



Smoking and e-cigarette use in young adults with blindness, deafness, or serious vision or hearing impairments

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Significance

Minority populations including people with disabilities are frequently excluded from large-scale surveys which gather data on smoking, a leading contributory factor in health inequalities. People who are blind or have long-lasting serious vision impairment, or deaf or with serious hearing impairment (BSVI/DSHI) comprise such minority populations. Data on smoking prevalence in these groups are very limited worldwide and there is a scarcity in the scientific press. As a consequence, disability-related inequalities that these groups suffer may

be exacerbated by lack of important health-related data necessary to understand tobacco use in these groups and also to develop appropriate health interventions where needed. Young adults with long-lasting BSVI/DSHI are particularly poorly represented in this regard. This study examines smoking and e-cigarette use in young adults (20-year-olds) in Ireland with BSVI/DSHI and compares them with non-vision/hearing impaired 20-year-olds.

Methods

We used weighted data from Wave 4 of the national longitudinal study *Growing Up in Ireland* (GUI) Cohort '98 (n=5,190) when participants were 20 years old (2019). Ethical approval was granted by the GUI Research Ethics Committee, Department of Children and Youth Affairs. Participants were asked whether they had long-lasting “Blindness or a serious vision impairment” and/or “Deafness or a serious hearing impairment” (yes/no). Ever and current smoking and e-cigarette use were measured by whether participants responded yes to “ever” used and yes to “occasional” or “daily” use.

Results

Among 20-year-olds, 1.9% (n=97) reported BSVI and 1% (n=49) DSHI. Ever-smoking was lower for those with these sensory impairments (69.5%, n=93) than for those without (74%, n=3,714). Prevalence for all other measures was higher for those with BSVI/DSHI than for those without. Ever e-cigarette use was 58% (n=78) vs 47.5% (n=2383); current smoking 42.1% (n=57) vs 37.4% (n=1889); and current e-cigarette use 16.9% (n=23) vs 13.2% (n=667) but only ever e-cigarette use was statistically significant (p=.01).

Conclusion

Current smoking and e-cigarette ever and current use is at least as high in 20-year-olds with BSVI/DSHI as it is in those without. Limitations are that numbers in our sample are small and our joint analysis may have occluded differences between the two groups. Nonetheless, targeted interventions for young adults with blindness, deafness or serious vision/hearing impairments are called for.

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