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Research paper

Increases in suicidal thoughts disclosure among adults in France from 2000 to 2021

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ABSTRACT

Background: The objective of the study was to investigate the prevalence of suicidal ideation disclosure over the past two decades in nationally representative samples of the general population, and to identify factors associated with disclosure.

Methods: Data were drawn from consecutive nationally representative cross-sectional Health Barometer surveys. The 2000, 2005, 2010, 2014, 2017, and 2021 waves were pooled to examine disclosure among those who reported 12-month suicidal ideation. Logistic regressions were performed to identify factors associated with the odds of disclosure.

Results: Across all waves (n = 124,124), 6014 of adults (4.7 %) reported 12-month suicidal ideation, and among them, 49.7 % talked to someone about it. Disclosure was 39 % in 2000, 44.6 % in 2005, 49.9 % in 2010, 52.8 % in 2014, 47.2 % in 2017, and 64.8 % in 2021. Female gender, a prior suicide attempt, higher education, inactive status, and younger age were associated with significantly greater odds of disclosure. Each survey wave was also associated with a greater likelihood of disclosure when compared to 2000, 1.31 (95 % CI, 1.08–1.59) in 2005, 1.69 (95 % CI, 1.38–2.07) in 2010, 1.89 (95 % CI, 1.52–2.34) in 2014, 1.47 (95 % CI, 1.21–1.79) in 2017, and 2.99 (95 % CI, 2.43–3.68) in 2021.

Limitations: Cross-sectional surveys.

Conclusions: In the general population of France, adults with suicidal ideation were increasingly more likely to disclose their ideation to someone in recent years. Factors associated with odds of disclosure should inform national suicide prevention strategies to identify subgroups who remain less likely than others to disclose their ideation.

1. Introduction

The importance of suicide prevention as a public health goal has been underlined in national suicide prevention programs presenting strategies and indicators that could be applied worldwide (World Health Organization, 2018). Suicide prevention programs include the promotion and provision of easily accessible help by individuals with suicidal thoughts and behaviors and their environment; along with early detection and intervention (WHO, 2021). Disclosure of suicidal thoughts represents the act of expressing to someone else that one is experiencing suicidal thinking, either spontaneously or when specifically asked. As such, disclosure of suicidal thoughts can be viewed as a significant step in the help-seeking process and in the prevention of suicide. While disclosure has potential benefits including social support and mental health treatment, it may also be associated with risks related to stigma, loss of privacy as well as unwanted treatment (Sheehan et al., 2019) including potentially iatrogenic psychiatric hospitalization (Ward-Ciesielski and Rizvi, 2021). Regardless of the reasons one might choose to disclose or to conceal, characterizing individuals that disclose suicidal thoughts will inform future public health interventions aimed at improving public health practices in response to disclosures.

The great majority of research on factors associated with suicidal ideation disclosure was conducted in samples of suicide decedents (Bond et al., 2022; Clark and Blosnich, 2023; Nock et al., 2017), or in clinical

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samples receiving treatment for a mental health problem or following a suicide attempt (Cukrowicz et al., 2014; Fulginiti et al., 2015; Gromatsky et al., 2022). Research on the disclosure of suicidal ideation in representative samples of the general population is scarce, yet such studies represent an important tool for public health prevention strategies as an estimated 19.6 % of those who attempt suicide did not present with a diagnosable disorder prior to their first attempt (Oquendo et al., 2024). For instance, in a large study in a representative sample of four regions of France, one study showed that among adults who had experienced lifetime suicidal ideation, 48.7 % of those with ideation did not disclose it to anyone, 52.3 % among those with no history of prior suicide attempt, and 35.8 % among those with a history of suicide attempt (Husky et al., 2016). Similarly, in a large sample of the general population of region of the Netherlands with an oversampling of older adults, 48 % of those with ideation in the previous 12 months did not disclose their ideation (Mérelle et al., 2018). Lastly, in multivariable models, a prior suicide attempt, female gender, younger age, higher education, being inactive, separated, number of comorbid mental disorders and strong social support were found to be associated with odds of disclosure (Husky et al., 2016). In contrast, the study in the Dutch population reported no evidence of gender, education, marital status in the odds of disclosure, but suggested that ages 35 to 49, poor health, psychological distress, frequent suicidal ideation, and loneliness were associated with disclosure (Mérelle et al., 2018). Considering global changes, the ubiquity of mass media achieved in the past decades, combined with efforts to destigmatize mental health problems (Niederkrotenthaler et al., 2014), it may be particularly relevant to investigate how disclosure has evolved over time. Yet, to our knowledge, no study has investigated whether the prevalence of adults with ideation who disclose their thoughts has changed in recent years.

Characterizing suicidal ideation disclosure among general population adults requires a consideration of factors associated with suicidal ideation itself. National data derived from the Health Barometer surveys in France have shown that 12-month suicidal ideation is highest among younger age groups, Among young adults ages 18 to 25, those who are neither employed nor students or in training are at the highest risk, females, and those living alone also exhibited higher odds of reporting recent ideation (Husky et al., 2024). Overall, among those 18–85 year olds, sociodemographic factors associated with 12-month suicidal ideation in France included younger age, unemployment, living alone, perceived financial difficulties (Léon et al., 2024).

The objective of the present study was to investigate the prevalence of suicidal ideation disclosure in the general population covering the past two decades from 2000 to 2021, drawing on six consecutive nationally representative population surveys conducted in mainland France. The study further examines suicidal ideation disclosure in adults with or without a lifetime history of suicide attempt and identifies factors associated with odds of disclosure.

2. Methods

2.1. Survey procedure

The Health Barometer is the main population-based survey conducted by the French national public health agency, Santé Publique France. Every four to five years, a needs assessment survey is offered to a nationally representative sample of adult residents of metropolitan France in order to identify health behaviors and determinants as well as health inequities. The Health Barometer used a two-stage random sampling strategy (Richard et al., 2018). First, household selection was performed using randomly generated phone numbers, followed by the random selection of one per household (Kish, 1949). If a household or respondent refused or could not be contacted, there was no replenishment. In parallel, mobile phone numbers were randomly generated to reach individuals who may not have had a landline. Data were collected by trained interviewers from a professional survey company using a computer-assisted telephone interview (CATI). Consent was obtained over the phone. National surveys conducted by Santé Publique France are exempt from review by a formal ethical review board. However, the procedures were required to be registered with the French commission on data privacy and public liberties (Commission Nationale Informatique et Liberté). In the present study, we pooled data from six surveys waves conducted in 2000, 2005, 2010, 2014, 2017, and 2021 respectively. Survey response rate was 62.8 % in 2000, 58.2 % in 2005, 52.7 % in 2010, 61.3 % in 2014, 48.5 % in 2017 and 44.3 % in 2021. For analysis, we removed cases with missing data ($n = 1230$) on any of the variables included the models, yielding a final sample of ($n = 124{,}124$) respondents for analysis, among whom 6014 reported 12-month suicidal ideation and indicated whether they had disclosed it or not. Analyses regarding disclosure of suicidal ideation were limited to those 6014 who reported past-year suicidal ideation.

2.2. Survey variables

2.2.1. Suicidal thoughts and behaviors

Respondents were asked "Over the past 12 months, have you thought about [your] suicide?"

Lifetime suicide attempt was assessed with the following question: "In your life, have you ever attempted suicide?"

2.2.2. Disclosure of suicidal thoughts

Consistently at each survey wave, respondents who reported suicidal ideation in the past 12 months were asked "Have you spoken to anyone about this?", referring to suicidal ideation reported within the prior 12 months.

2.2.3. Sociodemographic variables

Sociodemographic variables included gender (male, female), age (18–24, 25–34, 35–44, 45–54, 55–64, 65–75 years old), region of residence (rural, urban other than Paris, Paris region), education (Less than highschool, highschool degree, some college or more) occupational status (employed, seeking employment, student, retired, other inactive), living alone (yes, no), and income level terciles (from lowest (first tercile) to highest (third tercile), and undisclosed income).

2.3. Data analysis

Descriptive analyses were performed to characterize the prevalence of ideation and disclosure by age group, by gender, by lifetime suicide attempt status, and by survey wave using cross-tabulations and Chi square tests. Prevalences and corresponding 95 % CI were reported. Chi square statistics were used to assess the presence of prevalence differences between survey waves stratified by sex and age groups, and by presence or absence of lifetime suicide attempt. Bivariable and multivariable logistic regressions were then performed to identify factors associated with the odds of disclosure among those who reported12-month suicidal ideation, overall then stratified by lifetime suicide attempt status. These associations were assessed by odds ratios (OR) and adjusted odds ratios (aOR) and presented with their 95 % confidence intervals (CI). All analyses were weighted using the number of eligible individuals and telephone lines in the household, based on data from the most recent Employment survey by the National Institute of Statistics and Economic Studies (INSEE). Analyses were performed using SAS version 9.

3. Results

3.1. Prevalence of suicidal thoughts disclosure by survey wave and by age group

In the pooled sample, 4.70 % of all adults reported 12-month suicidal ideation, and among them, 49.70 % talked to someone about it. When

comparing the year 2000 to 2021, the prevalence of 12-month suicidal thoughts was not significantly different for most age groups (Fig. 1), with the exception of the 35 to 64 year olds who exhibited a significant reduction in suicidal thoughts. In contrast, disclosure of suicidal thoughts significantly increased between 2000 and 2021 in all age groups except for adults ages 45 to 54 and 65 to 75 who showed a non-significant increase. Among those with ideation, disclosure was 39.04 % in 2000, 44.57 % in 2005, 49.92 % in 2010, 52.75 % in 2014, 47.20 % in 2017, and 64.84 % in 2021.

3.2. Prevalence of suicidal thoughts disclosure by survey wave and by lifetime suicide attempt status

Overall, when pooling all waves, the prevalence of disclosure of suicidal ideation (Fig. 2) was significantly higher among those with a prior suicide attempt (55.49 %) as compared to those with no history of suicide attempt (46.76 %) ($\chi^2 = 39.23$, df = 1, $p < 0.0001$). However, when examining presence or absence of prior history of attempt within survey waves, statistically significant differences were only found in 2005 ($\chi^2 = 29.04$, df = 1, $p < 0.0001$) and 2021 ($\chi^2 = 10.95$, df = 1, $p = 0.0009$), while the increased prevalence of disclosure among those with prior suicidal behavior was not statistically significant in 2000 ($\chi^2 = 0.30$, df = 1, $p = 0.59$), 2010 ($\chi^2 = 0.40$, df = 1, $p = 0.53$), and 2014 ($\chi^2 = 1.47$, df = 11, $p = 0.23$), in 2017 ($\chi^2 = 2.76$, df = 1, $p = 0.10$).

3.3. Prevalence of suicidal thoughts disclosure by survey wave and by gender and by lifetime attempt status

In the pooled sample with lifetime attempt, a significantly higher proportion of women (57.24 %) disclosed suicidal thoughts as compared to men (51.30 %, $\chi^2 = 5.77$, df = 1, $p = 0.017$). Similarly, in the pooled sample without lifetime attempt, a significantly higher proportion of women (51.36 %) disclosed suicidal thoughts as compared to men (41.72 %, $\chi^2 = 35.66$, df = 1, $p < 0.0001$). Within individual survey waves (Fig. 3), however, this gender difference was not consistently significant throughout the years.

In those with lifetime suicide attempt, statistically significant gender differences were observed only in 2021 (78.70 % versus 55.70 %, $\chi^2 = 20.49$, df = 1, $p < 0.0001$), while not in 2000 (38.98 % versus 47.26 %, $\chi^2 = 0.88$ df = 1, $p = 0.35$); 2005 (59.23 % versus 51.02 %, $\chi^2 = 1.93$ df = 1, $p = 0.17$), 2010 (51.32 % versus 51.20 %, $\chi^2 = 0.00$ df = 1, $p = 0.98$), in 2014 (56.44 % versus 53.87 %, $\chi^2 = 0.19$ df = 1, $p = 0.66$), in 2017 (52.30 % versus 44.61 %, $\chi^2 = 1.66$ df = 1, $p = 0.20$).

In those without lifetime suicide attempt, statistically significant gender differences were observed in 2000 (42.89 % versus 32.51 %, $\chi^2 = 5.79$, df = 1, $p = 0.015$), 2005 (43.86 % versus 35.90 %, $\chi^2 = 5.83$ df = 1, $p = 0.016$), 2010 (53.54 % versus 44.36 %, $\chi^2 = 5.24$ df = 1, $p = 0.02$), 2017 (51.40 % versus 39.65 %, $\chi^2 = 10.87$ df = 1, $p < 0.001$), and 2021 (65.93 % versus 54.76 %, $\chi^2 = 7.55$, df = 1, $p = 0.006$), while not in 2014 (53.37 % versus 47.86 %, $\chi^2 = 1.33$ df = 1, $p = 0.25$).

3.4. Factors associated with suicidal thoughts disclosure

In the overall population of adults who reported suicidal ideation in the previous 12 months, multivariable analyses revealed that female gender (aOR = 1.49, 95 % CI, 1.34–1.67), a prior history of suicide attempt (aOR = 1.24, 95 % CI, 1.10–1.39), higher education (aOR = 1.22, 95 % CI, 1.06–1.39), occupational status - other inactive (aOR = 1.23, 95 % CI, 1.03–1.46) were associated with significantly greater odds of disclosure (Table 1). In addition, adjusting for all other variables, each survey wave was also associated with a greater likelihood of disclosure when compared to 2000, [1.31 (95 % CI, 1.08–1.59) in 2005, 1.69 (95 % CI, 1.38–2.07) in 2010, 1.89 (95 % CI, 1.52–2.34) in 2014, 1.47 (95 % CI, 1.21–1.79) in 2017, and 2.99 (95 % CI, 2.43–3.68) in 2021]. In contrast, as compared to the 18 to 24 age group, older age was associated with lower aORs of disclosure, with 0.76 (95 % CI, 0.59–0.96) in the 45 to 54 year olds, 0.53 (95 % CI, 0.41–0.70) in the 55 to 64 year olds, and 0.51 (95 % CI, 0.35–0.73) in the 65 to 75 year olds.

Multivariable analyses on the factors associated with disclosure among those with versus those without a prior history of suicide attempt

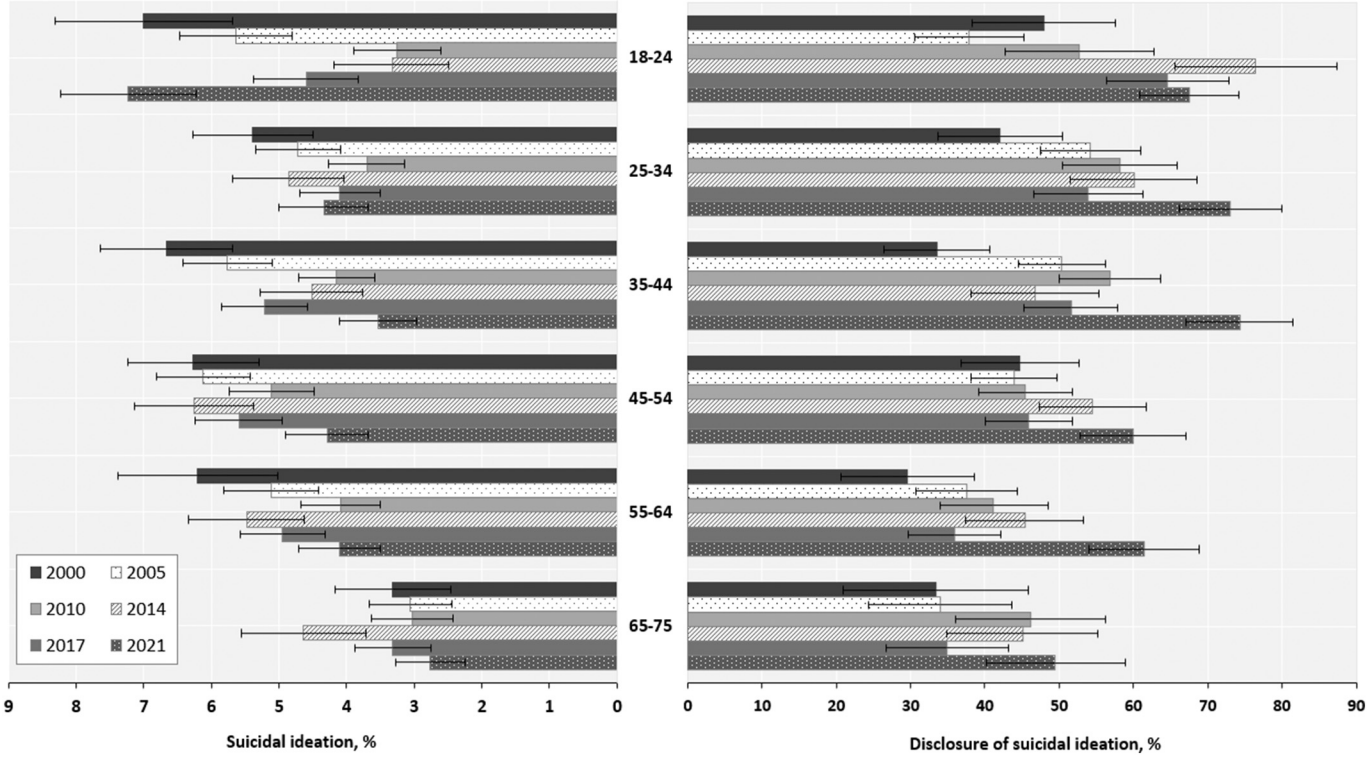

Fig. 1. Prevalence of suicidal ideation ($n = 124{,}124$) and disclosure of suicidal ideation ($n = 6014$) by age group and by survey wave.

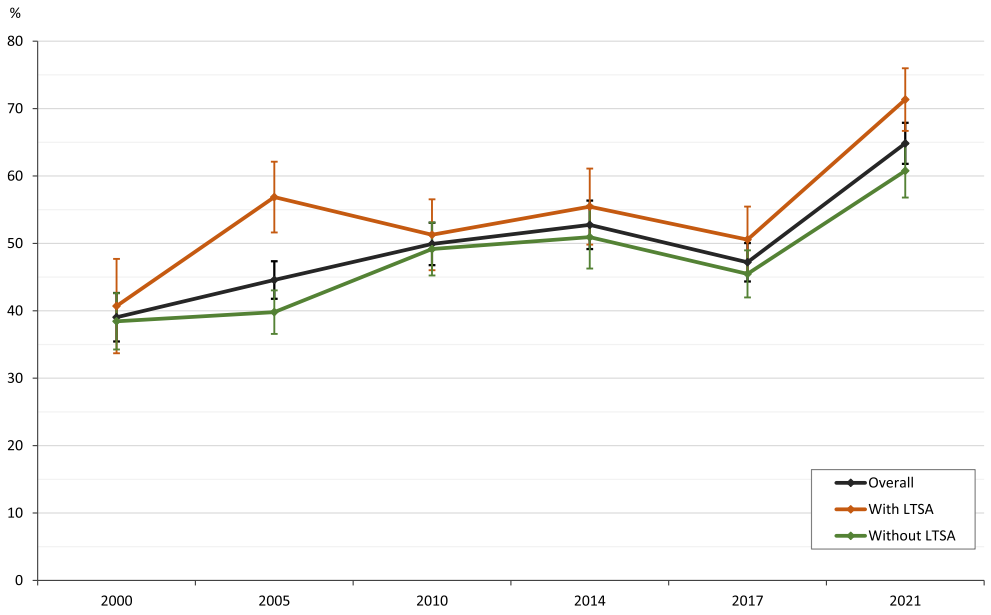

Fig. 2. Overall prevalence of disclosure of suicidal ideation (n = 6014) by lifetime suicide attempt status and by survey wave.
Note: LTSA, Lifetime Suicide Attempt.

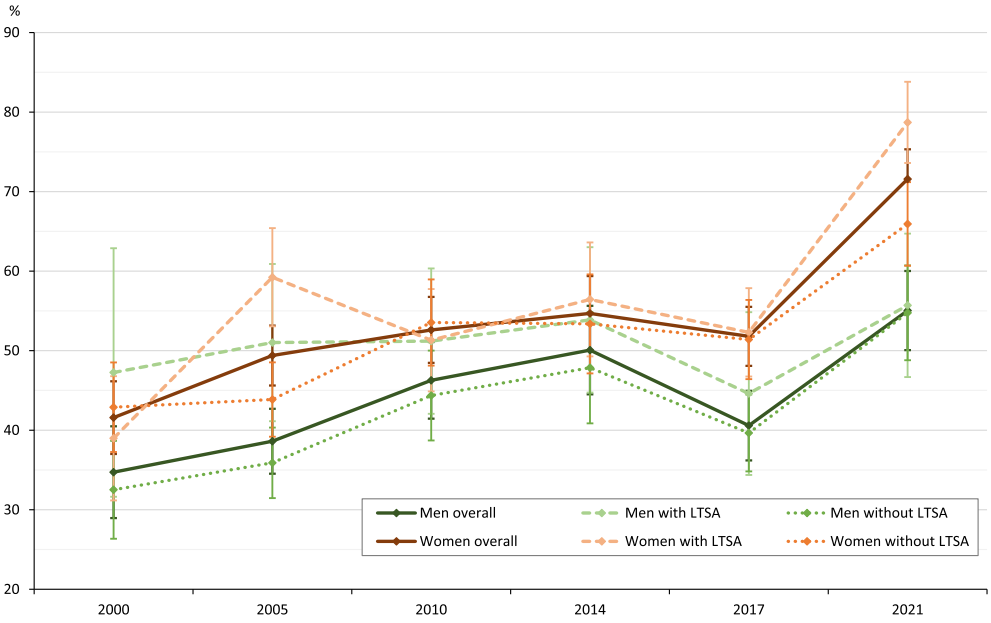

Fig. 3. Prevalence of disclosure of suicidal ideation (n = 6014) among men and women by lifetime suicide attempt status and by survey wave.
Note: LTSA, Lifetime Suicide Attempt.

are presented in Table 1. Among those with a history of suicide attempt, greater odds of disclosure are associated with female gender (aOR = 1.47, 95 % CI, 1.19–1.81), higher education (aOR = 1.56, 95 % CI, 1.20–2.03), being retired (aOR = 2.21, 95 % CI, 1.39–3.53), and each survey wave: aORs for wave following the 2000 survey were 2.05 (95 % CI, 1.41–2.99) in 2005, 1.70 (95 % CI, 1.17–2.45) in 2010, 2.07 (95 % CI, 1.41–3.04) in 2014, 1.58 (95 % CI, 1.10–2.27) in 2017, and 4.30 (95 % CI, 2.92–6.32) in 2021. Older age was also associated with lower aORs of disclosure, with 0.38 (95 % CI, 0.25–0.59) in the 55 to 64 year olds, and 0.21 (95 % CI, 0.11–0.40) in the 65 to 75 year olds as compared to the 18 to 24 age-group.

Among those with no prior history of attempt, factors associated with increased odds of disclosure in multivariable analyses included female gender (aOR = 1.50, 95 % CI, 1.32–1.71), undisclosed income level (aOR = 1.37, 95 % CI, 1.06–1.78), occupational status - other inactive (aOR = 1.30, 95 % CI, 1.03–1.65), and survey wave with aOR of 1.71 (95 % CI, 1.34–2.18) in 2010, 1.83 (95 % CI, 1.41–2.39) in 2014, 1.47 (95 % CI, 1.17–1.86) in 2017, and 2.58 (95 % CI, 2.01–3.31) in 2021. Lower aORs were associated with the 55 to 64 age group (aOR = 0.64, 95 % CI, 0.45–0.90) and being retired (aOR = 0.72, 95 % CI, 0.53–0.99).

4. Discussion

Pooling data from nationally representative surveys covering 2000 to 2021, the present investigation revealed significant increases in the prevalence of suicidal ideation disclosure in the general population from

Table 1
Bivariable and multivariable associations between sociodemographic factors and suicidal ideation disclosure in the overall sample, and among those with or without a history of lifetime suicidal attempt.

	Disclosure of suicidal ideation											
	Overall N = 6014				Lifetime suicide attempt *N* = 1918				No lifetime suicide attempt *N* = 4096			
	OR	95 % CI	AOR	95 % CI	OR	95 % CI	AOR	95 % CI	OR	95 % CI	AOR	95 % CI
Lifetime suicide attempt												
Yes	1.42***	1.27–1.58	1.24***	1.10–1.39	–	–	–	–	–	–	–	–
No	Ref		Ref		–	–	–	–	–	–	–	–
Gender												
Men	Ref		Ref		Ref		Ref		Ref		Ref	
Women	1.48***	1.33–1.64	1.49***	1.34–1.67	1.27*	1.05–1.55	1.47***	1.19–1.81	1.48***	1.30–1.68	1.50***	1.32–1.72
Age												
18–24	Ref		Ref		Ref		Ref		Ref		Ref	
25–34	1.02	0.84–1.24	1.06	0.83–1.35	0.95	0.68–1.32	0.98	0.66–1.45	1.07	0.84–1.35	1.11	0.81–1.51
35–44	0.83	0.69–1.00	0.89	0.70–1.14	0.81	0.59–1.11	0.91	0.62–1.35	0.84	0.67–1.06	0.88	0.65–1.21
45–54	0.73***	0.61–0.87	0.76*	0.59–0.96	0.77	0.56–1.05	0.79	0.53–1.70	0.72**	0.58–0.90	0.74	0.54–1.00
55–64	0.56***	0.47–0.68	0.53***	0.41–0.70	0.50***	0.36–0.70	0.38***	0.25–0.59	0.60***	0.47–0.76	0.64**	0.45–0.90
65–75	0.53***	0.43–0.67	0.51***	0.35–0.73	0.46***	0.31–0.68	0.21***	0.11–0.40	0.59***	0.45–0.77	0.75	0.48–1.18
Living alone												
Yes	1.01	0.90–1.13	1.03	0.91–1.16	0.97	0.80–1.17	1.08	0.87–1.32	0.99	0.85–1.15	1.00	0.86–1.17
No	Ref		Ref		Ref		Ref		Ref		Ref	
Education												
Less than high school	Ref		Ref		Ref		Ref		Ref		Ref	
High school degree	1.25**	1.08–1.43	1.12	0.96–1.30	1.24	0.97–1.58	1.08	0.83–1.41	1.30**	1.09–1.54	1.14	0.95–1.38
Some college or more	1.27***	1.12–1.43	1.22**	1.06–1.39	1.61***	1.25–2.06	1.56**	1.20–2.03	1.26**	1.08–1.46	1.13	0.96–1.33
Income level												
First tercile	Ref		Ref		Ref		Ref		Ref		Ref	
Second tercile	0.82**	0.72–0.93	0.91	0.79–1.04	0.75**	0.61–0.93	0.80	0.63–1.02	0.90	0.77–1.05	0.95	0.80–1.12
Third tercile	0.86*	0.75–0.99	1.04	0.90–1.21	0.97	0.75–1.25	1.03	0.77–1.38	0.90	0.77–1.06	1.02	0.86–1.22
Undisclosed	1.04	0.85–1.27	1.18	0.95–1.45	0.89	0.63–1.26	0.84	0.58–1.22	1.18	0.92–1.50	1.37*	1.06–1.78
Occupational status												
Employed	Ref		Ref		Ref		Ref		Ref		Ref	
Student	1.29*	1.06–1.56	0.99	0.76–1.30	1.35	0.93–1.96	0.98	0.60–1.58	1.27*	1.01–1.60	0.99	0.71–1.39
Seeking employment	1.10	0.95–1.29	1.01	0.86–1.19	1.23	0.95–1.60	1.20	0.91–1.58	0.98	0.81–1.19	0.94	0.77–1.15
Retired	0.70***	0.60–0.81	1.03	0.80–1.33	0.82	0.62–1.09	2.21***	1.39–3.53	0.65***	0.54–0.78	0.72*	0.53–0.99
Other inactive	1.23*	1.05–1.44	1.23*	1.03–1.46	1.00	0.79–1.27	1.23	0.93–1.61	1.33*	1.06–1.66	1.30*	1.03–1.65
Wave												
2000	Ref		Ref		Ref		Ref		Ref		Ref	
2005	1.26*	1.04–1.52	1.31**	1.08–1.59	1.92***	1.34–2.76	2.05***	1.41–2.99	1.06	0.85–1.32	1.10	0.88–1.39
2010	1.56***	1.28–1.89	1.69***	1.38–2.07	1.53*	1.07–2.20	1.70**	1.17–2.45	1.55***	1.22–1.96	1.71***	1.34–2.18
2014	1.74***	1.42–2.15	1.89***	1.52–2.34	1.81**	1.25–2.62	2.07***	1.41–3.04	1.66***	1.29–2.15	1.83***	1.41–2.39
2017	1.40***	1.16–1.69	1.47***	1.21–1.79	1.49*	1.05–2.12	1.58*	1.10–2.27	1.34*	1.07–1.67	1.47**	1.17–1.86
2021	2.88***	2.35–3.52	2.99***	2.43–3.68	3.63***	2.51–5.24	4.30***	2.92–6.32	2.48***	1.95–3.16	2.58***	2.01–3.31

Note: Data are weighted. *: $p < .05$. **: $p < .01$. ***: $p < .001$.

39.04 % of those with 12-month suicidal ideation in 2000 to 64.84 % in 2021, in contrast with the absence of a significant increase in ideation over that time period. Increases in the prevalence of disclosure were true both for men and for women, across all age groups with the exception of the 45 to 54 and the 65 to 75 who displayed a non-significant increase. Increases in disclosure were observed both among adults with a history of suicide attempts and without, and prior history was associated with a higher prevalence of disclosure (55.49 % vs 46.76 %). In multivariable analyses, in addition to survey wave, and prior history of attempt, factors associated with greater odds of disclosure included female gender, younger age, higher education and being inactive. Factors associated with odds of disclosure varied as a function of prior history of attempt.

To the best of our knowledge, this is the first report of a significant increase in the disclosure of suicidal ideation in the general population in recent years. While suicide ideation did not increase during that time frame, disclosure did, suggesting that adults share sensitive personal thoughts more readily in 2021 than they did twenty years prior. Although the cross-sectional survey data used in the present analyses did not allow us to identify contributing factors or underlying mechanisms explaining the differences in rates of disclosure over time, we can envisage several hypotheses. Consistent with tenets of Bandura's Social Cognitive Theory, disclosure of suicidal ideation may in part be elicited by thought processes involving self-efficacy and positive outcome expectations (Bandura, 1986). Based on the latter model, in order for disclosure to become possible, one has to be confident enough to engage in disclosure (self-efficacy) and one likely expects that the outcome of disclosure will be positive (Kelder et al., 2015). Socioenvironmental factors then further elicit disclosure, for instance, through normative beliefs providing a general sense of social acceptability of suicidal thoughts disclosure, observational learning through influential role models, opportunities to disclose in one's direct environment, and social support (Kelder et al., 2015). It is possible that both cognitive factors and socioenvironmental factors have evolved in recent years in a manner consistent with the promotion of suicidal thoughts disclosure. Future research is needed to identify the specific mechanisms involved in order to identify targets likely to impact disclosure. Relatedly, another hypothesis is that the observed increases in disclosure of ideation may reflect societal changes in mental health and suicide-related stigma (Cybulski et al., 2021; Pescosolido et al., 2021). While a recent study in the U.K. has shown that a decrease in societal stigma could not account for local increases in self-reported mental health problems (Gagné et al., 2023), less stigma may have facilitated disclosure of suicidal ideation in recent years. The fact that the highest prevalence was found in 2021 may also suggest that part of the increased disclosure may have occurred during the COVID-19 pandemic during which general population mental health and suicide risk was extensively publicized (Marzano et al., 2023). In parallel, increased disclosure may be related to suicide prevention efforts, such as efforts in the advertising of national suicide

hotlines, and the creation of a new "3114" hotline in 2021. It is noteworthy that increases in disclosure were occurring while rates of suicide deaths in France were decreased during the time frame of the surveys investigated here (Observatoire National du Suicide, 2022). Although the present findings cannot be considered as having contributed to decreased suicide death nationally, it remains that patterns of increased disclosure at the population level are of considerable import to policy makers, clinicians, and researchers. Yet, it is important to consider that the present findings observed in a national sample of residents of metropolitan France should not be construed as applicable globally. Cross-national surveys are needed to understand suicidal ideation disclosure in the context of cultural attitudes and beliefs, and in the context of country-specific policies and mental health programs.

While the proportion of adults experiencing ideation who shared it with someone has increased, it remains that over one third of ideators in the general population does not. Focusing on the disclosure of suicide attempts, rather than ideation, one prior report pooling Health Barometers from 2000 to 2017 estimated that one in five had told no one about their attempt (Jollant et al., 2022). Not sharing one's suicidal thoughts may be due to a number of reasons including one not deeming that ideation to require services, or perceiving a need for help (Calear and Batterham, 2019). Suicidal thoughts can be fleeting and are not in and of themselves a strong predictor of suicide death (Franklin et al., 2017). In parallel, people determined to end their life have often denied suicidal ideation at the last visit they had with their mental health provider (Obegi, 2021), which could reflect that either they were not experiencing ideation when they were asked or that they were but chose not to inform their provider in order to avoid any hindrance to their suicide plan. Furthermore, non-disclosure may be associated with shame or suicide-related stigma (Fulginiti and Frey, 2019; Hom et al., 2017). Lastly, sharing suicidal thoughts with someone also implicates the recipient and their anticipated reaction or outcome expectation, with fear of involuntary treatment including hospitalization (Fulginiti and Frey, 2019; Richards et al., 2019). Thus identifying factors associated with disclosure is key to identifying groups less likely disclose their thoughts.

In the present analyses and pooling all surveys, factors associated with increased odds of disclosure included female gender, younger age, higher education and being inactive. These factors are consistent with prior findings pertaining to disclosure of lifetime ideation in representative samples of four regions of France (Husky et al., 2016). Increased disclosure among women further aligns with the influence of gender in earlier studies (De Luca and Wyman, 2012; Vannoy and Robins, 2011) and known general trends in treatment-seeking behavior (Kovess-Masfety et al., 2014; Wang et al., 2007a) possibly influenced by traditional male roles that may imply that help-seeking as a sign of weakness (Murphy, 1998). Older age was also found to be associated with lower disclosure, which is concerning as older adults and older men in particular have the highest rates of suicide death at the national level (Observatoire National du Suicide, 2022). Higher education, which was found to be associated with disclosure is also known to be associated with greater access to care in general (Wang et al., 2007b). The group of inactive adults, excluding students, those seeking employment, and retirees, may in fact include persons who are not engaged in the workforce due to their medical or psychological ability to do so. This would be consistent with the notion that disclosure was more likely among those with increased need operationalized as the number of comorbid disorders (Husky et al., 2016). Taken together, these factors contribute to identifying vulnerable groups that are still either reluctant to share their suicidal ideation or who may not know who to share it with.

5. Limitations

The present investigation holds limitations. The focus on 12-month ideation and disclosure thereof does not allow us to decipher contemporary from retrospective disclosure, that is sharing one's ideation while ideation is current vs letting someone know they experienced ideation days, weeks or months prior. It is reasonable to conceive that current vs distal disclosure may be associated with different factors as, if ideation is no longer current, what the recipient of the disclosure could do with the information is likely to differ substantially. In addition, the survey did not allow us to examine to whom ideation was disclosed consistently across all waves, whether individuals shared their ideation with a health professional, a close friend, family member or another person. Furthermore, the severity of 12-month suicidal ideation or its duration was not assessed in the Health Barometer. Similarly, the Health Barometer did not assess lifetime psychopathology, despite its known association with likelihood of disclosure (Husky et al., 2016). As a consequence, it was not possible to delve deeper in the investigation of disclosure by mental health status. Furthermore, decreases in general population survey response rates have been observed in large epidemiologic surveys in high income countries in recent years, and France's Health Barometer is no exception with a response rate of 62.8 % in the year 2000 down to 44.3 % in 2021. While it has been argued that low response rates do not necessarily equate to non-response biases (Groves, 2006; Kreuter, 2013), weights were applied to all analyses presented here to adjust for survey participation. Moreover, we excluded 1230 respondents (>1 %) with missing data on any of the variables included in the multivariable models in order to analyze complete cases only. That said, the present findings are consistent with the prevalence advertised in the official reports based on the full sample of each Health Barometer (Léon et al., 2019; Léon et al., 2024) further supporting the absence of selection bias in the present analyses. Lastly, as the Health Barometer did not systematically assess racial/ethnic background, or religious background, we were not able to address how cultural factors may be related to suicidal disclosure.

6. Conclusion

The present findings describe a significant increase in the disclosure of suicidal ideation in the general population over the past decades. It will be important to investigate disclosure in future national surveys in order to determine whether or not increases observed in 2021 remain stable post-pandemic. We further recommend that representative surveys from other regions investigate whether disclosure has increased in recent years. If a greater proportion of individuals expresses suicidal thoughts to others, the health care system should be prepared to handle these disclosures. Policy makers should also consider that while there is no evidence of increased need, there is evidence that persons are more likely to express existing needs.

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CRediT authorship contribution statement

Mathilde M. Husky: Writing – original draft, Methodology, Conceptualization. **Christophe Léon:** Writing – review & editing, Validation, Methodology, Data curation. **Helen-Maria Vasiliadis:** Writing – original draft, Methodology, Formal analysis, Conceptualization.

Declaration of competing interest

None.

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