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NOMOPHOBIA: AN EMERGING PSYCHOLOGICAL DISORDER

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Abstract

Portable technologies especially smart phones have emerged as an advantage for providing a galaxy of opportunity and has steered the society for accessing network, communicating in social circles and gaining knowledge. It has intensified the amount of work and opportunities but excessive use and long-time exposure also brings serious problems. Recently one of the major problems is the excessive usage of mobile or smartphone by the huge population without any specific reason leading to addiction of smart phones from child of early age to adult ones. This is slowly penetrating in human habits and behaviour causing behavioural dependency on electronic gadgets especially smartphones. One of major factor for causing this problematic condition is connection of mobile phone to the internet. Several research reports from different parts of world are indicating the causes, phases of onset of smartphone addiction, consequences and health issues due to the emerging threat of 'no mobile phone phobia' (nomophobia). Therefore, present review is intended to address the current problems associated with nomophobia and the future strategies to overcome its negative impact on society.

Keywords: Nomophobia, Smartphone addiction, psychological variables, Anxiety, CBT

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1. Introduction

Mobile phones or smartphones have become the integral part of our life and we are getting dependent on it for almost everything starting from online e-learning, e-commerce, e-governance, ebanking to gaming and entertainment.

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¹*Department of Zoology, Udai Pratap (Autonomous) College, Varanasi – 221002, Uttar Pradesh, India. Email: tumultapan@yahoo.co.in Undefined and excessive usage of mobile phones is associated with increased screen time which is badly impacting the physical as well as psychological health of children, teenagers and adults too1. One of the badly emerging psychological dysfunctions associated with smartphones in general public is Nomophobia. Nomophobia is an abnormal psychological condition characterised by the fear of not having a mobile phone or for some reason being unable to access it². In general terms, it stands for "No Mobile phone Phobia (NoMoPhobia)", a modern pathological condition which may have negative consequences on the physical, physiological, psychological and social well-being. Although the research is in an incipient stage, the problem has impacted various

groups of population and has negative consequences on personal and professional development. Well established causes and phases of onset of mobile phone addiction leading to nomophobia and its symptoms have been presented in **Figure 1.**

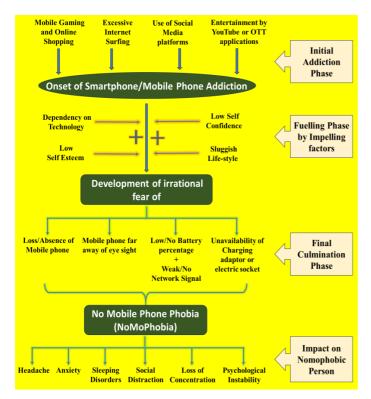


Figure 1. Causes, phases of the development and symptoms of "No Mobile Phone Phobia" (NoMoPhobia).

Nomophobia is a sort of anxiety of being without mobile phone or being unable to use it due to either loss of network signal or low battery. A person with nomophobia invariably feels anxious, insecure, or panicked in the absence of their phone³. In this regard, the term "phobia" seems inappropriate here as this psychological condition is much associated with anxiety, fear or panic of being without electronic gadgets. In 2008, an international research and analytics group organisation, 'YouGov' coined this term 'Nomophobia' while studying the impacts of excessive usage of mobile phones and electronic devices on physical, mental and psychological health. Outcome of that survey was alarming as more than 50% of participants realised and confessed nomophobic symptoms like worry of phone loss, no contacts with their loved ones and low battery⁴.

2. Conceptualization of Nomophobia

Nomophobia is a term derived from "NO MObile phone PHOBIA," referring to the fear or anxiety experienced when individuals are without their mobile phones or unable to use them⁵. This condition has become increasingly prevalent in the digital age, as smartphones have become integral to daily life. This occurrence is expected to rise, emerging as a significant

concern, due to the widespread use of smartphones; similarly, the worldwide COVID-19 pandemic has led to increased screen time on these devices⁶.

2.1. Causes and Phases of Onset of Nomophobia

Nomophobia has been associated with four key fears: (1) not being able to talk to others, (2) losing internet or signal connection, (3) not being able to find information online, and (4) missing out on the ease that smart phones provide. Mobile addiction through its excessive usage is aggravated by different factors including increased technological dependency, low self-esteem, loneliness, low self-confidence and sluggish lifestyle^{7, 8}. Such week emotional and psychological variables act as fuel and impelling factors which culminate mobile addiction into nomophobia (Fig 1).

2.2. Sign and Symptoms of Nomophobia

Nomophobia is the collection of signs and symptoms of abnormal psychological and mental status. It has negative impact on several aspects of person's life including family and social relationships, performance on workplace, health, and general well-being^{2,3,9}. Nomophobia may manifest as the following symptoms:

- Frequently checking mobile phone for notifications, messages, or calls
- Restlessness or nervousness when the phone is not within visual reach
- Anxiety or stress when the phone battery is low or the signal is poor or absent
- Physical discomfort including palpitation, headaches, eye strain, or neck pain from excessive phone use
- A strong urge to have the phone in hand constantly
- Difficulty in concentration on general tasks or activities in the absence of phone
- Trouble in sleeping or relaxing without the phone
- Negligence in other responsibilities or interests in general talks while using phones
- Impaired social interactions or interpersonal relationships due to phone dependence

After the worsening of condition, nomophobic person may suffer from severe side effects on physical as well as mental health that includes perspiration, reduced cognition, mental confusion, agitation, loss of patience, disorientation, respiratory dysfunctions, trembling and loss of creativity¹⁰.

3. Global distribution

A scientific investigation across several countries observed prevalence rates of nomophobia ranging from 77% to 99 %, with young ones being the most affected6. In Indian context, a study reported a significantly high proportion of college students experiencing some level of nomophobia, with 32.7% suffering from severe symptoms¹¹. In Bahrain, approximately 93% of students experienced moderate to severe symptoms of nomophobia¹². In an investigation carried out by SecurEnvoy (UK) including 1,000 employees, the percentage of individuals experiencing symptoms of nomophobia were ranging from 53% to 66%^{13, 14}. In addition, they also reported that women were more vulnerable to nomophobia, affecting about70% of female participants compared to 61% of their male counterparts.

4. Factors Associated with Nomophobia

There are several reports in which demographic factors were found to influence the frequency and severity of nomophobia in given population. Some of the factors have been discussed in subsequent sections.

- Age: Younger population, particularly college and university students, are more susceptible to nomophobia and they are also exhibiting severe nomophobic symptoms compared to adult ones¹⁵.
- Gender: According to some studies, females experience higher levels of nomophobia, although findings are mixed and need further investigations on large population covering household as well as working individuals¹⁶.
- Smartphone Usage Patterns: Increased levels of nomophobia have been found to be associated with higher daily usage hours and irrational frequent phone checks for massages, time, battery levels and network signal¹⁷.
- Parental Education and Income: Severity of nomophobia has not been associated with parental education levels and place of residence¹⁶. In some countries including India, nomophobia is found prevalent among high income families¹⁸ while in other developed countries, no significant correlation was observed with the income of parents¹⁶.

5. Psychological Correlates and prevailing factors

The impact of nomophobia also can be correlated to psychological status of affected person in terms of different conditions such as depression, stress, insomnia, loss of self-confidence etc. The problem of nomophobia is not limited to this extent but it may also coexist with addictions in the peoples for social media and internet^{2,16,19}. The regular addiction of internet badly affects the human health in terms of cognitive overload. The compulsive need to check notifications or remain constantly online contributes to mental and emotional tiredness. Some important aspects of nomophobia on psychological behaviour are being discussed in following subsections.

Stress: A person having nomophobia frequently experience high levels of stress when due to some reasons they are not able to use their mobile phone and it may be expressed as high levels of anxiety and impatience. This anxiety can be reflected as nervousness, or fright in situations where the use of mobile phones is restricted or limited¹⁹.

Depression: Researches have demonstrated the strong correlation between nomophobia and depression in the form of conditions such as sadness, grief, loss of interest in routine work, exhaustion¹⁹.

Loneliness: It has been observed that people addicted with mobile phones and suffering from nomophobia also experience loneliness and become isolated from society²⁰.

Loss of confidence and poor management approaches:

Excessive use of mobile phones on daily basis causes the negative impact on human psychology and related with loss of self-confidence and limited participation in family or societal activities. Stress induced poor and inefficient management skill has also been observed in nomophobic persons^{21.}

6. Impact of nomophobia on daily activities

Nomophobia has prominent and significant impact on psychological, behavioural as well as social aspects of affected person. Nomophobic individual has been found to be engaged in risky behaviour such as texting while driving, walking, and often using mobile phones in social gathering². Mobile addiction is also linked to reduced academic or work-place performance²⁰. It also hinders

face-to-face communication promoting isolation and withdrawal from family and society. Person involved in any profession are suffering from nomophobia issues and they face several problems such as restriction from social environment, limited direct interaction with peoples, having high levels of stress, low levels of concentration, loss of sleep etc^{5, 21}.

7. Treatment and Intervention Strategies

Effective interventions strategies for managing nomophobia include cognitive-behavioural therapy (CBT), digital detox programs, and mindfulness-based practices^{22,23}. In CBT, nomophobic person is able to identify and change negative thought patterns associated with mobile phone usage. Mindfulness techniques involving the meditation and deep breathing practices are found effective to calm the mind while reducing stress and anxiety. Promoting digital literacy, healthy habits and self-discipline may also serve as preventive measures. Mobile applications that track screen time or restrict usage are increasingly used in minimizing the impact of nomophobia²⁴. Psychiatric counsellors may assist the affected person also for the treatment of sign and symptoms like anxiety, eye irritation, sleeplessness etc^{2,8}. However, pharmacological treatments under severe conditions which may include use of psychotropic drugs are also recommended.

8. Conclusion

NOMOPHOBIA, being a form of behavioural addiction is putting our "social, mental as well as physical well-being" at higher risk. Compared to the virtual world, there is need to spend more time in the real one. Face-to-face communication and inperson relationships must be restored to avoid the development of nomophobia or any other psychological disorder associated with electronic gadgets. One should limit rather than completely prohibit mobile phone use because we cannot undervalue the power of technological advancement.

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