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## Review Article

# Pairing Peer Education and Social Media for Adolescent Smokers with Disabilities

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**Tobacco usage among adolescents with and without disabilities is associated with negative outcomes in health and finance. To combat usage, inclusive peer education combined with social media outreach may benefit efforts to minimize, prevent, and discontinue tobacco use in adolescents with and without disabilities. This article aims to concisely review current literature associated with tobacco usage, associated with the term health outcomes, and social media usage; specifically connecting the relationships with adolescents with and without disabilities.**

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## Pairing Peer Education and Social Media for Adolescent Smokers with Disabilities

Smoking has been linked to several negative outcomes<sup>[1]</sup>. Nicotine, found in tobacco, has powerful and lasting effects on the developing brain, and adolescent exposure is associated with impaired cognition, attention, memory, and mood (U.S. Department of Health and Human Services). Particularly for individuals with disabilities, tobacco use may exacerbate impeding behaviors and characteristics<sup>[2]</sup>. The intricate relationship between social, economic, and health factors associated with disability poses risks for substance use, unhealthy habits, and addiction<sup>[3]</sup>. In addressing the negative impact of smoking on adolescents, researchers have explored intervention strategies. A systematic review by Dodd et al.<sup>[4]</sup> suggests that peer-education interventions show evidence of effectiveness. Additionally, Lazard<sup>[5]</sup> found promise in social media campaigns educating about the harms of e-cigarette usage.

## Peer Education for Tobacco Use

Peer mentors, individuals of the same age, can provide support towards a common goal. In Turkey, Bilgiç and Günay<sup>[6]</sup> discuss the potential positive impact of systematically planned peer education in changing the smoking behaviors of adolescents. Khambayat et al.<sup>[7]</sup> emphasize the effectiveness of peer-led programs in India, including peer-to-peer education and support, in preventing e-cigarette use. Peer educators, trained to understand and communicate the dangers of e-cigarettes, offer non-judgmental support to their

peers. In Finland, Kiuru et al.<sup>[8]</sup> suggest that addressing smoking trends in adolescents involves not only promoting resistance to peer pressure but also focusing on peer selection and challenging the perception that smoking is favorable.

In the United States, Glover-Kudon et al.<sup>[9]</sup> found that raising the minimum legal age for tobacco sales to twenty-one, based on peer, family, or cultural groups, may accelerate a decline in tobacco prevalence. Lakon et al.<sup>[10]</sup> and Mamudu et al.<sup>[11]</sup> reported similar findings on the influence of peers on smoking behavior, indicating the potential impact on electronic nicotine delivery systems use.

## Adolescents with Disabilities and Tobacco Use

Among adolescents with disabilities, Senders and Horner-Johnson<sup>[12]</sup> found higher rates of cigarette use, e-cigarette use, and dual use. Krahn et al.<sup>[13]</sup> reported differences in health outcomes for individuals with disabilities, highlighting higher rates of unmet healthcare needs, unhealthy lifestyle behaviors, mental health and chronic diseases, and social determinants of poor health. Chen et al.<sup>[14]</sup> emphasized the importance of peer engagement, noting its influence on social outcomes for autistic adolescents.

Beck Wells (2023) suggests that evidence-based peer education programs may benefit adolescents with disabilities by reducing tobacco use and promoting positive decision-making, self-determination, and independent living skills. Wagemaker et al.<sup>[15]</sup> highlight the potential for peers to promote prosocial behavior in inclusive settings.

## Social Media and Peer Education

Combining peer education with social media may be a beneficial pathway to support smoking cessation and avoidance in adolescents, including those with disabilities. Elmore et al.<sup>[16]</sup> found that media-related cognitions significantly influenced adolescents' perceptions of social approval for alcohol and tobacco use.

In the context of social media, Ågren et al.<sup>[17]</sup> reported a preference for peer support among young people with learning disabilities. Lazard (2021) suggested that social media campaigns can effectively reach youth, potentially through peer-to-peer sharing. Lyu et al.<sup>[18]</sup> recommended a combined approach, involving social media-based peer mentoring interventions for e-cigarette cessation.

However, there are challenges that may impede the applicability and practicality of pairing peer education and social media. Moorhead et al.<sup>[19]</sup>, in their systematic review, stated that while there are many benefits to the use of social media for health communication, the information exchanged needs to be monitored for quality and reliability, and the users' confidentiality and privacy need to be maintained. In a more recent systematic review, Chen and Wang<sup>[20]</sup> concluded that although several new usages have emerged since Moorhead et al.'s review, such as advancing health research and practice, social mobilization, and facilitating offline health-related services and events, research gaps continue to exist concerning advancing the strategic usage of social media based on audience, assessing the impact of social media in health interventions, appreciating the impact of health identity development, and resolving privacy

concerns. These health implications and social media findings can be applied to the health associations of tobacco usage in adolescents and the usage of social media. Next steps include further investigation and the creation of peer-mentoring social media programs that incorporate feasibility, acceptability, and efficacy for adolescents, which may be beneficial to support positive health outcomes.

## **Conclusion**

Tobacco usage in adolescents, with and without disabilities, is associated with negative outcomes. Inclusive peer education combined with social media outreach may be effective in minimizing, preventing, and discontinuing tobacco use in adolescents with disabilities. The creation of such a program should be considered, with further investigation into the usefulness of peer education and social media programs, building on the insights from previous research.

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Melissa Beck Wells confirms responsibility for the following: study conception and design, literature acquisition and analysis, and manuscript preparation.

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### *Conflicts of interest*

The author has no conflicts of interest to declare.

### *Data availability*

I did not analyze or generate any datasets because this work proceeds within a theoretical and mathematical approach.

### *Informed consent*

No direct participants were utilized in this study, so no informed consent was collected.

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