



Misleading estimates of suicidal behaviours among junior and high school adolescents in Ghana

To the editor

We welcome Ayodeji Emmanuel Iyanda and colleagues' analysis of the 2012 World Health Organisation Global School-based Health Survey (WHO-GSHS) data from Ghana that provides important insights, however, we have two concerning issues with the study as published online (Iyanda et al., 2022).

[1]. The authors are too sanguine in – wrongly – reporting cross-tabulation values as prevalence estimates of suicidal ideation (SHS = 52.3%; JHS = 47.7%), suicidal planning (SHS = 52.9%; JHS = 47.1%), and suicidal attempt (SHS = 48.6%; JHS = 51.4%). It is alarming to read in the Abstract that “The 12-month prevalence of suicidal thoughts and plans among senior high school students was over fifty percent” (Iyanda et al., 2022). This is incorrect! These estimates are wrong and misleading because they have been mistakenly obtained from the cross-tabulations within the “Yes/At least once Group” only, excluding participants in the “No/Never Group” (Table 2). To correctly compute the prevalence estimates for a representative sample, prevalence is taken as the number of people in the sample with the characteristic (i.e., suicidal behavior) of interest, divided by the total number of people in the sample. If this formula is appropriately applied, the correct 12-month prevalence estimates should be relatively lower: suicidal ideation (SHS = 18.5% [95% CI: 16.8–20.3%]; JHS = 20.3% [95%CI: 18.4–22.3%]), suicidal planning (SHS = 22.7% [95%CI: 20.9–24.6%]; JHS = 24.3% [95%CI: 22.2–26.4%]), and suicidal attempt (SHS = 22.4% [95%CI: 20.6–24.3%]; JHS = 28.6% [95%CI: 26.4–30.8%]). Clearly, regardless of school level, whether JHS or SHS, none of the estimates reaches 32% (let alone 50%), even with their varying associated 95% confidence intervals. In fact, a simple check (via Google Scholar) shows that all the previous studies drawing data from the 2012 Ghana WHO-GSHS have reported estimates similar/identical to the latter. This flags up the former – the very high estimates by the Iyanda and colleagues – as problematic and misleading. Interestingly, Iyanda and colleagues have rather indicated the correct overall estimates as “Frequency distribution of the sample data” in Table 1 (suicidal ideation = 19.3%; planning = 23.4%; and attempt = 25.2%).

[2]. It is also disappointing that in discussing the “Epidemiology of Suicidal Behaviors in Ghana”, the authors (subtly) limited the evidence mostly to suicidal death only: evidence on suicidal ideation, planning and attempt among students and young people in Ghana are conspicuously missing. Thus, the background to the study is bereft of key contextual information on what is known about the prevalence and associated factors of suicidal ideation, planning and attempts among students in junior high schools (JHSs) and senior high schools (SHSs) in Ghana. Meanwhile, there are at least two published studies drawing on the same 2012 Ghana WHO-GSHS data to report evidence on the prevalence of suicidal ideations, planning, attempts, and their correlates among SHS students (Asante et al., 2017) and JHS students (Quarshie

and Andoh-Arthur, 2022). There are other recently published studies on the subject that are relevant, too (Quarshie and Odame, 2021; Quarshie et al., 2021). Again, a simple search on Google Scholar shows these; thus, knowledge about these previous studies could not have been lost on Iyanda and his colleagues. Evidence from these previous studies could have helped to elaborate and treat the topic with sufficient contextual depth, but also helped to nuance reader understanding of the suicide continuum among school-going adolescents in Ghana. It thus appears that, generally, the core subject and data of the paper have been already published variously elsewhere. For example, the prevalence and correlates of suicidal behaviours, substance use, bullying victimization, and physical inactivity have already been published drawing on the same 2012 Ghana WHO-GSHS data. However, the authors have failed (whether intentionally or otherwise) to duly reference and discuss these previous studies.

Put together, we are worried that these concerns may leave the informed reader with questions about the authors' academic integrity and diligence. The position of this correspondence is that while the paper may look technically appealing, scientifically, it may not bring any incremental advancement to the field and would not make a valid original contribution to the literature.

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Declaration of Competing Interest

The authors declare no conflict of interest.

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