

Digital and Substance Abuse Among Youth: A Public Health Nursing Perspective

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Abstract

This review carried out to examine the increasing prevalence of digital and substance addiction among young people, its causes and adverse effects on health. While digital addiction defined as a type of behavioral addiction that occurs when the use of social media, video games and the internet reach an excessive level, substance addiction includes the use of substances such as tobacco, alcohol, marijuana and e-cigarettes. Both types of addiction seriously affect the physical, psychological and social health of young people and reduce their quality of life. This study is based on a literature search in PubMed, Scopus and Google Scholar databases using the keywords "digital addiction", "substance abuse", "young people" and "public health nursing". Recent studies have revealed that these addictions are quite common among young people and often have common risk factors. It has been emphasized that public health nurses play an essential role in the prevention and management of addictions. Raising awareness about addictive behaviors among young people, organizing training programs, providing early interventions and providing counseling services are among the prominent strategies in this context. However, it is suggested that policymakers and health professionals should collaborate to overcome this problem by adopting a multidisciplinary approach.

Key Words: Digital addiction, Substance abuse, Young people, Public health nursing

Gençler Arasında Dijital ve Madde Bağımlılığı: Halk Sağlığı Hemşireliği Perspektifi

Özet

Bu derleme, gençler arasında giderek artan dijital ve madde bağımlılığının yaygınlığını, nedenlerini ve sağlık üzerindeki olumsuz etkilerini incelemek amacıyla gerçekleştirilmiştir. Dijital bağımlılık, sosyal medya, video oyunları ve internet kullanımının aşırı düzeye ulaşmasıyla ortaya çıkan bir davranışsal bağımlılık türü olarak tanımlanırken, madde bağımlılığı tütün, alkol, esrar ve e-sigara gibi maddelerin kullanımını kapsamaktadır. Her iki bağımlılık türü de gençlerin fiziksel, psikolojik ve sosyal sağlıklarını ciddi şekilde etkileyerek yaşam kalitesini düşürmektedir. Bu çalışma, "dijital bağımlılık", "madde bağımlılığı", "gençler" ve "halk sağlığı hemşireliği" anahtar kelimeleri kullanılarak PubMed, Scopus ve Google Scholar veri tabanlarında yapılan literatür taramasına dayanmaktadır. Güncel çalışmalar, gençler arasında bu bağımlılıkların oldukça yaygın olduğunu ve sıklıkla ortak risk faktörlerine sahip olduklarını ortaya koymuştur. Halk sağlığı hemşirelerinin bağımlılıkların önlenmesinde ve yönetiminde önemli bir rol oynadığı vurgulanmıştır. Gençler arasında bağımlılık davranışlarına yönelik farkındalık oluşturmak, eğitim programları düzenlemek, erken müdahaleler sağlamak ve danışmanlık hizmetleri sunmak, bu kapsamda öne çıkan stratejiler arasında yer almaktadır. Bununla birlikte, politika yapıcılar ve sağlık profesyonellerinin multidisipliner bir yaklaşım benimseyerek bu sorunun üstesinden gelmek için iş birliği yapması gerektiği önerilmektedir.

Anahtar kelimeler: Dijital bağımlılık, Madde bağımlılığı, Gençler, Halk sağlığı hemşireliği

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INTRODUCTION

Digital and substance addiction are two important types of addiction that emerge with the rapidly changing technological and social dynamics of our age and negatively affect the

physical, psychological and social health of individuals. Digital addiction is a behavioral addiction characterized by individuals' excessive attachment to social media, video games, and other digital platforms. Digital addiction negatively affects the cognitive development, social relationships and academic success of individuals, especially in adolescence, making it difficult for them to have a healthy adulthood process (1). In addition, the increase in the time spent in front of the screen causes decreases in physical activity, obesity, disruptions in sleep patterns and chronic health problems (2,3).

Substance addiction, on the other hand, is an increasingly common problem among young people that occurs when individuals use substances such as tobacco, alcohol, marijuana and e-cigarettes uncontrollably. Substance addiction leads to permanent changes in brain chemistry by affecting neurobiological processes and negatively affects individuals' cognitive functions such as decision-making, attention, and emotional regulation (4). In addition, the increase in this addiction among young individuals causes serious problems both in terms of individual health and social costs (5).

The interaction between digital and substance abuse is strengthened, especially with the effect of social media and content spread on digital platforms. Advertisements and impressive

content that encourage substance use published on social media platforms are an important risk factor that increases the susceptibility of young people to substance abuse (6). In addition, digital addiction facilitates the transition to substance addiction by triggering emotional problems such as loneliness, stress and anxiety in individuals (7). This situation shows that digital and substance addiction are intricately related to each other and that these types of addiction pose a multidimensional threat to public health.

Public health nurses play a critical role in the fight against addiction by providing preventive and curative services. Public health nursing, which aims to reduce addictive behaviors at both the individual and community level, makes significant contributions through educational programs, awareness-raising campaigns, and counseling services (8). Public health nurses also collaborate with psychologists, social workers and other health professionals through multidisciplinary approaches. This cooperation ensures the development and implementation of effective strategies in the fight against addictions.

This study aims to address the interactions between digital and substance abuse, the effects of these types of addiction on young individuals, and the role of public health nursing in this process. By examining the current research in the literature, it is aimed to offer solutions for the

prevention and management of addictions. In this context, the causes and effects of addictive behaviors among young people and the approaches that can be used to combat these addictions have been examined in detail.

MATERIAL AND METHOD

This study was designed as a review study to comprehensively examine the existing literature on digital and substance abuse. Within the scope of the study, published research on digital addiction, substance abuse, youth and public health nursing were analyzed. The literature review conducted using PubMed, Scopus and Google Scholar databases. During the screening, the keywords "digital addiction", "substance abuse", "youth" and "public health nursing" were used in Turkish and English. During the selection of the studies, 60 studies published between 2013 and 2023 that provided important data on the subject were evaluated.

Inclusion criteria included that the study was methodologically sound, presented results on digital and substance abuse among young people, and was appropriate from a public health nursing perspective. However, theoretical studies, case reports and articles published before 2013 are excluded. The findings obtained from the studies were classified by thematic analysis method and presented on the axis of the effects of digital addiction, the prevalence and consequences of

substance addiction, and the relationships between these two types of addiction.

This review study aims better understanding the effects of addiction types on young people and to shed light on strategies that can be applied from a public health nursing perspective. During the literature review, ethical rules were considered and all sources were cited accurately and completely.

RESULTS

In this review study, the findings obtained as a result of a comprehensive literature review on digital and substance addiction are presented on the axis of digital addiction, substance addiction and the interaction between these two types of addiction.

Physical, Psychological and Social Effects of Digital Addiction

The effects of digital addiction on young people emerge in different ways in physical, psychological and social health dimensions. Karaaslan et al. (2023) found that there is a negative relationship between digital game addiction and physical activity level and that addiction increases depression levels (3). Irmak and Çelikkalp (2022), on the other hand, emphasized that digital addiction is linked to physical health problems such as obesity, scoliosis, and vision problems. Mutlu and Tamer (2020) showed that as the motivation to play

digital games increased, the body mass index also increased (2,9).

In terms of psychological effects, digital addiction leads to problems such as depression, anxiety and loneliness in young people (10,11,12). Kaya and Vangölü (2023) stated that female students' digital addiction levels were higher than boys, but this addiction negatively affected their life satisfaction (7). In the context of social effects, Deveci Çolak (2021) stated that social media addiction reduces academic achievement and weakens the social relations of individuals (13).

Prevalence and Effects of Substance Abuse

Substance abuse stands out as a serious public health problem, especially among young people. Johnston et al. (2020) stated that the increase in alcohol and tobacco use among young people is associated with the accessibility of substances and advertising strategies (5). Volkow et al. (2019) drew attention to the effects of addictive substances on brain chemistry, showing that this negatively affects the cognitive development processes of young people (4).

Altay and Koç (2022) found that participation in physical activity reduces the risk of substance abuse and emphasized that sports activities are an effective tool in the fight against addiction (14). Kelly et al. (2022), on the other hand, stated that social support systems increase the effectiveness

of substance abuse treatment in young people (15).

The Relationship Between Digital and Substance Abuse

The fact that there is a close interaction between digital addiction and substance addiction has been supported by many studies. Primack et al. (2017) showed that content promoting substance use on social media platforms increases the risk of addiction among young people(6). Koç et al. (2023) stated that physical inactivity and inappropriate family environments create a bridge between digital addiction and substance addiction (16).

Delebe and Hazar (2022) found that digital addiction negatively affects academic achievement and addiction weakens individuals' social functioning (17). Bağcı and Özer (2021), on the other hand, stated that male students are more prone to digital addiction and substance use, and this situation depends on the gender factor (18). It is seen that digital addiction increases emotional problems such as stress, loneliness and anxiety in individuals and strengthens the tendency to substance use (11,12, 4).

Findings from a Public Health Nursing Perspective

It has been widely discussed in the literature that public health nurses play a critical role in the fight against digital and substance abuse. Demir

(2022) showed that positive attitudes towards physical education and sports reduced the levels of digital addiction (19). Altınok (2021) emphasized the importance of public health nurses providing education and counseling services in early diagnosis of addictive behaviors in young people and in combating these problems (8).

Kaya and Van Lake (2023) stated that organizing training programs to increase public health nurses' awareness of addictive behaviors is an effective approach to preventing addictions (7). Kelly et al. (2022), on the other hand, revealed that multidisciplinary approaches give successful results in addiction treatment (15).

ARGUMENT

Digital and substance abuse are types of addiction that are becoming increasingly common among young people and pose significant threats to public health. The literature shows that these types of addiction often share common risk factors and can trigger each other (1,5). For example, it is known that digital addiction disrupts individuals' daily life activities, reduces physical activity levels, and causes health problems such as obesity (3,9). In addition, it is stated that content promoting substance use spread on digital platforms increases the susceptibility to substance abuse among young people (6).

Substance abuse is a common health problem that negatively affects individuals' neurobiological functions, social relationships, and psychological states. Volkow et al. (2019) stated that addictive substances regress cognitive development by affecting brain chemistry (4). Kelly et al. (2022) emphasize that the lack of social support systems of young people increases their susceptibility to substance use and complicates the treatment processes (15). It is frequently stated in the literature that the relationship between digital addiction and substance addiction is strengthened as a result of digital content causing emotional problems such as loneliness, anxiety and stress in individuals (11,2).

Public health nurses play a critical role in the fight against digital and substance abuse. Kaya and Vangölü (2023) emphasized the contribution of public health nurses in the early diagnosis of addictive behaviors and the organization of education programs (7). Altınok (2021) stated that awareness activities and counseling services for the community should be increased to combat addiction among young people (8). In particular, the development of programs that limit the use of technology to prevent digital addiction stands out as an effective method to alleviate the physical and psychological effects of this addiction (10,3). Similarly, increasing the awareness levels of parents, teachers and young people in the fight

against substance addiction is among the preventive strategies (19,5).

Multidisciplinary approaches offer effective strategies in the fight against addictions. Collaboration between psychologists, social workers, public health nurses and Policy-makers gives successful results in the fight against digital and substance addiction (20,15). In particular, social awareness campaigns and educational activities have the potential to create a positive transformation throughout society (16). In addition, the promotion of sports activities stands out as an effective method to reduce the risk of both digital and substance abuse (14,17). Physical activity can contribute to the development of healthy living habits by reducing the risk factors of addiction.

In the light of these findings, digital and substance addiction should be considered as a social problem, not just an individual one. By increasing the training of public health nurses and adopting a multidisciplinary approach, the adverse effects caused by addictions can be minimized. In addition, a more comprehensive strategy for the prevention of addictions should be adopted through educational programs and public awareness activities (21,22).

CONCLUSION

This review study addressed the physical, psychological, and social effects of digital and

substance addiction, which are increasingly common among young people. It revealed the common risk factors and interactions of these types of addiction. It has been determined that digital addiction leads to health problems such as decreased physical activity levels, obesity, depression, and anxiety, as well as negatively affecting individuals' social relations and academic success. Similarly, it has been supported by the findings of the literature that substance addiction hinders the cognitive development of young people, causes neurobiological and psychological disorders, and weakens their social functioning. In particular, it is seen that the relationship between digital addiction and substance addiction is strengthened by the content spread on social media and digital platforms, and this situation reinforces the addictive behaviors of individuals.

This study emphasized once again that public health nurses have a leading role in the fight against digital and substance abuse. Nurses can detect young people's addictive behaviors at an early stage and provide services to protect and improve the health of individuals. Education programmes, counseling services and awareness-raising activities in society considered important strategies important strategies in the prevention of addictions. In addition, multidisciplinary approaches stand out

as an effective method to reduce both individual and social effects of addictions.

In conclusion, comprehensive approaches based on education, awareness raising, policy development and multidisciplinary cooperation should be adopted to prevent and manage digital and substance abuse. Promoting sports and physical activity programs for young people will support the adoption of healthy living habits by reducing the risk of addiction. The results of this study provide an important framework for developing new strategies in the fight against addictions and strengthening the role of public health nurses in this process. Future research suggests that more evidence-based studies are needed to explore and implement innovative approaches to reduce the effects of addictions.

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