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Dear Editors,

The UK government is undergoing consultation to reform the UK 2005 Gambling Act. Gambling behaviour in the general population was measured via the British Gambling Prevalence Survey (BGPS), (1999, 2007 and 2010) [1] and, since 2010, via the Health Survey England (HSE) and Scottish Health Survey (SHeS) [2], and more recently by small telephone surveys carried out quarterly by the Gambling Commission (GC) [3].

The GC telephone surveys involve only a small non-representative sample and rely upon respondents answering a number they do not recognize. Similarly, although BGPS and HSE data provide a cross-sectional snapshot of gambling behaviour, such surveys are subject to methodological limitations. For example, both surveys exclude people who do not have a residential address, such as those who are experiencing homelessness, and also fail to include people who reside at institutional addresses such as hospitals, prisons, military barracks and student halls of residence. Such populations are likely to have higher rates of gambling problems [4, 5]. As a consequence, both surveys are likely to significantly under-report gambling-related harm. Such methodological limitations are not limited to gambling surveys; a recent article regarding measuring heroin use via general population surveys (the US National Survey on Drug Use and Health) drew the conclusion that such methodological limitations are likely to lead to significant underestimation of the disorder [6].

Similarly, prevalence surveys rely upon subjective self-reports and are prone to error [7], such as selective non-response or selection bias [6, 8] and socially desirable responding [9]. Even the largest surveys have been shown to rely upon the responses of a small number of the overall populace [6]. Research has shown that people may be less likely to take part in research and to disclose problematic gambling for reasons such as stigma [10].

Furthermore, data collected by prevalence surveys are cross-sectional, which do not capture the episodic nature of disordered gambling [11, 12] or the harms experienced beyond the individual. Gambling harms can impact the health and wellbeing of individuals, as well as families, communities and society as a whole [13]. Additionally, both surveys use the Problem Gambling Severity Index (PGSI), which has reliable properties for detecting gambling disorder but is less appropriate for measuring individuals who are 'at-risk' of problematic gambling [14], although at-risk gamblers are estimated to account for approximately 85% of the burden of gambling harm at population level [15, 16].

The primary focus of the BGPS was gambling behaviour; however, the number of gambling questions has been reduced in the broader HSE and SHeS [2]. Consequently, key topics which would provide vital evidence are lacking. In addition, the health surveys include gambling questions towards the end of the survey which can reduce data quality, due to decreases in concentration and enthusiasm towards latter sections of a questionnaire [17]. Similarly, positioning gambling questions at the end of a long survey to detect a population with high impulsivity levels is a significant issue, as it is unlikely that respondents work their way consistently to the end [18]. Gambling questions in health

surveys have correspondingly been demonstrated to show a much lower prevalence than gambling-specific questionnaires [19].

Akin to the foundation of the formulation of substance use policy, it is crucial that we quantify and recognize the extent of harms attributable to gambling. This is unlikely to be achieved by cross-sectional surveys alone. There is need for a gambling-specific, longitudinal prevalence study that utilizes more comprehensive and inclusive data collection methodologies and more clearly understands the true extent of wider gambling harms. These data can then be triangulated with existing large-scale data sets such as those held by the financial sector, health and social care records and criminal justice systems. Although a large task with multiple obstacles, better cohesion across sectors is essential to move towards a more effective use of data that can support the identification, minimization and prevention of gambling-related harms.

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