

# Original Research Paper

Physiology

# STUDY OF PHANTOM RINGING & VIBRATION SYNDROME IN FIRST YEAR INDIAN MEDICAL GRADUATE STUDENTS

Naik Anshuman

Associate Professor, Department Of Physiology Hi-tech Medical College, Rourkela, Odisha

Patel Shashikala\*

Associate Professor, Department Of Anatomy Hi-tech Medical College, Rourkela, Odisha \*Corresponding Author

**ABSTRACT** 

 $\textbf{INTRODUCTION:} \ This study was conducted to determine the prevalence of phantom ringing \& \ Vibration \ syndrome \ and \ to \ find \ the \ factors \ associated \ with \ it. \ .$ 

METHODS: validated questionnaire was administered to 100 participants & were analysed. Results: 95 per cent of them say that they've experienced these phantom vibrations. 83 per cent of them say they've experienced this phantom ringing.

CONCLUSION: It would be interesting to find exact site of involvement, in auditory circuit

KEYWORDS: Indian Medical Graduate, Mbbs, First Year, Phantom Ringing, Phantom Vibration, Smart Phone

## INTRODUCTION:

Use of smart phone, which has become an integral activity of daily life now, has begun to show subtle untoward effects on health. Various health related problems associated with electronic devices, especially smart phones, use are being studied. Phantom ringing & Vibration syndrome is one such adverse effect, which is an auditory hallucination seen in mobile phone users when they feel that their phone is ringing when it is actually not. To the best of our knowledge and literature search, we could not find any Indian study on phantom ringing & vibration syndrome in first year MBBS students. This study was conducted to determine the prevalence of phantom ringing & Vibration syndrome and to find the factors associated with it.

## **METHODS:**

This was a prospective, cross-sectional questionnaire based study, conducted in first year A 7-item validated questionnaire was administered to 100 participants & were analyzed

# RESULTS:

Out of 100 respondents, 95 per cent of them say that they've experienced these phantom vibrations.83 per cent of them say they've experienced this phantom ringing.Both the syndrome occurs more in students who kept their cell phone in shirt or paint pocket than to who kept mobile in handbag.85% of students felt vibration or ringing even when the phone is switched off

## DISCUSSION:

Phantom ringing syndrome is the belief that your phone is ringing when it actually isn't, and repeatedly checking. It is also called ringxiety, a term coined by psychologist David Laramie, and linked to phantom vibration syndrome – the mistaken sensation that your phone is vibrating when in your pocket, is caused by 'learned bodily habits.' 'Through bodily habit, your phone actually becomes a part of you, and you become trained to perceive the phone's vibrations as an incoming call or text,' So, due to these kinds of habits, it becomes really easy to misperceive other similar sensations. It may be considered as normal brain mechanism (1)

Phantom vibration syndrome is a sensory hallucination. Phantom Vibration Syndrome were common in medical staffs who used electronic devices (2)

Neurodevelopment changes associated with the hypoth alamic-pituitary-adrenal (HPA) axis have been investigated as mechanisms of auditory hallucination. Phantom vibration was more prevalent than phantom ringing syndrome. Stress in medical studies is reason for this syndrome.

There may be a relation between this syndrome and emotional symptoms with burnout syndrome.

Mohammadbeigi [3] reported a higher female prevalence for vibration and male prevalence for ringing; other studies did not find differences across genders (taking vibration and ringing together

The cause of phantom vibrations is not known. ... It has been suggested that, when anticipating a phone call, the cerebral cortex may misinterpret other sensory input (such as muscle contractions, pressure from clothing, or music) as a phone vibration or ring tone.

Medical students are "just so anxious these days, because of all of our different technologies", which include emails and text messages, "keep them on edge." & inclined to be jumpy and feel something in our pocket as a phantom vibration,"

## **CONCLUSIONS:**

The prevalence rate of phantom vibration in our study was 95% & phantom ringing was 85%, which occurs irrespective of gender, age, profession, and physical location, duration and mode of phone use. It would be interesting to find exact site of involvement, in auditory circuit; by BERA studies. Phantom Ringing Syndrome is common among medical students who use mobile phones

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