



## “Guardians of Early Development: The Pivotal Role of Public Health Nurses in Addressing Screen Addiction and Behavioral Disorders Among Toddlers”

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**Abstract:** The rapid advancement of digital technology has transformed modern childhood experiences, leading to increased exposure to screens among toddlers. While digital media offers educational and entertainment opportunities, excessive and unsupervised screen use has been linked to screen addiction and various behavioral disorders in early childhood. Toddlers are particularly vulnerable due to their developing cognitive, emotional, and social capacities. Public health nurses play a crucial role in promoting healthy screen habits, preventing behavioral problems, and supporting families through education, screening, and community-based interventions. This review article examines the role of public health nurses in addressing screen addiction and behavioral disorders among toddlers. It explores the prevalence, causes, consequences, assessment strategies, nursing interventions, family involvement, community-based approaches, and policy implications. The article emphasizes evidence-based practices and multidisciplinary collaboration to promote holistic child development. Strengthening the role of public health nurses is essential for mitigating the negative impacts of excessive screen exposure and fostering healthy behavioral outcomes in early childhood.

**Keywords:** Screen addiction, toddlers, behavioral disorders, public health nursing, early childhood development, digital media, parental guidance, preventive healthcare

### Introduction

The early years of life are critical for physical, cognitive, emotional, and social development. During this period, toddlers acquire foundational skills that influence lifelong health and well-being. However, the increasing availability of smartphones, tablets, televisions, and digital devices has significantly altered early childhood environments. Many toddlers are exposed to screens from infancy, often for extended durations, leading to concerns about screen addiction and its impact on behavior.

Screen addiction refers to excessive, compulsive, and uncontrolled use of digital devices that interferes with daily functioning and development. Among toddlers, prolonged screen exposure has been associated with delayed language development, attention deficits, emotional dysregulation, social withdrawal, and behavioral disturbances. These challenges pose significant public health concerns.

Public health nurses, as frontline healthcare providers, play a vital role in child health promotion and disease prevention. They work closely with families, communities, and healthcare systems to ensure optimal child development. Their involvement in addressing screen addiction and behavioral disorders is essential in promoting healthy digital habits, early identification of problems, and implementation of preventive strategies. This review aims to analyze the role of public health nurses in addressing screen addiction and behavioral disorders among toddlers, highlighting evidence-based interventions, community initiatives, and policy advocacy.

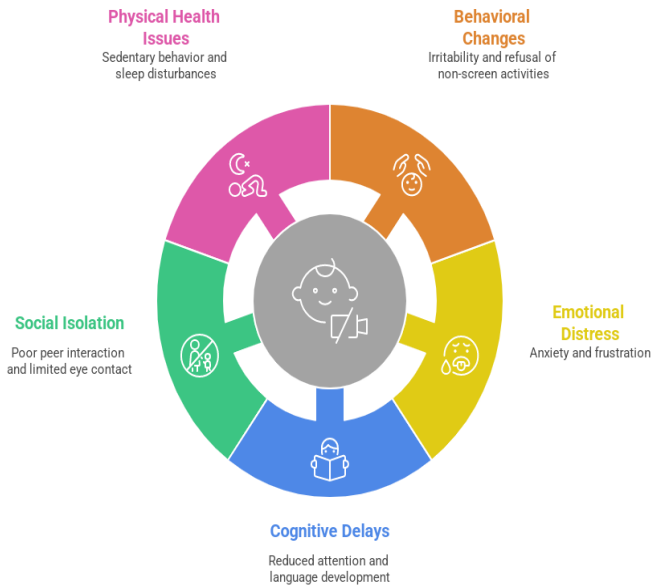
### Concept of Screen Addiction in Toddlers

Screen addiction in toddlers is characterized by excessive dependence on digital devices, emotional distress when access is restricted, and preference for screen-based activities over physical or social interaction. Although



addiction is traditionally associated with substance use, behavioral addictions such as excessive screen use are increasingly recognized.

### Screen Addiction in Toddlers



Toddlers lack the self-regulatory capacity to manage screen exposure independently. Therefore, parental supervision and professional guidance are crucial. Prolonged screen use may lead to overstimulation of the developing brain, reduced attention span, and impaired emotional regulation.

**Table 1: Characteristics of Screen Addiction in Toddlers**

Aspect	Description
<b>Behavioral</b>	Irritability without screens, refusal of non-screen activities
<b>Emotional</b>	Anxiety, frustration, emotional outbursts
<b>Cognitive</b>	Reduced attention, delayed language development
<b>Social</b>	Poor peer interaction, limited eye contact
<b>Physical</b>	Sedentary behavior, sleep disturbances

### Behavioral Disorders Associated with Excessive Screen Use

Behavioral disorders among toddlers linked to excessive screen exposure include attention-deficit symptoms,

hyperactivity, aggression, social withdrawal, anxiety, and sleep disturbances. These disorders may interfere with learning, socialization, and emotional growth.

Research indicates that prolonged screen time reduces opportunities for real-life interaction, imaginative play, and physical activity. These limitations negatively affect brain development and behavior regulation. Additionally, exposure to inappropriate content may influence emotional responses and aggression.

Public health nurses play a significant role in identifying early signs of behavioral disorders and providing timely interventions.

### Epidemiology and Prevalence

Recent studies indicate a steady rise in screen exposure among toddlers worldwide. Many children below five years exceed the recommended daily screen time limits. In India and other developing countries, increased smartphone accessibility has further contributed to this trend.

**Table 2: Recommended Screen Time for Toddlers**

Age Group	Recommended Screen Time
<b>Below 2 years</b>	No screen time
<b>2–3 years</b>	Less than 1 hour/day
<b>3–5 years</b>	Maximum 1 hour/day

Despite these guidelines, many toddlers engage in screen use for more than two hours daily. This excessive exposure correlates with higher rates of behavioral issues and developmental delays.

### Etiological Factors Contributing to Screen Addiction

Several factors contribute to screen addiction among toddlers. These include parental screen habits, lack of awareness, busy lifestyles, limited outdoor spaces, and inadequate childcare support. Digital devices are often used as “electronic babysitters” to manage child behavior. Socioeconomic factors also influence screen exposure. In nuclear families and urban settings, parents may rely on screens due to work commitments. Cultural acceptance of digital media further normalizes early screen use.

Understanding these factors enables public health nurses to design context-specific interventions.



### Impact on Growth and Development

Excessive screen exposure affects multiple developmental domains. Cognitive development may be impaired due to reduced language stimulation. Emotional development may suffer due to limited caregiver interaction. Physical development may be compromised due to sedentary behavior.

**Table 3: Impact of Screen Addiction on Toddler Development**

Domain	Impact
Cognitive	Poor attention, delayed speech
Emotional	Mood instability, anxiety
Social	Reduced interaction skills
Physical	Obesity risk, poor sleep
Behavioral	Aggression, hyperactivity

These developmental challenges emphasize the need for early preventive strategies.

### Role of Public Health Nurses in Assessment and Screening

Public health nurses are instrumental in early identification of screen addiction and behavioral disorders. During home visits, immunization clinics, and community health programs, nurses assess developmental milestones and screen habits.

Assessment tools include developmental screening checklists, parental questionnaires, and observational methods. Nurses also evaluate family environment, parenting practices, and child-care routines.

Early detection enables timely referral to pediatricians, psychologists, and therapists when necessary.

### Health Education and Parental Counseling

One of the primary responsibilities of public health nurses is health education. They educate parents about recommended screen time, age-appropriate content, and the importance of interactive play.

Counseling sessions focus on building positive parenting skills, setting boundaries, and promoting alternative activities such as storytelling, outdoor play, and creative

games. Nurses also address parental misconceptions regarding digital learning.

By empowering parents, nurses help create supportive home environments that reduce dependency on screens.

### Preventive and Promotional Interventions

Public health nurses implement preventive strategies through community outreach, workshops, and school health programs. These interventions emphasize balanced lifestyles and healthy digital habits.

**Table 4: Preventive Strategies by Public Health Nurses**

Strategy	Description
Awareness programs	Educating parents on screen risks
Parenting workshops	Training on behavior management
Home visits	Monitoring child development
Play-based activities	Encouraging physical interaction
Support groups	Peer learning among parents

Such initiatives promote holistic child development and prevent long-term complications.

### Community-Based and Multidisciplinary Approaches

Addressing screen addiction requires collaborative efforts. Public health nurses work with pediatricians, psychologists, educators, social workers, and community leaders to design integrated programs.

Community centers, anganwadis, and early childhood education centers serve as platforms for promoting healthy behaviors. Nurses facilitate referrals, coordinate care, and ensure continuity of services.

Multidisciplinary collaboration enhances intervention effectiveness and sustainability.

### Policy Advocacy and Program Development

Public health nurses contribute to policy formulation by advocating for child-friendly digital guidelines, parental education programs, and early childhood development policies. They participate in governmental and non-governmental initiatives focused on child welfare.



By collecting data and documenting community needs, nurses influence program development and resource allocation. Their advocacy ensures that screen addiction is recognized as a public health priority.

### Challenges Faced by Public Health Nurses

Despite their critical role, public health nurses face several challenges, including limited resources, heavy workloads, lack of specialized training, and resistance from parents. Technological advancements also outpace policy development, making regulation difficult.

Cultural acceptance of digital devices further complicates intervention efforts. Addressing these challenges requires continuous professional development and institutional support.

### Future Directions and Recommendations

Future interventions should emphasize digital literacy, parental empowerment, and early childhood-friendly technology use. Training programs for nurses must include modules on digital health and behavioral assessment.

Research should focus on culturally appropriate intervention models and long-term outcomes. Strengthening community partnerships and leveraging digital platforms for education can enhance outreach.

### Conclusion

Screen addiction and behavioral disorders among toddlers pose significant threats to healthy development. Public health nurses play a central role in prevention, early identification, education, and intervention. Through community engagement, parental counseling, multidisciplinary collaboration, and policy advocacy, nurses promote balanced digital habits and positive behavioral outcomes.

Strengthening the capacity of public health nurses is essential to address emerging challenges in the digital era. Their proactive involvement ensures that toddlers grow in nurturing environments that support optimal physical, emotional, and social development.

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