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Relation between Phantom Vibration/Ringing Syndromes and Level of Anxiety among Nursing Students

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Abstract: Smart mobile usage has seeped into each element of college students, live. On the other hand, its extreme use and its health impacts are somewhat novel subjects, we must shed the light to this subject which are prevailing hallucinations in the general population .The current study aimed to determine the relation between Phantom Vibration Syndrome (PVS), Phantom Ringing Syndrome (PRS) and level of anxiety among nursing students.

Design: Cross-sectional study was used.

Subjects: 300 nursing students were selected by proportional stratified random sampling method in each stratum.

Tools: Data were collected by a self-administered questionnaire and a Hamilton Anxiety Rating Scale.

Results: The frequency of PVS/PRS due to mobile phones in students of nursing sciences was estimated to be 77.0 /77.3% respectively & there was a significant association between PVS and using social webs such as Face book, &GPS. Concerning the relation between PVS and level of anxiety there is highly significant relation at (p-value <0.001**), regarding frequency of time feeling by PVS there is a significant relation (p-value 0.028) where students who felt vibration weekly have sever anxiety 97.4%, while there is no association between PRS and anxiety.

Conclusion & Recommendations: It was concluded that there was a relation between phantom vibration syndromes and level of anxiety but no relation with VRS among nursing students so the researchers recommended that researches must be done to evaluate the long-term impairment of misusing smart phones and methods to alleviate anxiety.

Keywords: Phantom Vibration Syndrome (PVS), Phantom Ringing Syndrome (PRS), ringxiety, vibranxiety.

1. INTRODUCTION

Smart mobiles are renovation of new era's technology. The sum of smart phone handlers in the world is predictable to go beyond the five billion by 2019⁽¹⁾. Cell phone is an essential part of teenager's life. Undergraduate students spent more time using phones and it is affecting their physical and mental health. Undergraduate students mostly use ringing and vibration mode for call and messages alerts because of phone ringing is prohibited in classes so students use vibration mode for alerts.

Phantom Vibration Syndrome (PVS) and Phantom Ringing Syndrome (PRS) also called "vibranxiety" & "ringxiety" respectively; are common hallucinations with incredible prevalence in the general population particularly in adolescents (Lin et al., 2013)² and current psychological phenomenon that had attracted the attention of the media.

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Phantom vibration syndrome (PVS) is a part of mobile phone induced disorder. It was explained by an emerging disorder due to excessive use of mobile phones. People perceive that their cell phone is vibrating but in reality it not $^{(3)}$ · PVS is concern with psychological or neurological changes may be results in a misconception of received sensory signals by the cerebral cortex, in order to deal with the awesome sum of sensory input, the brain applies filters or schema according to what it anticipates to find, a process known as hypothesis guided search'' (**Rothberg et al** 2010)⁴. Therefore phantom vibrations results from the brain misidentifying received sensation as a phone vibration, due to a cognitive misinterpretation in filtering, and intensified by expectation of a ringing or text message.⁽⁴⁾

According to Dr. Rothberg, PVS is not a syndrome. It is a tactile hallucination in which brains perceive a stimulation that is not actually present. It is associated with psychological diseases, another author suggests mechanisms that contribute to these hallucinations, and these can be synthesized through a cognitive formulation⁽⁵⁾.

The prevalence of PVS and PRS due to cell phones in students of medical sciences was 54.3% and 49.3%, respectively. PVS was higher among female students than among males while the PRS was greater in male students. Also there was a significant relationship between PVS and using social networks such as Viber, Whats App, and Line. In addition, a significant association was observed between PVS and friend-finding,& chatting. **Rosen** postulated that PVS will be a part of technology-related anxiety ^(6,7). Indeed he described it as "iDisorders," means the harmful association between technology practice and psychological health ⁽⁷⁾.

Researchers found that high levels of anxiety about received messages may lead to a greater sympathy to the real vibrating sensations that signal a new message; This jagged feeling started in the absence of real vibrations', influence a person to misinterpretation of sensory stimuli or imagined vibrations, resulting in the perception of mobile phone vibrations that are not really there. Also anxiety may similarly predispose persons to misunderstanding of sensory input (1, 4, 8 & 9).

Phantom vibrations may not be obviously bothersome may be potentially increasing the flow of neurotransmitters such as nor epinephrine, dopamine, epinephrine and Corticotrophin-releasing hormone and decrease the flow of serotonin, and gamma-amino butyric acid' which means that the phenomenon to result from the brain chemistry of anxiety ^(7&10).

Monophobia has a significant amount of attention among the experts. Nomophobia, an abbreviation for "No-mobilephone phobia," was invented during a 2010 study by the UK Post Office to look at anxieties suffered by mobile phone users. Monophobia are a significantly diminished number of face-to-face relations with individuals and a growing preference for communication through technologies keeping the phone in reach while sleeping and never turned off; looking at the phone screen frequently to avoid missing any message, phone call or notification leads to ringxiety^(10,11&12).

Nursing is a stressful career, and nursing students are exposed to high level of anxiety in both theoretical and clinical components of their educational programs .Phantom vibration syndrome has high prevalence rate and it is emerging with time so managing it in early stage is extremely important to avoid complications of PVS/PRS as burn out ,withdrawn from study, social withdrawal& many psychological problems. So the nurses' role aims to Life style modifications, Counseling and guidance regarding hallucinations and affective aspects, avoid the vibration mode of cell phone &Use different devices. Therefore, the current study was conducted on undergraduate nursing students in order to assess relation between phantom vibration/ringing syndromes and level of anxiety among nursing students.

Aim of the study was to:

Assess relation between phantom vibration/ringing syndromes and level of anxiety among nursing students.

Research question:

What is the relation between phantom vibration/ringing syndromes and level of anxiety among nursing students?

2. SUBJECT & METHOD

Research design:-

A cross-sectional correlation design was used for the current study.

Setting:

The study was conducted at Faculty of Nursing, Tanta University.

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Subjects:

300 nursing students were selected by proportional stratified random sampling method in each stratum. The total number of the students enrolled at the Faculty during the academic year(2017/2018) amounted to 1500 students(250,465,455&330 enrolled grade one, grade two, grade three & grade four respectively) A representative sample (20%) of each grade the nursing students were randomly selected.

Data Collection Tools:

Two tools were used to collect data for the current study.

Tool I: Phantom vibration and ringing questionnaire

This tool consists of two parts:

Part I

Socio-demographic and Academic characteristics developed by the researchers to elicit information about; age, gender, and the current academic semester.

Part II

Self-report questionnaires developed by **Goyal2015** ⁽¹⁹⁾ and modified b the researchers after review of literatures^(4,13&14). The questions encompassed whether the students had experienced phantom vibration or phantom ringing during the aforementioned 3-month period, as well as potential factors associated with phantom vibration , whether the phone was used in vibration or ringing mode and where it was outfit in. Those who reported phantom vibration or phantom ringing were also asked how bothersome these events were. Those who indicated that they had experienced phantom vibrations were asked about its rate of recurrence.

Tool Two: Hamilton Anxiety Rating Scale (HAM-A)

The HAM-A is a 14-item scale that assesses the severity of anxiety symptoms Developed by Hamilton in 1959, and last updated in 2015, It involves of 14 symptom-defined elements, and outfits for both emotional and somatic symptoms, encompassing anxious mood; tension (including startle response, fatigability, restlessness); fears (including of the dark/strangers/crowds); insomnia; 'intellectual' (poor memory/difficulty concentrating); depressed mood (including anhedonia); somatic symptoms (including aches and pains, stiffness, bruxism); sensory (including tinnitus, blurred vision); cardiovascular (including tachycardia and palpitations); respiratory (chest tightness, choking); gastrointestinal (including irritable bowel syndrome-type symptoms); genitourinary (including urinary frequency, loss of libido); autonomic (including dry mouth, tension headache) and observed behavior at interview (restless, fidgety, etc.)⁽¹⁵⁾.

Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0-56 points ,with higher scores indicating severe level of anxiety. A score between 8-14 indicates mild anxiety, 15-23 indicates moderate anxiety ,and greater than 24 indicates severe anxiety⁽¹⁶⁾.

Method:

Written official permission to conduct the study was obtained from the Dean of Faculty of Nursing, Tanta University

Ethical consideration:

Informed consent was obtained from study students after clarification of the purpose and the form of study tools .The students were reassured that all information will be confidential and used only for the purpose of the study& would not affect their grades, Anonymity of the study subjects was assured.

Actual study:

The tools were distributed to study students, and they filled it by themselves in classroom, it consumed from 20 to 30 minutes .The present study was detained at the second term of the academic year 2017-2018, it was completed over a period of one month.

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Statistical analysis:

Data was collected, organized tabulated, and statistically analyzed using SSPSS, version 22. Data were presented as number and percentage, Chi-Square (x^2)used for data presented in number of frequency and to test association between two variables in the same group.

3. RESULTS

Table (1) Socio-demographic and academic characteristics of nursing students

Items	Studied students	
	300	%
Age		
19	48	16.0
20	97	32.3
21	86	28.7
22	69	23.0
Mean±SD	(20.59±1.02)
Sex		
Male	119	39.7
Female	181	60.3
Level of education		
Grad I	50	16.7
Grad II	93	31.0
Grad III	91	30.3
Grad IV	66	22.0

Results showed that majority of participants) were at 20 years old while the mean age was (20.59 ± 1.02). In relation to gender more than half of participants (60.3 %) were females ,regarding level of education (31.0,30.3)in grade two and grade 3 respectively (table 1).



Figure (1) Levels of anxiety among nursing students

This figure show the majority of studied subject (79.7 %) suffering from severe anxiety while only 8% have mild anxiety

Table (2) Distribution of psychosomatic syndromes experienced by nursing students.

	Mild		modera	te	severe		
	N	%	N	%	Ν	%	
Anxious mood	21	7	54	18	225	75	
Tension	15	5	24	8	261	87	
Fears	36	12	36	12	228	76	

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Insomnia	18	6	30	10	252	84
Intellectual	45	15	30	10	225	75
Depressed mood	24	8	24	8	252	84
Somatic (muscular)	30	10	9	3	261	87
Gastrointestinal	30	10	7	5	261	87
Somatic (sensory)	21	7	54	18	225	75
Cardiovascular symptoms	18	6	54	18	228	76
Respiratory symptoms	24	8	51	17	225	75
Genitourinary symptoms	15	5	45	15	240	80
Autonomic symptoms	12	4	21	7	267	89
Behavior at interview	15	5	66	22	219	73

Table (2) declared that the most common psychosomatic syndromes according to Anxiety Rating Scale of nursing students are (tension .somatic &gastrointestinal 87%)while anxious mood, fear, insomnia& depressed mood were75, 76,84&84 respectively.

Table (3) Correlation between level of anxiety & socio-demographic data& phantom vibration / ringing syndrome among nursing student .

	Anxiety Rating Scale											
	Mild	Mild Moderate Severe Total		Total	Chi-square							
	Ν	%	Ν	%	Ν	%		X^2	P-value			
Age												
≤19	0	0.0	4	8.3	44	91.7	48	13.224	0.040*			
20	9	9.3	9	9.3	79	81.4	97					
21	5	5.8	12	14.0	69	80.2	86					
≥ 22	10	14.5	12	17.4	47	68.1	69					
Level of education												
Grad I	0	0.0	2	4.0	48	96.0	50	38.115	< 0.001**			
Grad II	1	1.1	11	11.8	81	87.1	93					
Grad III	8	8.8	12	13.2	71	78.0	91					
Grad IV	15	22.7	12	18.2	39	59.1	66					
Sex												
Male	11	9.2	15	12.6	93	78.2	119	0.450	0.799			
Female	13	7.2	22	12.2	146	80.7	181					
Having	•	•		•	•	•	•	•				
Fixed Line Phone	17	37.0	3	6.5	26	56.5	46	26.283	< 0.001**			
Simple Mobile Phone	6	21.4	8	28.6	14	50.0	28	5.571	0.062			
Smart Mobile Phone	1	0.4	26	11.5	199	88.1	226	462.996	< 0.001**			
Having PVS												
Yes	8	3.5	29	12.6	194	84.0	231	28.228	< 0.001**			
No	16	23.2	8	11.6	45	65.2	69					
If Yes then how many tir	nes											
Daily	14	10.2	21	15.3	102	74.5	137	10.850	0.028*			
Weekly	0	0.0	1	2.6	38	97.4	39					
Monthly	3	5.5	9	16.4	43	78.2	55					
Did it bother you to feel	like this	3:										
Yes	17	7.3	31	13.3	185	79.4	233	1.454	0.483			
No	7	10.4	6	9.0	54	80.6	67					
Having PRS												
Yes	17	7.3	31	13.4	184	79.3	232	1.473	0.479			
No	7	10.3	6	8.8	55	80.9	68	7				
If Yes then how many tir	nes											
Daily	8	5.6	21	14.8	113	79.6	142	8.874	0.064			

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Weekly	6	13.6	1	2.3	37	84.1	44				
Monthly	3	6.5	9	19.6	34	73.9	46				
Did it bother you to feel like this											
Yes	16	7.3	30	13.6	174	79.1	220	1.716	0.424		
No	8	10.0	7	8.8	65	81.3	80				

As shown in table (3) correlation between level of anxiety & socio-demographic data& phantom vibration & ringing syndrome among nursing student there is a significant relation between level of anxiety and age 91.7% of students at age 19 have sever anxiety also there is a highly significant relation with educational level (p-value 0.001), While there is no relation with sex. There is also a significant relation between using smart phone /or fixed phone and anxiety (p-value <0.001**)

Concerning the association between PVS and level of anxiety there is highly significant association at (p-value <0.001**), regarding frequency of time feeling by **PVS** there is a significant relation (p-value 0.028) where students who felt vibration weekly have sever anxiety 97.4%, while there is no association between **PRS** and anxiety

	Exper	Experience Phantom Vibration Syndrome									
	Yes		No	No		Chi-squar	e				
	Ν	%	Ν	%	Total	X^2	P-value				
Age						•	•				
19	17	35.4	31	64.6	48						
20	75	77.3	22	22.7	97	47 124	<0.001**				
21	64	74.4	22	25.6	86	47.134					
22	63	91.3	6	8.7	69						
Sex						•	•				
Male	87	73.1	32	26.9	119	0.001	0.072				
Female	132	72.9	49	27.1	181	0.001	0.972				
Level of education											
Grad I	19	38.0	31	62.0	50						
Grad II	72	77.4	21	22.6	93	42.975	-0.001**				
Grad III	68	74.7	23	25.3	91	42.875	<0.001**				
Grad IV	60	90.9	6	9.1	66						

Table (4) Relation between socio-demographic characteristic of studied subjects and phantom vibration experience

Relation between socio-demographic characteristic of studied subjects and phantom vibration experience are shown in table (4) there are highly significant correlation between age, level of education and (PVS) where(p value $<0.001^{**}$) while there is no correlation with sex.

 $Table \ (5) \ Relation \ between \ socio-demographic \ characteristic \ of \ studied \ subjects \ and \ phantom \ ringing \ experience \ .$

	Experience of phantom ringing syndro								
	Yes		No		Tatal	Chi-square			
	Ν	%	Ν	%	Total	X^2	P-value		
Age									
19	18	37.5	30	62.5	48				
20	76	78.4	21	21.6	97	57 505	-0.001**		
21	73	84.9	13	15.1	86	57.505	<0.001**		
22	65	94.2	4	5.8	69				
Sex									
Male	96	80.7	23	19.3	119	1.254	0.040		
Female	136	75.1	45	24.9	181	1.254	0.263		
Level of education									
Grad I	20	40.0	30	60.0	50				
Grad II	73	78.5	20	21.5	93	52.064	-0.001**		
Grad III	77	84.6	14	15.4	91	32.904	<0.001**		
Grad IV	62	93.9	4	6.1	66]			

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Relation between socio-demographic characteristic of studied subjects and phantom Ringing experience are shown in table (5), there are highly significant correlation between age, level of education and (PRS) where (p value <0.001**) while there is no correlation with sex.

	Anxi	ety Ratin	g Scale	•					
	Mild	ety Italii	Mod	erate	Severe			Chi-squar	e
	N	%	N	%	N	%	Total	$\frac{3}{X^2}$	P-value
Having phantom ringing/v	ibratio	n syndron	ne	,,,	1,	/0	1		1 (1100
Yes	13	5.7	27	11.8	189	82.5	229		0.001.0
No	11	15.5	10	14.1	50	70.4	71	1.151	0.021*
Keeping phone in						1	•	1	
Shirt Pocket	7	12.1	15	25.9	36	62.1	58		
Jean Front Pocket	7	12.7	10	18.2	38	69.1	55		
Jean Back Pocket	5	6.0	6	7.2	72	86.7	83	29.975	< 0.001**
Handbag etc.	5	10.9	4	8.7	37	80.4	46		
On my hand	0	0.0	2	3.4	56	96.6	58		
Most purposes for using t	he mol	oile phone	è	•				•	
Face book	24	8.7	37	13.5	214	77.8	275	6.961	0.031*
What's APP	21	7.6	31	11.2	225	81.2	277	5.717	0.057
GPS	8	15.4	9	17.3	35	67.3	52	6.756	0.034*
MP3	20	7.2	33	11.9	225	80.9	278	4.501	0.105
Others	11	9.9	18	16.2	82	73.9	111	3.699	0.157
Time spent on smart phot	ne per	day					•		
≤1	21	50.0	21	50.0	0	0.0	42		
1-3	3	8.6	16	45.7	16	45.7	35	268 002	<0.001**
3-5	0	0.0	0	0.0	62	100.0	62	208.002	<0.001
5-10	0	0.0	0	0.0	161	100.0	161		
Having private information	on ph	one							
Not private	8	14.3	9	16.1	39	69.6	56		
Some private	13	8.8	21	14.3	113	76.9	147	11.038	0.026*
very private	3	3.1	7	7.2	87	89.7	97		
How much emotional perso	on think	x you are							
Normal	9	16.7	11	20.4	34	63.0	54		
very emotional	11	9.4	18	15.4	88	75.2	117	21.025	<0.001**
Much emotional	4	3.1	8	6.2	117	90.7	129		

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Table (6) Relation	hetween	level of any	ietv Xz se	verity of	nhantom	ringing	/vibrafion e	vnerienced hv	studied students
Lable (0) Itelation	been cent	c ver or ana	icij a be	verity of	phantom	i i iii giii gi	, the actor c	aperienceu by	studicu studentis.

This table display a significant relation between feeling vibration or ringing of smart phone even when it is switched off or not in student's pocket also there is a highly significant relation between where the students keep their mobile and level of anxiety (p value $< 0.001^{**}$), 96.6% of student who keep mobile in hand have sever anxiety. Also there is a significant relation between using mobile for face book and GPS, time spent on mobile, keeping private information on mobile and perceiving themselves as emotional person and level of anxiety.

(p value0.031*,0.034*,<0.001**,0.026&<0.001** respectively)

4. DISCUSSION

Smart phone usage has incorporated into each quota of the community and it has a particular presence in the lives of college students. Nevertheless, its extreme usage and its health impact are pretty new concerns that have found in the latest years especially in continuously stirring world. Phantom vibrations and ringing of mobile phones are prevalent hallucinations in the general population and has a major effect on individual and community as well. The phone in our compartment, like the glasses on our face, can turn out to be so clear that it can be almost forgotten.

Subjects of the study were 300 undergraduate nursing students 20% from each grade students aged 20 years old with mean age 20.59 ± 1.02 , this age are so called generation" Y" characterized by awareness of technology, these students consumed more time on the mobile in a number of applications, and better able to use many mobile applications hence

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they liable to experience emotional or physiological effects accompanying phone usage. This result go in the same line with **Bianchi and Phillip (2005)**¹⁷ Who account that younger mobile phone users are spend more time on their mobile phones than older users . And also go in accordance with **Subba et al 2013**⁽¹⁸⁾ who found that the mean age was 20.6 years (SD=1.36)

Concerning level of anxiety 79.7% from studied subjects suffering from severe anxiety this may be because of 49% & 32 which equal (81%) from studied subjects said that they have some private information & very private information respectively saving on phone this may leads to a danger of loss a significant data from mobile or taken of secretive information by somebody. Also it may be associated with students psychological behavior which are (very emotional 39% & much emotional 43%, The college students who have more psychological behavior are more sensitive to the secretive information in mobile so the anxiety level is high, Also may be due to the cause that the nursing is not only a highly stressful profession, but also because of the smart phone plays an imperative role in linking nursing professionals in emergency circumstances. Further the anxiety level is high because students are frequently in a state of mind that (preoccupied with) an important person is calling, texting, notified, e-mailing or sending files to him over internet. (Goyal A.2015)19

Regarding prevalence of Phantom vibration syndrome & the Phantom ringing syndrome the present work revealed that The frequency of each are almost the same among students 77% & 77.3% of students have experience the either PVS or PRS respectively .This result come in accordance with (Laramie, 2007& Rothberg et al., 2010)^{4 & 12}who found that the prevalence statistics for PVS approximately two-thirds of the participants had experienced PVS ;In other studies of students, 90% are found to complained from PVS (Drouin, et al. 2012)⁸. Another study found that 70% from study subjects experienced PVS hallucination (Rothberg, et al. 2010)³. **Drouin et al.** concluded that 89% from undergraduates have complained from phantom vibration ,additionaly **Rothberg et**. Al.(2010)³ report that 68% have phantom vibrations , And in a study of 74 subjects during a one-year medical internship at Chang Gung Memorial Hospital in Taiwan, **Lin et al.**⁽¹⁾ report that 78.1% stated to have phantom vibrations before the internship began, with varying rates during and after, and with a highest prevalence of 95.9% during the internship's third month and Both PVS and PRS increased dramatically over the course of the stressful internship (86.7 hours/week, 33.5 consecutive work hours, and 10 on-call duties per month) and decreased after it was completed. Interns with severe PVS or PRS showed a significant increase in anxiety and depression (Lin et al 2013)¹. Another study concluded that three fourth of students having both Phantom vibrations and ringing syndrome. (**Goyal A. 2015**)¹⁹

Regarding factors predisposing to Phantom Vibration and Ringing Syndrome, as the place of keeping mobile phone. The frequency of Phantom Vibration and ringing Syndrome was higher in students who keep their phone in blouse pocket, in hand and jean back pocket, this result contradict with **Goyal A** 2015^{19} who stated that The incidence PVS&RVS was higher in students who save their phone in blouse pocket and jean front pocket, and was lower in students who save mobile in their jean back pocket. Also **Alam et al 2014** found (70%) kept their mobile phones in their trousers' pockets. Moreover 10% students kept their mobile phones in upper pockets while 6% students chose to attach their phones with their belts. ⁽²⁰⁾ **Lin et al.'s (2013)**¹ concluded that carrying a mobile phone in the breast pocket is a risk factor for PVS/PRS . Also, they found no statistically significant difference in the severity of PVS between those who used their phone on both vibrate and ring mode versus those who used it only on ringing mode.

Concerning Consequences of PVS /PRS, around two third of students worried from theses experience which in turn responsible for high anxiety level. This results go in the same line with **Goyal A 2015** who concluded that Phantom syndrome are a source worries among the students which in turn responsible for high level of anxiety. However he found that more than half of 53 % students having Phantom vibration or ringing syndrome indicated that it does not worry them⁽¹⁹⁾

This study found that there are highly significant correlation between PVR/PRS with age, level of education while there are no correlation with sex this go in the same line with .Saaid Al-Ani et al. $(2009)^{21}$ who found no relations between ringxiety and age.

The current study concluded that the students experience many psychosomatic syndroms as tension ,somatic gastrointestinal fear ,insomnia and depressed mood this come in accordance with **Al-Khlaiwi and Meo** who found that extensive mobile phone usage is the cause of headache, fatigue, tension and sleep disorders (AlKhleiwi et al., 2004)²².

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Massimini and Peterson observed that most of the students are unable to sleep enough due to mobile phone use in at least one day of the week (Massimini et al., 2009)²³ Also the association between sleep, stress, headache, disturbance and depression with the use of mobile phones has already been reported (Subba et al., 2013)¹⁸. Prospective analysis has indicated that high incidence of mobile phone use could be an indicator for insomnia and depression (Thomee et al., 2011)²⁴.

The present study found that there is a significant relation between experience PVS and level of anxiety those who experience PVS daily are high in anxiety also there is positive relation with using smart phones may because of more than half of studied sample spent from five to ten hours on mobile daily also **Spungin2006** stated that the phone has been described as an "umbilical cord" ^{25.} While **Catchings et al. (2010)**²⁶ found that there is no significant statistical relationship between ringxiety and the amount of mobile phone use

Over dependency on phones leads to believe that students cannot function without them (Moeller et al., 2012)²⁷ and they experience high stress levels when there is loss of connectivity (Singh et al., 2013; Subba et al., 2013). This may lead to severe psychiatric and psychosomatic problems including ringxiety. ^(18&28)

Kruger D., & Djerf J 2015 found that Attachment anxiety directly predicted the frequency of phantom ringing and notification experiences, also demonstrate that the frequency of phantom mobile phone experiences is associated with psychological characteristics, specifically those related to insecurity in interpersonal relationship⁽²⁹⁾

The current study found that there is an Association between phantom vibration syndromes and level of anxiety but no association with VRS among nursing students this may be because of many student always put their phones on vibrating mode ,in this respect **Goyal 2015 concluded that** Phantom syndrome are cause botheration among the students which lead to high anxiety level. Also Bart M (2010)³⁰ concluded that College students who refrained from using media for 24 hours experience Withdrawal, sever anxiety & intense antsy. A similar endeavor by Lin et al. (2013) revealed that, medical interns with severe PVS and PRS had higher subjective and somatic anxiety. Parisi (2013) concluded that phantasms can suggest the craving for continuous social interactions, or terror and worry in an anticipation of an incoming call.⁽³¹⁾

5. CONCLUSION

The results of the current study discovered that most of the nursing students are facing phantom vibration and ringing syndrome. The vibration pattern of mobile phone use among the nursing students appeared to be problematic, and 79.7% experience severe anxiety. It was also found that there is relation between phantom vibration syndromes and level of anxiety but no relation with VRS among nursing students.

6. RECOMMENDATIONS

- 1. Limit mobile phone use by increase awareness about PVS/VRS as problem the symptoms and measures must be taken to reduce it.
- 2. The authors also recommend future researches be done to evaluate the long-term problems of mobile phone abuse and its effect on students life.

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