Published on *Prohuman* (https://www.prohuman.sk)

Suicide mortality trends across Europe in 2015-2025: Societal and community risk factors

Zverejnené v kategórii Psychológia [1] Teoretické príspevky [2] Zdravotníctvo [3]
máj 29 2025

Trendy úmrtnosti v dôsledku samovrážd v Európe v rokoch 2015-2025: Spoločenské a komunitné rizikové faktory

Abstract: Suicide represents a serious public health challenge on a global scale. It reflects complex interactions between psychological, social, and economic determinants. Understanding of suicidal behaviour demands comprehensive, multidisciplinary approaches to prevention and intervention efforts. Thus, this study aimed to compare current epidemiological patterns and trends in suicide across Europe, with particular attention to Eastern and Central Europe, using global and Western European context as a comparative benchmark. We searched the literature published between 2015 and 2025 in the Web of Science, PubMed, CINAHL and Embase, in line with Joanna Briggs Institute (JBI) reccomendations for scoping review. We aimed to provide sufficient evidence pointing towards the multi-causality of suicidal behaviour with the main focus on societal and community factors. A total of 22 eligible studies were identified. This review highlights suicide mortality declining across the European Union in the past decade, however this positive trend conceals significant cross-country disparities, with suicide mortality significantly higher in Eastern Europe. Our study showed, that these differences may reflect both systemic issues in mental health care provision and broader socio-cultural factors, including socioeconomic factors, higher stigmatization of mental health problems, lower access to mental health care, financial barriers, higher alcohol consumption, or higher loneliness and social isolation. It is also crucial to address geopolitical tensions and the resulting economic and social instability that may impact suicide rates. Integrating these dimensions into prevention and intervention framework may provide a more comprehensive understanding of the multilayered and dynamic interplay between environmental, social, and political determinants of health.
Key words: suicide, societal and community risk factors, trends across European countries.

Abstrakt: Samovražda predstavuje vážnu výzvu pre verejné zdravie v globálnom meradle. Odráža zložité interakcie medzi psychologickými, sociálnymi a ekonomickými determinantmi. Porozumenie samovražednému správaniu si vyžaduje komplexné, multidisciplinárne prístupy k prevencii a intervencii. Cieľom tejto štúdie bolo porovnať aktuálne epidemiologické vzorce a trendy v samovraždách naprieč Európou, so zvláštnym zreteľom na krajiny strednej a východnej Európy, pričom globálny a západoeurópsky kontext slúžil ako porovnávací rámec. Do štúdie sme zahrnuli literatúru publikovanú v rokoch 2015 až 2025. Štúdie boli vyhľadávané v databázach Web of Science, PubMed, CINAHL a Embase, v súlade s Joanna Briggs Institute (JBI) odporúčaniami pre scoping review. Zároveň sme sa snažili poskytnúť dôkazy podporujúce koncept multikauzality samovražedného správania, s osobitným zreteľom na spoločenské a komunitné determinant. Celkovo bolo identifikovaných a analyzovaných 22 relevantných štúdií. Táto prehľadová štúdia poukazuje na celkový pokles úmrtnosti v dôsledku samovrážd v krajinách Európskej únie za poslednú dekádu. Tento pozitívny trend však nezohľadňuje výrazné rozdiely medzi jednotlivými krajinami, pričom úmrtnosť na samovraždu je významne vyššia vo východoeurópskom regióne. Naše zistenia naznačujú, že tieto rozdiely môžu odrážať systémové nedostatky v oblasti poskytovania starostlivosti o duševné zdravie, ako aj širšie sociokultúrne faktory, vrátane socioekonomických podmienok, pretrvávajúcej stigmatizácie duševných porúch, nižšej dostupnosti psychologickej a psychiatrickej starostlivosti, vyššej miery konzumácie alkoholu či sociálnej izolácie a osamelosti. Za kľúčové považujeme aj zohľadnenie geopolitického napätia a následnej ekonomickej a sociálnej nestability. Integrácia týchto dimenzií do rámca prevencie a intervencií môže prispieť k hlbšiemu porozumeniu komplexnej a dynamickej prepojenosti medzi environmentálnymi, spoločenskými a politickými determinantmi zdravia.
Kľúčové slová: samovražda, spoločenské a komunitné rizikové faktory, trendy v európskych krajinách.

INTRODUCTION

Suicide represents a serious global public health concern, according to the World Health Organisation, over 700,000 deaths per year are caused by suicide (WHO, 2021) - almost 10 per 100,000 population (WHO, 2020), or one person every 40 seconds (Lovero et al., 2023; Bertuccio et al., 2024). Although suicide death rates are higher in older adults (Alicandro et al., 2019), suicide is currently ranking as the fourth leading cause of death among young adults worldwide (Bertuccio et al., 2024). In 2016, suicide was among the top 10 leading causes of death in Eastern Europe, Central Europe, Western Europe, Central Asia, Australasia, Southern Latin America, and high-income areas of North America (Naghavi, 2019). The majority of the world's suicides occur in Asia, but

suicide and self-harm remain major concerns in Europe as well (Pompili et al., 2020) despite some current trends indicating a decline in suicide-related mortality in EU countries (European Commission, 2024).

During the last decades of the 20th century, declining suicide mortality trends were observed in Eastern Europe, the European Union, the United States of America, and Japan (Levi et al., 2003). The global reduction in suicide rates has been attributed to various factors, including the implementation of targeted prevention strategies and increased mental health support. Over the past decade, the European Union (EU) has witnessed a notable decline in suicide rates as well. In 2021, approximately 47,000 deaths by suicide were recorded, accounting for 0.9% of all deaths that year and equating to an average of 10.2 deaths per 100,000 people. This represents a 13.3% decrease from 2011 with a rate 12.4 per 100,000 (European Commission, 2024).

Despite this overall positive trend, substantial disparities remain among EU member states, with some countries exhibiting suicide rates significantly above the EU average. Challenges remain, particularly in addressing the needs of high-risk groups and regions with persistently high suicide rates. For example, 2021 data show that Slovenia reported the highest suicide rate of all EU countries, with 19.8 deaths per 100,000 inhabitants, followed by Lithuania (19.5), Hungary (15.7), Poland (13.7), and the Czech Republic (13.3). Conversely, Cyprus had the lowest rate at 2.7 per 100,000, followed by Greece (4.2) and Italy (5.9) (European Commission, 2024). Current data also show that suicide mortality was found to be significantly higher in Eastern European Countries (19.2%), and Central Europe (10.1%), when compared to Western European countries (7.5%) (Weaver et al., 2025).

Unlike many other causes of death, suicide does not stem from a single disease process (Gunnell and Lewis, 2005). Rather, it is the result of a complex interplay of multiple factors, including biological influences (e.g., genetic predispositions), psychological traits (e.g., specific personality characteristics), clinical conditions (e.g., co-occurring psychiatric disorders), as well as social and environmental determinants (Turecki et al., 2019). Research shows, that European suicide mortality is higher in populations with a low socioeconomic status (Lorant et al., 2018; Batty et al., 2018), suggesting a significant association between socioeconomic disadvantage and suicide behaviour (Cairns et al., 2018).

A comprehensive understanding of the less-known societal and community determinants influencing suicide trends across Europe is essential for developing even more effective prevention strategies. It is commendable that this objective has been established, as reducing suicide mortality by one-third by 2030 aligns with the broader efforts of the World Health Organization and the United Nations Sustainable Development Goals (United Nations, 2021).

The aim of this study was to explore and synthesize existing evidence on suicide mortality trends across European countries between 2015 and 2025, with a specific focus on Central and Eastern Europe, and identifying and analyzing societal and community-level risk factors. Drawing on a multilevel socioecological framework, the review seeks to highlight how macro- and meso-level determinants, such as economic conditions, social protection policies, healthcare access, public stigma, and community disadvantage, that may have influenced suicide rates over the past decade. The goal is to inform public health strategies by mapping structural drivers of suicide risk beyond the individual level.

METHODS

We followed the Joanna Briggs Institute (JBI) guidelines for scoping reviews (Peters et al., 2020). The multidisciplinary team consisted of four reviewers (LH, VT, DB, IN) with expertise in psychology, psychiatry, medical sciences, and public health. The aim was formed by applying the Population-Concept-Context (PCC) framework. Our study aimed to identify the sources that have been performed within the context of epidemiological patterns and trends (context) of suicide behaviour (concept) with a focus on the situation and possible differences in Eastern/Central and Western Europe (population).

Search strategy process

The search strategy was based on the three-step process recommended by JBI (Peters et al., 2020). We compiled a list of potential search terms after an initial broad search in databases. We searched and identified studies/sources based on reviewing titles, and abstracts, followed by the keywords. The reference lists of the relevant papers were searched for additional resources. Search terms (EN and their SK equivalents) in our review were identified as: suicide, suicidal behaviour, suicide mortality, and suicide attempts. We applied the principle of saturation to verify if new themes were derived with ongoing searches (following e.g. Wang et al., 2023).

Information sources

To identify potentially relevant documents the following bibliographic databases were searched from January 2015 to April 2025. We used scientific databases including Web of Science, PubMed, CINAHL, and Embase. Desktop search was conducted by two authors (LH, IN). We searched also Google Scholar. Grey literature was searched including national registers, governmental data, policy documents, and healthcare-affiliated organizations. Titles, abstracts, and keywords were screened to identify potentially relevant studies. If the

suitability of an article was uncertain, the full text was screened. We also screened the reference lists of the relevant papers for additional resources.

Inclusion and exclusion criteria

The inclusion criteria were original peer-reviewed journal papers with an explicit focus on suicidal behaviour across Europe. We included also systematic reviews and meta-analyses, information from national registers, governmental data, policy documents, information from healthcare-affiliated organizations, and expert opinion papers. We excluded newspaper articles, television reports, guidelines, letters, dissertations, conference abstracts, and economic evaluations. As societal and cultural factors and healthcare systems may have changed over time, we only included sources published in the past decade (from 2015 to 2025).

Data extraction

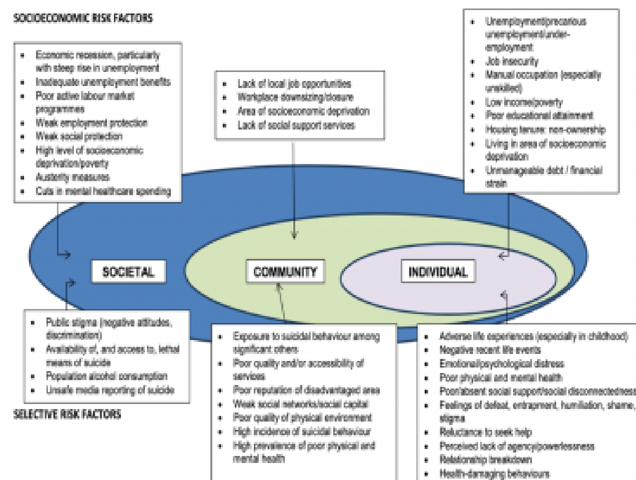
Two reviewers (IN and LH) independently charted the data. A preliminary data extraction was created in line with JBI (Peters et al., 2020) based on the PCC framework and the aims of our study. In case of disagreement in data extraction, consensus was achieved by discussion between the two authors.

Data analysis and synthesis of results

We grouped the information retrieved from the papers by the key themes based on the Model of societal, community, and individual factors influencing suicide (Smith, 2017) used in our study (Figure 1). This model emphasizes the role of societal and community factors related to suicidal behaviour.

For the purposes of this review, we have chosen to adopt the model, which offers a structured framework for understanding the multifaceted risk factors contributing to suicidal behaviour. The model distinguishes between three interconnected levels of influence: (1) societal, (2) community, and (3) individual, and within each level, it further differentiates socioeconomic determinants from other types of risk factors. This layered and comprehensive approach sets the model apart from others in the existing literature by emphasizing the breadth of socioeconomic influences. Given the wide array of factors associated with suicide risk, a selective process was used when incorporating non-socioeconomic determinants. Two key criteria guided their inclusion: firstly, the presence of robust evidence indicating the factor's substantial impact on variations in suicidal behaviour (such as access to lethal means); and secondly, a demonstrated empirical or theoretical link between the factor, socioeconomic disadvantage, and suicide. This model thus provides a valuable lens through which to explore how structural and contextual conditions shape suicide risk across different levels of society (Bambra and Cairns, 2017).

Figure 1. Model of societal, community, and individual factors influencing suicide



[4]

Source: Smith. 2017: In their own words: How do people in the UK understand the impacts of socioeconomic disadvantage on their mental health and risk factors for suicide? In: Cairns, Bambra: The impact of place on suicidal behaviour.

RESULTS

Study characteristics

Type of sources

After title, abstract, keywords, full-text, and reference lists screening, 22 studies met the inclusion criteria. The main data sources were quantitative studies (n=9), systematic reviews (n=6), review articles (n=3), expert

commentaries and strategic reports (n=3), and qualitative studies (n=1). The majority of the included papers (73%) were published in the last 7 years (from 2018 onwards), indicating increasing interest in the area of suicidal behaviour.

Factors influencing suicide rates across the EU

At the societal level, key socioeconomic determinants associated with an increased risk of suicidal behaviour include periods of economic recession and instability, characterized by high unemployment rates, low socioeconomic status, educational disparities, and economic recession. On the community level, major contributing factors encompass weak social capital, substandard physical environments, scarcity of mental health service access, alcohol and substance abuse, behavioral health disorders, and social isolation. At the individual level, heightened suicide risk is linked to adverse labour markets conditions, such as unemployment, insecure or precarious work, underemployment, and low-skilled manual occupation, as well as indicators of low socioeconomic status, including low income, limited educational attainment, lack of home ownership, and residence in socioeconomically disadvantaged neighbourhoods (Bambra and Cains, 2017).

Societal level

Although suicide rates have declined over the past decade, it remains unclear whether socioeconomic disparities in suicide have followed a similar downward trend. Research shows, that European suicide mortality is higher in populations with a low socioeconomic position (Lorant et al., 2018; Batty et al., 2018), moreover suggesting a significant association between socioeconomic disadvantage and suicide behaviour (Cairns et al., 2017). Lorant et al. (2018) analyzed harmonised register-based data from the DEMETRIQ study on suicide mortality follow-up of population censuses, from 1991 and 2001, in European populations aged 35-79. The findings showed that educational disparities in suicide rates were evident, particularly among men, and remained relatively stable over time. Men with lower educational attainment consistently faced a higher risk of suicide compared to those with higher education, with the relative risk increasing slightly from 2.17 to 2.30 over the studied periods (Lorant et al., 2018). Country-specific trends showed variation: absolute inequalities declined in Finland, Hungary, and Switzerland but increased in Lithuania and Poland. Relative inequalities rose in Belgium, Denmark, Hungary, Norway, and Poland, while declining in England and Wales, Estonia, Finland, and Switzerland. Among women, educational differences in suicide were generally small and often not statistically significant, though several Eastern European countries did show modest but significant inequalities. Overall, both absolute and relative socioeconomic disparities among women slightly increased over time (Lorant et al., 2018).

The non-socioeconomic determinants of suicidal behaviour, as outlined in the model, are diverse and multifaceted. Particular attention should be given to those factors that interact with socioeconomic vulnerability, especially during periods of economic recession and uncertainty. Systematic review examined the relationship between sociodemographic variables associated with the prevalence of suicidal behaviour and specific suicide methods in Europe and America (Cano-Montalbán and Quevedo-Blasco, 2018). Sociodemographic variables most associated with suicidal behaviour and suicide methods in Europe and America: a systematic review. The European Journal of Psychology Applied to Legal Context. Vol. 10, p. 15–25., 2018). Their findings showed evidence that men (36% of the studies) and older adults (28%) are more frequently represented among completed suicides, whereas women (30%) and young people (17%) show higher rates of suicide attempts and suicidal behavior. Several socio-demographic factors, such as unemployment (17%), living in rural areas (9%), being unmarried (15%), and having a low level of education (23%), were found to be strongly associated with both suicide and suicidal behavior (Cano-Montalbán and Quevedo-Blasco, 2018).

Divorced individuals face significantly higher suicide risk compared to those who are married, largely due to elevated levels of depression, morbidity, financial stress, and alcohol abuse (Denney et al., 2015; Stack and Scourfield, 2015). The coefficient of aggravation (COA), which compares suicide rates between divorced and married individuals, consistently exceeds one and often ranges from two to three, indicating a much higher risk among the divorced. For instance, in 2001 in the Czech and Slovak Republic, divorced men aged 25–55 had a suicide rate nearly three times higher than their married counterparts (Stack and Scourfield, 2015). A meta-analysis of 36 studies found that divorced men had a suicide risk 4.08 times higher, and divorced women 2.96 times higher, than married individuals, confirming the strong association between divorce and suicide risk (Kyung-Sook et al., 2018).

Having children was found to significantly reduce suicide risk for women in most categories, while the protective effect was much weaker for men. This suggests a gendered impact of parenthood on suicide risk. However, these findings are based on limited data from a few Scandinavian countries, highlighting the need for further research in diverse cultural and geographical contexts (Stack, 2021).

The findings show that in post-socialist countries, divorce rates are the strongest predictor of suicide, while female labor force participation, urbanization, and GDP per capita are associated with lower suicide rates. In contrast, in non-socialist countries, both urbanization and female labor force participation are linked to higher suicide rates. For the entire sample of 25 European countries, higher GDP per capita is associated with lower suicide rates (Bošnjak et al., 2024). Overall, the influence of socioeconomic factors varies by region and period, emphasizing the need for context-sensitive approaches to suicide prevention (Bošnjak et al., 2024).

The study by Ferreira et al. (2019) showed that suicide rates during the most recent EU recession would likely have been even higher without the mitigating impact of social protection programs, particularly for working-age individuals and their children. According to the authors, these groups should be prioritized in future economic crises or proactively included in social safety nets (Ferreira et al., 2019). On the other hand, a study conducted in V4 countries revealed significantly higher suicide rates among the elderly, potentially linked to pension insecurity, social isolation, and the loss of social status after retirement (Lochmannová et al., 2025). These findings highlight the need for targeted prevention efforts led by governments in collaboration with local communities. At the societal level, public stigma, directed toward individuals who have attempted suicide or those who are unemployed or marginalized from the labour market, along with high rates of alcohol consumption, are likely to exacerbate suicide risk among socioeconomically disadvantaged populations (Konig, et al., 2018; Smith, 2017). The historical use of psychiatry as a political tool, which today continues to challenge mental health care provision in primary or community care settings and worsens mental health stigma (Hook and Bogdanov, 2021).

Community level

On the community level, elevated suicide rates, exposure to suicidal behaviour, weak social capital, substandard physical environments (particularly housing conditions), and inadequate access to quality local services are all more prevalent in deprived areas and contribute to elevated suicide risk. While these factors may not exclusively define socioeconomic disadvantage, they often coexist with it and significantly heighten vulnerability to suicidal behaviour (Konig, et al., 2018; Smith, 2017).

Research has shown that suicide mortality rates often increase during economic downturns, driven by factors like rising unemployment and reduced health service availability (Konig, et al., 2018). While socioeconomic influences on suicide have been widely studied, the impact of changes in mental health service access remains insufficiently examined. Cross-national differences in suicide rates may also reflect variations in mental health care systems, as well as legal, cultural, and reporting practices (Fu et al., 2021). The limited accessibility of mental health care services was found to be prevalent in several Central and Eastern European countries. For instance, in Poland, Hungary, Bulgaria, Slovenia, and Slovakia, access to timely and high-quality psychological and psychiatric care remains critically insufficient (Krupchanka and Winkler, 2016). In Slovakia alone, the average waiting time for psychiatric services can extend up to seven weeks, with only 306 practicing psychiatrists nationwide, equating to just 4.9 psychiatrists per 100,000 inhabitants, in stark contrast to the EU average of 17.17. Furthermore, in countries such as Slovakia, Romania, and Estonia, the cost of therapy is high, amounting to the equivalent of approximately two days' wages for individuals earning minimum wage, thereby further limiting access to essential mental health support (Barbato et al., 2016).

Despite the overall increase in mean age at death, research indicates that suicide continues to be a leading cause of mortality among individuals aged 10 to 49 years in numerous regions worldwide. In particular, Central and Eastern Europe exhibit an elevated suicide risk, which can be according to the WHO attributed to factors such as a higher prevalence of alcohol and substance abuse when compared to Western Europe, as well as a higher prevalence of mental and behavioural health disorders (Fu et al., 2021; Weaver et al., 2025).

Since Durkheim’s (2005) foundational work, the family and religion have been central to sociological research on suicide. These institutions are thought to counteract egoism by encouraging individuals to focus on others, marriage fosters care for spouses and children, while religion promotes adherence to shared norms. Both are associated with improved mental health, which is a known protective factor against suicide. Numerous studies have reinforced the idea that strong family ties and religious involvement can reduce suicide risk (Stack, 2021).

Furthermore, research highlights a strong link between suicide and social isolation, while also emphasizing the protective role of social support against suicidality (Motillon-Toudic et al., 2022). The study conducted in Slovenia (Gomboc et al., 2022) examined the prevalence of death ideation and suicidal ideation (SI) across four age groups in the Slovenian general population and assessed the role of emotional and social loneliness as predictors of SI. Findings revealed that younger individuals reported higher levels of SI, death ideation, and previous suicide attempts. Emotional loneliness emerged as a significant predictor of SI across all age groups. These results underscore the importance of addressing emotional loneliness in suicide prevention strategies across the lifespan (Gomboc et al., 2022). Loneliness and decreased social participation are common especially in Eastern European countries (Surkalim et al., 2022). A recent meta-analysis by Surkalim et al. (2022) indicates that the prevalence of loneliness in the general population ranges from 1.8% to 6.5% in Northern European countries and from 5.9% to 24.2% in Eastern European countries. These findings underscore the importance of promoting protective factors, such as family cohesion and social integration, while simultaneously addressing detrimental cultural norms and practices that may elevate the risk of suicide, as essential components of long-term suicide prevention strategies.

DISCUSSION

This study aimed to evaluate current epidemiological patterns and trends in suicide across Europe, with particular attention to Eastern and Central Europe. We also aimed to provide evidence pointing towards the multi-causality of suicidal behaviour with the main focus on societal and community factors. Our findings show a need for multi-layered and cross-cutting preventative strategies to further decrease suicide-related death rates.

This review highlights that while overall suicide mortality has declined across the European Union in recent decades (European Commission, 2024), this positive trend conceals significant disparities across countries, age groups, genders, and socio-economic strata. Suicide mortality was found to be significantly higher in Eastern European Countries (19.2%), and Central Europe (10.1%), when compared to Western European countries (7.5%) (Weaver et al., 2025). Thus, despite the declining trend of suicide mortality, the review of regional differences, particularly between post-socialist and non-socialist countries, underscores the need for contextualized approaches to suicide prevention (Makinen, 2000, Lochmannová et al., 2025). Suicide remains a complex and multifactorial phenomenon shaped by a confluence of biological, psychological, clinical, social, economic, and cultural factors.

Socioeconomic inequalities continue to play a central role (Lorant et al., 2018, Batty et al, 2018), with individuals from disadvantaged backgrounds, especially those with low educational attainment, unemployment, or living in rural or marginalized areas, consistently showing elevated suicide risk (Cairns et al., 2017). These patterns are particularly pronounced among men, who also account for the vast majority of completed suicides (Lorant et al., 2018). The observed regional differences in suicide rates between Eastern and Western European Countries may reflect both systemic issues in mental health care provision and broader socio-cultural factors, including socioeconomic factors (Lorant et al., 2018; Batty et al., 2018), higher stigmatization of mental health problems (Hook and Bogdanov, 2021), lower access to mental health care (Krupchanka and Winkler, 2016; Barbato et al., 2016), higher alcohol consumption (Weaver et al., 2025), or higher loneliness and social isolation (Gomboc et al., 2022). Although suicide rates in Central European countries have followed a downward trend, the legacy of post-communist transitions continues to influence mental health outcomes as they remain disproportionately high compared to Western Europe, particularly among men and the elderly (Lochmannová et al., 2025). In 2019, Central European countries showed a substantially higher proportion of male suicides (82%) compared to global (69%) and Western European (75%) averages (Lochmannová et al., 2025). While divorce and unemployment are strong predictors of suicide in post-socialist countries, in non-socialist contexts, urbanization and labor force participation of women show a more complex relationship (Denney et al., 2015; Stack and Scourfield, 2015; Kyung-Sook et al., 2018). Moreover, the economic downturn of 2008 served as a critical turning point in many countries, revealing how macroeconomic stressors, especially when coupled with reductions in mental health service capacity, can lead to increased suicide mortality, particularly among men.

Other factors that may currently play a role in experiencing psychological distress may stem from the current geopolitical situation in Europe and the COVID-19 pandemic. The past major historical events that shaped psychological well-being and social integration, such as in the the Great Depression or health pandemics, have been shown to impact well-being and suicide rates, though the extent of these effects depends heavily on the broader socio-political context (Stockard, 2025). Although no significant increase in suicide rates was observed globally during the periods examined throughout the COVID-19 pandemic (Da Cunha Varella et al., 2024), it remains essential to consider the potential delayed or indirect effects of pandemic-related factors, such as long COVID, social isolation, and economic hardship, on suicidal behavior (Weaver, 2025). A longer follow-up period may offer further insight into these trends, particularly in regions with limited data availability. Enhancing data quality through improved reporting mechanisms and the implementation of real-time surveillance systems is crucial for timely and effective suicide prevention and support efforts.

Emerging crises such as the ongoing Russo-Ukrainian war conflict also highlight the need for further research in association with suicidal behaviour and increase in psychological distress. A recent survey conducted across five major European countries—namely the United Kingdom, France, Germany, Italy, and Spain—between 41% and 55% of respondents indicated that they considered the occurrence of another world war within the next five to ten years to be either "very likely" or "fairly likely" (YouGov, 2025). Recent evidence also suggests that these conflicts may contribute to increased psychological distress especially in neighboring Eastern/central European countries, underscoring the importance of examining the broader impact of current geopolitical tensions, and the resulting economic and social instability on mental health including suicide rates in neighboring countries (Chudzicka-Czupała et al., 2023).

Cultural and social factors, such as family structure, religious engagement, and social support networks, are also essential in understanding suicide risk and resilience (Stack, 2021, Denney et al., 2015). Evidence suggests that strong family bonds, marriage, and parenthood, particularly motherhood, are protective against suicide, while divorce, social isolation, and emotional loneliness serve as significant risk factors (Stack, 2021; Gomboc et al., 2022; Motillon-Toudic et al., 2022). These findings highlight the critical importance of integrating social support mechanisms into national suicide prevention strategies. However, many of these areas, such as the impact of parenthood or the specific cultural scripts related to masculinity and suicide, remain underexplored in large-scale European studies.

Study Limitations

This article is subject to several limitations that are common in suicide epidemiology research. Similar to global estimates, our findings may be affected by delays in data reporting and the limited availability of accurate records, particularly in certain regions or demographic groups. Under-reporting of suicide remains a concern, often due to stigma, cultural factors, or procedural delays in establishing intent- cases may initially be classified as deaths of undetermined cause until further investigation is completed (Weaver, 2025). Additionally, recorded

causes of death in some countries may lack sufficient detail to allow precise classification, which could affect the reliability of suicide-specific estimates. For example, in the Slovak Republic, the rate of deaths by suicide is 9.7 per 100,000 inhabitants. This implies that in terms of the rate of completed suicides, the situation in Slovakia is better than in most OECD countries (Bražinová, 2024). However, research indicates that some deaths by suicide in Slovakia, are coded as deaths of undetermined intent due to insufficient evidence during examination or autopsy. The mortality rate from undetermined intent in Slovakia is seven times higher than the average rate in the EU while in most EU countries, deaths of undetermined intent account for a maximum of 20% of the suicide mortality rate, in Slovakia this figure is more than twice as high (Bražinová, 2024).

Implications

To meet the global target of reducing suicide mortality by one-third by 2030, as set by the World Health Organization and the United Nations Sustainable Development Goals, for European countries adopting a multi-level and multidisciplinary approach is crucial to strengthen mental health systems, promote social equity, ensure access to care for high-risk groups, enhancing surveillance and research, and implementing community-based interventions that address both individual vulnerabilities and broader social determinants. Only through coordinated action across health, social, economic, and policy sectors can we make meaningful progress in reducing suicide mortality and its profound individual and societal impacts.

It seems that future studies may benefit from the inclusion of broader contextual and structural factors such as political conditions, crises, and wars, all of which have been shown to profoundly affect the population's mental health. Pandemic-related factors, such as long COVID, increased social isolation, economic stress, and disruptions to healthcare services, may have influenced suicide trends in ways that are not yet fully understood (Weaver, 2025). It is therefore important to consider the potential impact of the COVID-19 pandemic on both the incidence and reporting of psychological distress including suicidal behavior across Europe. Another under-researched factor that may play a role in suicide behaviour in different European regions is the role of the natural environment and built environment including the proportion of green space, comfortable, and convenient walking, biking areas, or public transport connections between the community and urban center (Jiang et al., 2021; Helbich et al., 2018) that differs across Europe (Baycan-Levent et al., 2009). Based on the findings of our study, the model of societal, community, and individual factors influencing suicide proposed by Smith et al. (2017) should be expanded to incorporate additional determinants. In particular, the built environment and access to green and natural spaces play a critical role in shaping mental health, including suicide behaviour (Jiang et al., 2021; Helbich et al., 2018). The model would also benefit from the inclusion of factors such as political conditions, crises, wars, and pandemics, all of which may diminish psychological well-being.

CONCLUSION

The findings reviewed in this study emphasize that suicide is a multifaceted phenomenon influenced by complex interactions. The observed differences in suicide rates between Eastern and Western European countries may reflect both systemic issues in mental health care provision and broader socio-cultural factors, including socioeconomic factors, higher stigmatization of mental health problems, lower access to mental health care, financial barriers, higher alcohol consumption, or higher loneliness and social isolation. Enhanced data collection, longitudinal studies, and a stronger focus on social determinants, such as loneliness, family structure, cultural and political transformations, and socio-economic inequality, will be essential to achieving the WHO goal of reducing suicide mortality by one-third by 2030. It is also crucial to address geopolitical tensions and the resulting economic and social instability that may impact suicide rates. Integrating these dimensions into this framework would provide a more comprehensive understanding of the complex and dynamic interplay between environmental, social, and political determinants of health.

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Táto práca bola podporovaná Agentúrou na podporu výskumu a vývoja na základe Zmluvy č. APVV-22-0587 a Výskumnou a inovačnou autoritou na základe zmluvy č. VAIA 09I01-03-V04-00101.

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Prohuman, 2009-2024, ISSN 1338-1415
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