

Effectiveness of Digital Crave Prevention Programme (DC2P) on Cyberchondria and Smartphone Addiction in terms of Knowledge and Skills: Pilot Study

AMBIKA¹, T SENTHIL², JYOTI SARIN³

ABSTRACT

Introduction: Cyberchondria and smartphone addiction have emerged as significant digital health concerns among nursing Students, adversely affecting concentration, psychological well-being, sleep quality, academic performance, and professional competency. Excessive online health searching often increases health anxiety, while compulsive smartphone use contributes to behavioral dependence and impaired digital self-regulation. Considering the increasing prevalence of maladaptive digital behaviors among adolescents and healthcare Students, a structured educational intervention is essential to improve awareness and preventive practices.

Objective: To assess the effectiveness of the Digital Crave Prevention Programme (DC2P) on cyberchondria and smartphone addiction in terms of knowledge and skills among nursing students.

Materials and Methods: A pilot quasi-experimental study with pre-test and post-test control group design was conducted among 20 nursing students (Experimental=10; Control=10) selected through simple random sampling to assess feasibility, reliability, intervention acceptability, and effect size estimation for the main study. Based on pilot effect size ($d=0.84$), power analysis at 95% confidence interval, 80% power, and 5% level of significance, the estimated sample size for the main study was 70 participants (35 per group). The intervention consisted of a two-day DC2P. On Day 1, baseline demographic assessment and pre-test evaluation of knowledge and skills regarding cyberchondria and smartphone addiction were performed using a structured knowledge questionnaire and

observational checklist. Subsequently, a 45-minute lecture-cum-discussion with multimedia presentation was administered. On Day 2, a 30-minute demonstration and hands-on digital wellness skill training session were conducted focusing on screen-time regulation, healthy online-search behaviors, fact verification, and digital self-control strategies. Post-test assessment was conducted on Day 15.

Results: Pilot findings demonstrated high feasibility and tool reliability (Knowledge Questionnaire Cronbach's $\alpha=0.89$; Skill Checklist $\alpha=0.86$). In the main study, the experimental group showed statistically significant improvement in mean knowledge scores from 14.80 ± 3.42 to 27.29 ± 2.11 and skill scores from 3.57 ± 1.24 to 6.57 ± 1.08 following DC2P intervention (paired $t=12.84$, $p<0.001$). Independent t-test revealed significant post-test differences between experimental and control groups ($p<0.001$). Pearson correlation analysis showed positive association between knowledge and skill scores ($r=0.71$). Chi-square and ANOVA demonstrated significant association between post-test scores and selected demographic variables including duration of smartphone use and sleep pattern ($p<0.05$).

Conclusion: The DC2P was highly effective in improving knowledge and digital wellness skills among nursing students. The intervention demonstrated strong statistical effectiveness, feasibility, and applicability for large-scale implementation in nursing education to promote healthy digital behaviour and psychological well-being.

Keywords: Digital wellness, Digital mental health, Health anxiety, Nursing students.

PARTICULARS OF CONTRIBUTORS:

1. Student M.Sc. Nursing, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.
2. Professor, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.
3. Principal cum Professor, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. T Senthil,
Professor, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala-133207, Haryana, India.
Email: senthilamma.t@gmail.com