

## 8.24 Prevalence of chronic health conditions among young adults living in Ireland and associations with smoking and e-cigarette-use

<sup>1,2</sup>Joan Hanafin, <sup>1</sup>Salome Sunday, <sup>1</sup>Luke Clancy

<sup>1</sup> *TobaccoFree Research Institute Ireland (TFRI) TU Dublin, Aungier Street, Dublin 2, Ireland;* <sup>2</sup> *Department of Sociology, University of Limerick, Limerick, Ireland.*

**Background:** There are myriad barriers to equality, including health equality, for persons with disabilities [1]. Young adults with long-lasting health conditions, impairments or disabilities (LHC) face pervasive social and material hardship [2]. Smoking is a leading cause of morbidity and premature death, contributing substantially to inequalities [3,4] yet little is known about smoking and even less about e-cigarette-use in this population. We report on smoking and e-cigarette use in Irish 20-year-olds reporting LHC.

**Methods:** We use data from Wave 4 of *Growing Up in Ireland Cohort '98*, n=5,190, when participants were 20 years old [3]. 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:** 22.2% (n=1151) had one or more LHC (Table 1). Learning (10.5%, n=543), psychological/emotional (7.0%, n=365) and pain (5.7%, n=297) were the most frequently reported difficulties (Table 2). Young adults with LHC had statistically significantly higher prevalence of current smoking (41.0 vs 36.5%) and current e-cigarette use (15.6% vs 12.6%) (Table 3).

**Conclusion:** Smoking and e-cigarette use is significantly higher in 20-year-olds with LHC adding further inequality to the lives of these rarely-surveyed young adults. Targeted surveys and interventions are required.

**Keywords:** disabilities, smoking, e-cigarettes, young adults.

### Disclosures:

**Funding:** This study was funded by Grant number 209, Royal City of Dublin Hospital Trust.

**Conflict of Interest:** The authors declare that they have no conflict of interest.

**Acknowledgement:** The data that support the findings were used under license for the current study, and are available from Central Statistics Office Ireland but restrictions apply. <https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/dataforresearchers/rmfregister/>). Wave 4 ethical approval was granted by the GUI Research Ethics Committee, Department of Children and Youth Affairs.

**Corresponding Author:** Professor Joan Hanafin <https://orcid.org/0000-0002-8016-2266>

### References:

1. Mannan, H., MacLachlan, M., McVeigh, J. and EquitAble Consortium, 2012. Core concepts of human rights and inclusion of vulnerable groups in the United Nations Convention on the rights of persons with disabilities. *Alter*, 6(3), pp.159-177.
2. Emerson, E., Honey, A., Madden, R. and Llewellyn, G., 2009. The well-being of Australian adolescents and young adults with self-reported long-term health conditions, impairments or disabilities: 2001 and 2006. *Australian Journal of Social Issues, The*, 44(1), pp.39-54.
3. Laaksonen M, Rahkonen O, Karvonen S, et al. Socioeconomic status and smoking: analysing inequalities with multiple indicators. *Eur J Public Health* 2005;15:262–9.

4. Hanafin, J. and Clancy, L., 2015. History of tobacco production and use. In *The tobacco epidemic* (Vol. 42, pp. 1-18). Karger Publishers.
5. McNamara, E., O'Reilly, C., Murray, A., O'Mahony, D., Williams, J., Murphy, D., McClintock, R. and Watson, D., 2021. Growing Up in Ireland-National Longitudinal Study of Children: Design, Instrumentation and Procedures for Cohort'98 (Child Cohort) at Wave 4 (20 years of age).

Table 1. Number of long-lasting conditions or difficulties of Young Adults (20-year-olds), GUI Cohort '98 (Wave 4)

<i>Do you have any of the following long-lasting conditions or difficulties? (Yes/No to 1 or more)</i>	N (%)
No conditions	4038 (77.8)
1 Condition	793 (15.3)
2 Conditions	247 (4.8)
3 or more conditions	111 (2.1)
Total	5189 (100.0)

Table 2. Type of long-lasting conditions or difficulties of Young Adult (20-year-olds), GUI Cohort '98 (wave 4)

<i>Do you have any of the following long-lasting conditions or difficulties? (Yes/No)</i>	Yes N (%)	No N (%)	Total
Blindness or serious vision impairment	97 (1.9)	5092 (98.1)	5189 (100.0)
Deafness or a serious hearing impairment	49 (1.0)	5140 (99.0)	5189 (100.0)
Mobility	94 (1.8)	5096 (98.2)	5190 (100.0)
Intellectual	230 (4.4)	4960 (95.6)	5190 (100.0)
Learning	543 (10.5)	4647 (89.5)	5190 (100.0)
Psychological or emotional	365 (7.0)	4822 (92.9)	5187 (100.0)
Pain	297 (5.7)	4892 (94.3)	5189 (100.0)

Table 3. Smoking and e-cigarette use among young adults with and without long-lasting conditions or difficulties (20-year-olds), GUI Cohort '98 (wave 4)

<i>Number of long-lasting conditions or difficulties</i>				
	No Condition	At least 1 condition	Total	P-value
<i>Smoking/E-cigarette Use</i>	4038 (77.8)	1151 (22.2)	5189 (100.0)	

Ever-Smoked (Wave 4)				
No	1018 (25.3)	326 (28.9)	1344 (26.1)	
Yes	3004 (74.7)	803 (71.1)	3807 (73.9)	0.02
Current Smoking (Wave 4)				
No	2565 (63.5)	679 (59.0)	3244 (62.5)	
Yes	1474 (36.5)	472 (41.0)	1946 (37.5)	0.01
Ever used e-cigarettes (Wave 4)				
No	2127 (52.9)	564 (50.0)	2691 (52.2)	
Yes	1896 (47.1)	564 (50.0)	2460 (47.8)	0.09
Current e-cigarette use (Wave 4)				
No	3528 (87.4)	972 (84.4)	4500 (86.7)	
Yes	511 (12.6)	179 (15.6)	690 (13.3)	0.01