soc Netw. 2020 May;23(5):303-311.
- 07. Conant J, Elmore R, Moore A, Blake S, Peacock A, Ward-Smith P. Use of Personal Communication Devices in Clinical Settings: Perception of Staff Nurses. J Nurs Adm. 2020 Apr;50(4):192-197.
- 08. Cho S, Lee E. Distraction by smartphone use during clinical practice and opinions about smartphone restriction policies: A cross-sectional descriptive study of nursing students. Nurse Educ Today. 2016 May; 40:128-33.

- 09. Fiorinelli M, Di Mario S, Surace A, Mattei M, Russo C, Villa G, Dionisi S, Di Simone E, Giannetta N, Di Muzio M. Smartphone distraction during nursing care: Systematic literature review. Appl Nurs Res. 2021 Apr; 58:151405.
- Mather C, Cummings E, Allen P. Nurses' use of mobile devices to access information in health care environments in australia: a survey of undergraduate students. JMIR MhealthUhealth. 2014 Dec 10;2(4):e56.
- 11. Stalin P, Abraham SB, Kanimozhy K, Prasad RV, Singh Z, Purty AJ. Mobile Phone Usage and its Health Effects Among Adults in a Semi-Urban Area of Southern India. J Clin Diagn Res. 2016 Jan;10(1):LC14-6.
- 12. Khlaiwi T, Meo SA. Association of mobile phone radiation with fatigue, headache, dizziness, tension and sleep disturbance in Saudi population. Saudi Med J. 2004 Jun;25(6):732-6.
- 13. DaeiA., Ashrafi-rizi H, SoleymaniMR.Nomophobia and health hazards: smartphone use and addiction among university students. Int J Prev Med. 2019 Nov28; 10:202.
- 14. Zarandona J, Cariñanos-Ayala S, Cristóbal-Domínguez E, Martín-Bezos J, Yoldi-Mitxelena A, HoyosCillero I. With a smartphone in one's pocket: A descriptive cross-sectional study on smartphone use, distraction and restriction policies in nursing students. Nurse Educ Today. 2019 Nov;82:67-73.
- 15. MarlettaG, TraniS, et al, Nomophobia in healthcare: an observational study between nurses and students; Acta Biomed. 2021 Jul 29;92.