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ARTICLE

Suicide Rates and Olympians: What Do We Know?

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Abstract

Background: Death by suicide is a global problem among the general population. Factors that contribute to the risk of death by suicide include age (chronological), sex (assigned at birth), and economic factors (high-income versus lower-income countries). Investigations of death by suicide focused on athletes remain sparse with limited attention devoted to athletes competing at elite levels of sport. **Purpose:** This paper describes results from a preliminary study of death by suicide reported between 1896 and 2023 for Olympic athletes. **Methods:** This study combined a non-experimental research design with archival data to address this question: What do we know about suicide rates and Olympians? **Results:** The mean age of death by suicide for Olympic athletes was 44.44 years (SD = 15.33 years). Death by suicide was more common in males and athletes representing high-income countries. The frequency of death by suicide between 1896 and 2023 was variable (Median = 2.00 suicides per year). **Conclusions:** Olympic athletes do not seem immune to dying by suicide. **Health & Fitness Journal of Canada 2023; 17(1):16-19.**

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Keywords: Elite Athletes, Premature Mortality, High-Performance Sport, Risk Stratification, Infographics

Introduction

Death by suicide is a global problem in society (Centers for Disease Control and Prevention [CDC], 2022a). Suicide, as defined by the CDC, is death by injuring oneself whereby death was the intent (2022a). Public health organizations report that suicide rates vary due to a multitude of sociodemographic factors (CDC, 2022b). Suicide rates differ based on chronological age, with more than half (58%) of the deaths by suicide occurring before the age of 50 (World Health Organization [WHO], 2021). Males (12.6 per 100,000 people; WHO, 2021) report higher rates of suicide compared with females (5.4 per 100,000 people; WHO, 2021). High-income countries typically report the highest age-standardized rates

of suicide, yet the largest portion of deaths by suicide occur in lower-income and middle-income countries (WHO, 2021), which implicates economic factors in risk of death by suicide. Overall, it appears that age (chronological), sex (assigned at birth), and economic factors (income status of countries) may be important risk stratification factors to consider relative to predicting death by suicide in the general population. These observations prompt this question: Does this apply to athletes?

Limited research to date has focused on death by suicide in athletes, especially those competing at 'elite' levels of sport. In collegiate sport, research conducted with data from the National Collegiate Athletic Association (NCAA) shows the incidence of death by suicide reported over a nine-year

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period was 1.35 per 100,000 in male athletes versus 0.37 per 100,000 in female athletes (Rao et al., 2015). However, rates of death by suicide for male and female athletes competing in NCAA sports were lower in comparison with age-matched students from the general population (Rao et al., 2015). In elite sport, one study of Olympic athletes reported a lower incidence of death by suicide in this cohort compared with the general population (Rao, 2018). Extrapolating from these studies has led experts to suggest that sport may play a protective role in lowering the risk of death by suicide for athletes (Rao, 2018). Nevertheless, media accounts profiling death by suicide for Olympic athletes (e.g., Rapkin & Cohen, 2020) make it apparent that suicide is a preventable cause of premature death in this cohort, which requires evidence-based guidelines that support intervention (Rao, 2018).

With limited investigation of suicide in athletes to date, further research seems justified to determine (1) the frequency of suicide rates in Olympic athletes, and (2) potential risk factors predisposing Olympic athletes to elevated suicide risk.

Methods

This study used a non-experimental research design conducted with archival data to investigate death by suicide in Olympic athletes (Olympedia, n.d.).

This study was reviewed and cleared by the Health Research Ethics Board at Brock University (REB File #22-291). The protocol used in this study was developed using an iterative process detailed in Wilson et al. (2023).

Results

Key findings from this study are presented using an infographic and have been summarised below.

What is the Typical Age of Death by Suicide Recorded for Olympic Athletes?

The mean age of death by suicide for Olympic athletes was 44.44 years (SD = 15.33 years). The age of death by suicide reported by Olympic athletes ranged from 18.00 years to 95.00 years.

Is Death by Suicide More Common in Male Versus Female Olympic Athletes?

Ninety-one percent of Olympic athletes that died by suicide between 1896 and 2023 were male and nine percent were female.

Is Death by Suicide More Common in Olympic Athletes from High-Income Versus Low-to-Middle Income Countries?

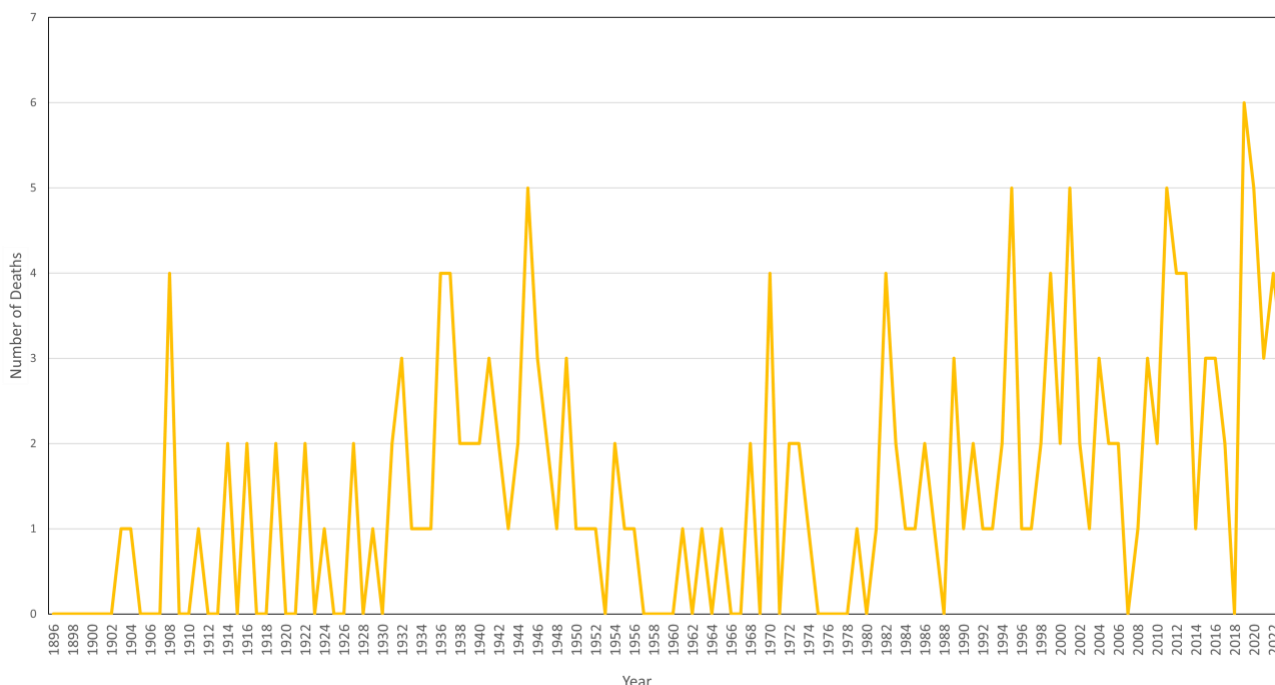
Eighty-seven percent of Olympic athletes that died by suicide represented 'high-income' countries. Most of these Olympians (12.3%) competed for the United States of America. Death by suicide was reported by Olympic athletes from 48 different countries recognised by the International Olympic Committee.

Is Death by Suicide Reported by Olympic Athletes Stable or Variable?

The frequency of death by suicide per calendar year from 1896 to 2023 reported for Olympic athletes was variable (see Figure 1 for details). The median frequency of death by suicide from 1896 to 2023 reported for Olympic athletes in this cohort was 2.00 deaths per calendar year (Mean = 2.18 deaths, SD = 1.26 deaths).

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Figure 1: Line graph plotting the frequency of death by suicide reported for Olympic Athletes per calendar year. Points defining the trajectory of this line graph denote total number of deaths by suicide per calendar year on record for this cohort.



Conclusions

The infographic produced from this study provides an omnibus view of death by suicide in Olympic athletes relative to known risk factors observed in the general population, which include: (1) Age (chronological); (2) Sex (assigned at birth); (3) Economic factors (high-income versus lower-income countries). Overall, the key finding emerging from this study can be summarised as follows: Olympic athletes do not appear 'immune' to death by suicide. Limitations of this study (e.g., use of archival data, non-experimental research design) notwithstanding, it seems reasonable to suggest evidence-based guidance to mitigate death by suicide in Olympic athletes should consider key factors during the risk stratification process. As such, it may seem prudent to use the variables highlighted in this study (e.g., age [chronological], sex

[assigned at birth]) to formulate a comprehensive risk stratification protocol that identifies Olympic athletes classified at elevated risk of death by suicide to support intervention by trained health professionals to mitigate premature mortality in this cohort. In closing, the last two decades have witnessed the emergence of mental health in athletes as a bona fide area of sport psychology research. Based on this observation, we pose the following question: Is it time to confer the same level of research scrutiny on death by suicide reported by athletes competing at elite levels of sport where the performance narrative is often defined as 'winning' (at all costs)?

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Authors' Qualifications

The authors' qualifications are as follows: Philip M. Wilson BSc, MSc, PhD; Emily A. Bonisteel BSc (KIN); Diane E. Mack BA, MA, PhD.

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