Effects of Pornography on Youth: A Review

by Meelie Bordoloi, MD, Ila Durkin, MD & Arpit Aggarwal, MD

In 2023, Pornhub totaled over 2.14 billion visits during a single month—more than Instagram, Netflix, Pinterest, and TikTok combined. 28,000 people visit porn websites every second.

Pornography refers to sexually explicit material created to 'entertain' and arouse the viewer. A 2002 Australian study found that 73% of boys aged 16-17 years-old watched X-rated movies five times per week.¹ That was in a time when smartphones had just been introduced and were not easily available. Now, over 20 years later, with smartphones omnipresent, children and adolescents have access to porn through the internet, streaming services, social media forums, adult entertainment websites, and virtual private networks. It's available almost everywhere.

Three major factors contribute to increased access: affordability, accessibility, and anonymity.² Justifiably, there is a growing concern about the impact pornography has on society in general and young people in particular. There are a wide range of troubling issues that are being studied. I am particularly reminded of a seven-year-old male who was admitted to our inpatient unit for acts of sexual inappropriateness towards his eight-year-old sister. On assessment, he disclosed that he regularly watched internet nude porn images of nude women and scenes of intercourse. Admittedly, the lack of parental supervision is obvious, but this case gives us insight into the complex nature of the porn problem and is the primary subject of this manuscript. As a parent of a young boy, I often ask myself these questions: At what age do children or youths start watching porn? Does porn adversely influence sexual attitudes and beliefs? Does porn lead to more violence, especially against women? Does porn lead to mental disorders like depression, body dysmorphia and eating disorders? Could porn possibly have benefits such as for sex education?

Based on a literature review, the results are mixed. Causal relationships are not established but there are some risk factors. Peter and Valkenburg conducted a study of peer-reviewed English journal articles from 1995 to 2015, to determine the effects of watching pornography on adolescents. They concluded that watching pornography was linked to a more permissive attitude towards sex and stronger gender-stereotypical sexual beliefs.³ Users were mostly male and were 'thrill seekers' at a more advanced pubertal stage and often were in dysfunctional families. They were more likely to have sexual intercourse and casual sex which can be related to perpetration and victimization. The authors pointed out the study's limitations. These limitations were pervasive and the common impediments to most sexual behavior studies. Ethical challenges are always primary. Sexual behavior studies cannot have controls for obvious reasons.

Braun et al. and Lo et al. conducted cross-sectional investigations and found strong correlations between exposure to internet sexually explicit content, earlier and more varied sexual activities, and engagement in sexual behaviors associated with deleterious sexual and mental health consequences^{4, 5} Adolescents who self-



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PERSPECTIVE

reported accessing sexually explicit websites had an increased number of sexual partners, participated in a broader array of sexual activities, and often used alcohol and/or drugs in their sexual experiences. These behaviors were linked to an elevated risk of sexually transmitted diseases and unintended pregnancies. As Peter and Valkenberg state: "We must consider limitations



Figure 1. Boys are exposed to porn about age 10 to 11 and girls about age 12 to 13. By age 16 about 70% of boys watch porn four to five times per week.

a report in 1970 that suggested there was no evidence of individual negative effects of watching porn. Additional research and changes in public perception no longer favor that benign interpretation of frequent viewing of pornography.

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What are some possible solutions to

with the study's design, including the survey mode and sampling procedure, which contribute to bias.' Subsequently, there is debate over how early researchers can ask such questions in a survey.

The earliest age noted in the studies was 10 yearsold, which also corresponds to the average age at which young boys are exposed to porn, for girls by age 12 to 13 (Figure 1). There is a lack of longitudinal follow up which could help determine future criminal behavior as most studies are cross sectional surveys in young adults. As no random controlled studies can ethically be done in youth porn use, we cannot control the environment and rule out all the confounding factors that may influence porn's effect on future criminal behavior. Body image can be influenced by social media but does pornography per se increase the risk of negative body image? It is difficult to determine based on the multiple influences that children and young youths have in the 21st century. Does viewing pornography itself lead to depression or anxiety? Most likely not, but it can increase the isolation that plagues today's young and further reduce motivation to seek gratification elsewhere, especially in beneficial social relationships.

A common concern to parents and researchers is whether pornography can be an addiction. In a landmark study in 2005, Nestler proposed that the ventral tegmental area nucleus accumbens pathway in part mediates the acute positive effects of rewards from natural incentives for survival like food and sex. This is similar to exogenous compounds like illicit drugs.⁶ This has been confirmed over the years, which gives substance to porn being often addiction and a legitimate public health problem. It is interesting to note that just a few decades earlier the Commission

the porn problem? Limiting access is a preventative treatment strategy but presently seems impossible. From personal smartphones to ubiquitous internet access, youths have many portals to pornographic material. To address this, parental control apps are marketed which signal inappropriate use to parents and help curb porn viewing. There is some evidence for using Motivational Interviewing for pornography with favorable results.7 Group therapy on porn use and abuse has been beneficial. There is also a role for Acceptance and Commitment Therapy.⁸ In pharmacotherapy, antidepressants such as selective serotonin reuptake inhibitors are the first-line pharmacological treatment for sexual addiction; naltrexone may also have some benefits.9 Comorbid psychiatric disorders, like depression and anxiety, should be identified and treated. Most of these porn viewing children and adolescents have a deep sense of shame and guilt; strong parental and school support is essential for recovery. Ultimately parental awareness, supervision and guidance are the keys to having a healthy view of sex. Sex education might include instruction on contraception, risky sexual behavior, HIV, prevention of sexually transmitted diseases, and maintaining sexual health.

Much of contemporary sex education has been defaulted to schools. Recently, there has been a debate about the inclusion of graphic photographs of intercourse between genders in school libraries. This issue has both strong proponents and strong opponents. Most importantly, having a trusted adult in the school, such as an impartial counselor, may facilitate communication and enhance the sex education process. It would be beneficial to have parents engaged in the process as well. Schools may also benefit from a proper prevention program similar to those for addiction. A school in Malaga, Spain, tried to develop and implement a contemporary educational/preventative program with mixed results.¹⁰ While the Diagnostic and Statistical Manual of Mental Disorders (DSM 5-TR) doesn't recognize internet use disorders, the American Psychiatric Association (APA) recognizes internet use disorders as a growing concern including problematic use of internet pornography.¹¹

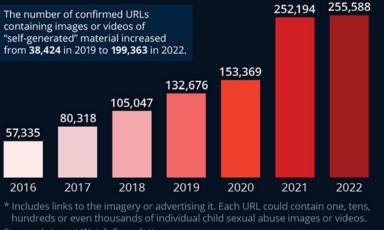
Conclusion

The exact effects of pornography are not yet completely determined and deserve further study. An obsession with porn is detrimental as are most addictions. Given the enormous and increasing exposure of our youth to pornography it deserves to be designated a public health problem and considerable resources devoted to education, research, prevention and treatment of porn habituation and addiction.

1 PICTURE = 1,000 WORDS

Online Child Pornography Skyrockets

Total number of URLs confirmed as containing child sexual abuse imagery worldwide, by year*



undreds or even thousands of individual child sexual abuse images or videos. urce: Internet Watch Foundation



The US hosts more child sexual abuse content online than any other country and accounts for about 30% of the global total of child sexual abuse material according to Internet Watch Foundation, more than any other country.

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