



#WhatWouldYouDo? A cross-sectional study of sports medicine physicians assessing their competency in managing harassment and abuse in sports

Margo Mountjoy ^{1,2} Helena Verhelle,³ Jonathan T Finnoff,^{4,5} Andrew Murray,^{6,7} Amanda Paynter,⁸ Fabio Pigozzi,^{9,10} Camille Tooth ^{11,12} Evert Verhagen ¹³, Tine Vertommen ^{2,3}

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For numbered affiliations see end of article.

Correspondence to
Margo Mountjoy;
mountjm@mcmaster.ca

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ABSTRACT

Objectives To assess the clinical competence of sports medicine physicians to recognise and report harassment and abuse in sports, and to identify barriers to reporting and the need for safeguarding education.

Methods We implemented a cross-sectional cohort study design recruiting through social media and international sports medicine networks in 2023. The survey captured participant perceptions related to the harmfulness of harassment and abuse. The survey incorporated the reasoned action approach as a theoretical framework to design survey questions to identify attitudes and self-efficacy to detect and report suspicions of harassment and abuse and to identify barriers to reporting.

Results Sports medicine physicians (n=406) from 115 countries completed the survey. The situations of harassment and abuse presented in the survey were described by sports medicine physicians as having occurred in the 12 months before participating in the survey. Despite recognising the situations as harmful, sports medicine physicians were somewhat uncomfortable being vigilant for the signs and symptoms and reporting suspicions and disclosures of harassment and abuse (M=2.13, SD=0.67). In addition, just over one-quarter (n=101, 26.9%) was unaware of where to report harassment and abuse, and over half did not know (n=114, 28.1%), or were uncertain (n=95, 23.4%) of who the safeguarding officer was in their sports organisation. Participants identified many barriers to reporting harassment and abuse, including concerns regarding confidentiality, misdiagnosis, fear of reprisals, time constraints and lack of knowledge. Over half felt insufficiently trained (n=223, 57.6%), and most respondents (n=324, 84.6%) desired more education in the field.

Conclusions Educational programmes to better recognise and report harassment and abuse in sports are needed for sports medicine trainees and practising clinicians. An international safeguarding code for sports medicine physicians should be developed.

INTRODUCTION

Safe sport is defined as an athletic environment that is free from harassment and abuse (HA). There are four forms of HA in sport: psychological, physical, sexual and neglect. HA occurs across all sports and at all levels, with increasing risk at the elite level, for child athletes, athletes with a disability and those who identify as LGBTQ+ (lesbian/gay/bisexual/trans-sexual/queer+).¹

WHAT IS ALREADY KNOWN ON THIS TOPIC

- ⇒ There are four main types of harassment and abuse: psychological, physical, sexual and neglect. Harassment and abuse can affect athletes of all ages and in all sports, with varying prevalence depending on the type, location, sport, age and cultural setting.
- ⇒ This is the first study assessing sports medicine physicians' clinical competence in recognising harassment and abuse, managing suspicions and disclosures and reporting.

WHAT THIS STUDY ADDS

- ⇒ Despite recognising the harms of harassment and abuse in sports, sports medicine physicians were uncomfortable in being vigilant for the signs and symptoms of harassment and abuse in athletes and in reporting suspicions and disclosures of harassment and abuse, citing numerous barriers.
- ⇒ More than half (53.9%) of participating sports medicine physicians reported having insufficient training to manage harassment and abuse, and an overwhelming majority (84.6%) expressed a desire for more education to support them in developing clinical competence in athlete safeguarding.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

- ⇒ A curriculum designed to develop competency in safeguarding skills should be embedded in sports medicine training programmes and continuing medical education (core content, peer mentoring, supervision and support) for practising sports medicine physicians, with special attention to addressing barriers to reporting suspicions and disclosures of harassment and abuse.
- ⇒ An international safeguarding code for sports medicine physicians and the multidisciplinary health and performance team should be developed.

The prevalence of HA is difficult to quantify due to under-reporting, lack of consistency in study design and operationalising definitions. However, several studies have revealed alarming results. For example, a study in six European countries of over 10 000 athletes showed



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psychological violence (65%) to be the most common form of HA experienced, followed by physical violence (44%), neglect (37%), non-contact sexual violence (35%) and contact sexual violence (20%).² A study of elite multisport summer athletes from around the world at the 2018 Youth Olympic Games (YOG) revealed that a third (34%) stated that HA occurred in their sport either 'likely' or 'very likely' with another fifth (19%) being 'unsure'.³ Similar results were reported at the Winter YOG (2020), with a third (32%) reporting that HA occurs 'likely' or 'very likely', while a further third (29.8%) was 'unsure'.⁴ The YOG findings demonstrate that youth athlete recognition of HA is low. This finding may signify that HA is normalised within their sports experience.

The associated impacts of HA on athletes' health and well-being are potentially extensive, can be severe and last long after the abuse has ended. The mental health impacts of HA vary depending on the type of abuse, the duration and the circumstances. The reported mental health symptoms associated with HA include avoidance,⁵ low self-esteem,^{6,7} low self-worth^{6,7} and poor concentration.⁸ The mental health disorders attributed to experiencing HA are depression,^{9,10} anxiety,^{9,10} post-traumatic stress disorder,⁶ disordered eating,¹¹ eating disorders,¹¹ substance misuse,¹² self-harm¹³ and even suicide.¹⁴ The physical outcomes of HA include impact-related injuries,¹⁵ self-harm,¹³ psychosomatic illnesses,⁹ unwanted pregnancies¹ and sexually transmitted infections.¹ Other sport-specific examples of HA resulting in physical impacts include the failure to prevent overuse injuries and overtraining, to provide a safe sporting environment (equipment, refereeing and field of play), to protect athletes from extreme environmental conditions or to provide sufficient recovery time, fluids or food.¹ These failures in oversight can lead to acute and/or recurrent preventable injuries and illnesses.¹ HA can also negatively affect athletic performance and cause premature drop-out from sports.⁵ Victims of HA have also been shown to have an increased willingness to cheat in sports and participate in doping.¹⁶

Sports medicine physicians (SMPs) have a duty of care to support the health and well-being of athletes under their care.¹⁷ Given the impacts of HA in sports, it is the responsibility of all SMPs, as a member of a multidisciplinary team (eg, sports medicine, sports psychiatry, subspecialist), to identify and stop HA and to support athletes and affected bystanders exposed to HA. Thus, SMPs should have the clinical competence to recognise the signs and symptoms of HA, manage suspicions of HA and athlete disclosures, know reporting obligations and mechanisms and support the athlete in their recovery and rehabilitation back to sport.^{18,19} SMPs should also be trained in trauma-informed and violence-informed care²⁰ to promote recognition of trauma and prevent retraumatisation of athlete victims of HA.²¹ These clinical competencies should be embedded in sports medicine training curricula.²² SMPs are uniquely situated to identify and support survivors of HA due to their therapeutic relationship with athletes. However, no published studies examine their clinical competence in doing so.

The scientific evidence suggests that HA is prevalent. However, we believe that there is under-reporting, which could be due to SMPs' lack of recognition of HA, or a reluctance of clinicians to report. As the consequences of HA are far-reaching, we need to improve clinical competence in the area. To realise this goal, there is a need for a better understanding of current clinician beliefs and practices. Ascertaining this information is essential to identify gaps in athlete healthcare, which can perpetuate long-term impacts. Therefore, the objectives of this research project were to do the following:

- Assess SMPs' *perceptions* of harm in presented scenarios of HA.

- Assess SMPs' witnessing of presented behaviours of HA in the past 12 months.
- Evaluate the beliefs, attitudes and *confidence* of SMPs in *recognising and reporting* suspicions and allegations of HA, as well as their *knowledge of reporting mechanisms and barriers to reporting*.
- *Compare experiences* by gender, continent, years of experience and training type.
- Assess SMPs' *level of training* and *desire for more education* in safeguarding.

METHODS

We implemented a cross-sectional cohort study design utilising a self-selection convenience recruitment strategy.

Instrument

A new questionnaire was developed for this study in English and French based on the research questions, which consisted of six parts: (1) sample characteristics, (2) perceived harmfulness of HA behaviours and if witnessed in the last 12 months, (3) beliefs, attitudes and self-efficacy to recognise signs of HA, (4) beliefs, attitudes and self-efficacy about reporting athlete allegations of HA, (5) reporting barriers and (6) reporting mechanisms and interest in further training. Parts 4 and 5 were formulated following the Reason Action Approach (RAA) CIBERlite items.²³ According to the RAA, the intention to display behaviour is determined by the person's attitude towards the behaviour, their idea of how peers perceive the behaviour (perceived norms) and their sense of behavioural control. Items were scored on a 5–7-point scale depending on the item (survey accessible in online supplemental appendix 1)

Procedures

SMPs were recruited for the study by distributing a call for participation in professional sports medicine networks, the research team's social media channels and sports medicine conferences in the second and third quarters of 2023. Inclusion criteria included being a licensed physician and/or specialist treating elite athletes in Tiers 3–5²⁴ or retired for ≤2 years. Anonymous responses were collected. Embedded in the survey was an international helpline should a participant require support. Ethical approval was obtained by the Hamilton Integrated Research Ethics Board, Canada (#15894).

Equity, diversity and inclusion statement

The project team was comprised of equal gender representation from seven high income countries with varied professional backgrounds, including sports medicine (MM, JTF, AM and FP), osteopathy (JTF), sports science (CT and EV), physiotherapy (CT), psychology (HV), ethics (TV) and criminology (TV and HV). The research team also demonstrates diversity in career stages.

Statistical analyses

Descriptive analyses were used to present the data. The scores of the perceived harmfulness of HA behaviours and reporting barriers are presented on a 1–5 scale. The items of parts 4 and 5 (ie, beliefs, attitudes and self-efficacy) are presented on a 0–1 scale. These were recoded to facilitate visual comparison. Independent t-tests were used to compare differences between gender (man vs woman), age (27–44

Table 1 Sample characteristics

Sports medicine physician characteristics	n	%
Gender		
Man	253	62.3
Woman	149	36.7
I prefer not to say	4	1.0
Educational background		
Licensed physician in my country	298	73.4
Specialty degree	341	84.0
Training trauma—informed care	70	17.2
Clinical training in mental health	45	11.1
Years of experience		
<1 year	17	4.2
Between 1 and 5 years	70	17.2
Between 5 and 10 years	80	19.0
>10 years	239	58.9
Competition level		
Recreational level	248	61.1
Local or regional competition level	288	70.9
National level	324	79.8
International level	291	71.7
Country of practice by continents		
Europe	155	38.4
North America	154	38.1
Asia	43	10.6
Oceania	24	5.9
South America	15	3.7
Africa	13	3.2

n, number.

years vs 45–75 years), educational background (trauma-informed care and/or mental health background vs licensed and/or specialty degree) and years of experience (<10 years' experience vs >10 years' experience). Analysis of variance with a Bonferroni post-hoc test was used to analyse response differences across continents (North America vs Europe vs Asia (South America, Africa and Oceania were excluded due to low responses from these continents)). Values of $p \leq 0.05$ were considered statistically significant. Statistical analyses were performed using IBM SPSS V.29 software.

RESULTS

Sample characteristics

Overall, 406 SMPs with 115 different nationalities completed the questionnaire in English ($n=352$, 86.7%) and in French ($n=54$, 13.3%). For a breakdown of participants by continent, please see the table in online supplemental appendix 2. The mean age was 47 years (range 27–75) and more than half were men ($n=253$, 62.3%). Over three quarters ($n=341$, 84%) reported obtaining a specialty degree (eg, orthopaedics, sports and exercise medicine, family medicine, emergency medicine, internal medicine, paediatrics, physical medicine and rehabilitation). In contrast, a smaller proportion reported having received specific training in trauma-informed care ($n=7$, 17.2%) and/or mental health ($n=45$, 11.1%). Over half ($n=239$, 58.9%) of the participants had more than 10 years of experience in sports (159 male and 76 female) and 87.7% treated athletes in more than one sports discipline (see [table 1](#)).

Perceived harmfulness of harassment and abuse behaviours

When presented with a list of HA scenarios, most SMPs assessed the scenarios as harmful. All presented behaviours had been witnessed in the past 12 months (see [table 2](#)).

Overall, men SMPs perceived nearly all presented HA scenarios as less harmful than women SMPs (see [table 3](#)). SMPs with >10 years of experience ($M=2.36$, $SD=0.74$) rated the behaviour of 'a coach asks details about the personal life of an athlete' as more harmful than SMPs with <10 years of experience ($M=2.14$, $SD=0.82$, $t(403) = -2.733$, $p=0.007$, $d=0.276$). Furthermore, SMPs with training in trauma-informed care and/or mental health ($M=2.96$, $SD=0.25$) perceived the behaviour of 'a coach forces an athlete to use fasting to reach the ideal weight competition' as more harmful than SMPs without this background ($M=2.87$, $SD=0.41$, $t(404) = 2.603$, $p=0.010$, $d=0.238$). No significant differences were found between the age groups. SMPs from Asia scored several behaviours as significantly less harmful than SMPs from North America and Europe (see [table 3](#)).

Recognising signs of harassment and abuse

Generally, SMPs recognised the importance of being vigilant for signs of HA ($M=0.91$, $SD=0.16$) and were confident that they were vigilant ($M=0.72$, $SD=0.20$); however, many did not feel comfortable with being vigilant ($M=0.57$, $SD=0.28$). They believed that most other SMPs would be vigilant for signs and

Table 2 Perceived harmfulness of harassment and abuse behaviours and witnessed behaviours in the past 12 months

Harassment and abuse behaviours	Perceived harmfulness			Witnessed behaviours		
	n	M	SD	Yes n (%)	No n (%)	Not sure n (%)
An athlete makes hurtful sexual comments to another athlete	404	4.64	0.655	61 (15.4)	313 (78.8)	23 (5.8)
A coach humiliates an athlete in front of others	405	4.62	0.647	166 (41.6)	215 (53.9)	18 (4.9)
A coach forces an athlete to train/compete while injured	406	4.62	0.688	170 (42.6)	202 (50.9)	25 (6.3)
A coach forces an athlete to continue training while sick or exhausted	404	4.59	0.701	146 (36.7)	226 (56.8)	26 (6.5)
A coach forces an athlete to use fasting to reach the ideal weight competition	406	4.55	0.728	85 (21.5)	289 (75.3)	31 (7.8)
A coach forces an athlete to limit/restrict contact with their social circle	406	4.33	0.838	67 (16.9)	298 (73.3)	31 (7.8)
A coach intentionally excludes an athlete from the group	405	4.32	0.790	107 (27.0)	255 (64.4)	34 (8.6)
An athlete humiliates another athlete in front of others	406	4.30	0.778	166 (41.6)	215 (53.9)	18 (4.9)
An athlete intentionally excludes another athlete from the group	405	4.18	0.827	150 (37.6)	206 (51.6)	43 (10.8)
A coach gives excessive negative critique on an athlete's performance	404	4.14	0.836	208 (52.3)	158 (39.7)	32 (8.0)
An athlete hits/pushes another athlete on the field	406	3.93	0.987	173 (43.4)	209 (52.4)	17 (4.3)
A coach asks details about the personal life of an athlete	405	3.41	1.104	119 (30.3)	223 (56.7)	51 (13.0)

%, percent; M, mean; n, number.

Table 3 Gender and continental differences regarding the assessment of harmfulness of various harassment and abuse behaviours

	Gender differences			Continental differences				
	M (SD)		t (df)	M (SD)		F	df	P value
	Men, n=252	Women, n=149		North America, n=154	Europe, n=155	Asia, n=43		
An athlete makes hurtful sexual comments to another athlete.	2.90 (0.37)	2.99 (0.08)	-3.685 (398)	2.99 (0.14)	2.91 (0.37)	2.81 (0.50)	5.963	2, 346 0.003*
A coach humiliates an athlete in front of others.	2.91 (0.33)	2.95 (0.24)	-1.394 (399)	2.95 (0.25)	2.93 (0.31)	2.84 (0.43)	2.280	2, 348 0.104
A coach forces an athlete to train/compete while injured.	2.88 (0.41)	2.97 (0.16)	-3.161 (400)	2.92 (0.36)	2.93 (0.28)	2.79 (0.56)	2.577	2, 349 0.077
A coach forces an athlete to continue training while sick or exhausted.	2.85 (0.42)	2.99 (0.12)	-4.681 (398)	2.88 (0.36)	2.94 (0.29)	2.70 (0.60)	7.366	2, 347 <0.001*
A coach forces an athlete to use fasting to reach the ideal weight competition.	2.86 (0.43)	2.94 (0.27)	-2.355 (400)	2.94 (0.34)	2.86 (0.40)	2.63 (0.70)	10.532	2, 349 <0.001*
A coach forces an athlete to limit/restrict contact with their social circle.	2.75 (0.56)	2.92 (0.32)	-3.903 (400)	2.81 (0.51)	2.75 (0.52)	2.77 (0.53)	4.596	2, 349 0.011*
A coach intentionally excludes an athlete from the group.	2.75 (0.51)	2.95 (0.21)	-5.558 (399)	2.90 (0.31)	2.83 (0.43)	2.70 (0.56)	1.870	2, 349 0.156
An athlete humiliates another athlete in front of others.	2.79 (0.47)	2.89 (0.36)	-2.534 (400)	2.84 (0.39)	2.72 (0.52)	2.70 (0.51)	0.332	2, 347 0.718
An athlete intentionally excludes another athlete from the group.	2.70 (0.55)	2.89 (0.36)	-4.027 (399)	2.72 (0.52)	2.74 (0.51)	2.79 (0.51)	1.313	2, 349 0.270
A coach gives excessive negative critique on an athlete's performance.	2.69 (0.57)	2.85 (0.36)	-3.314 (398)	2.72 (0.52)	2.64 (0.63)	2.47 (0.77)	1.753	2, 348 0.175
An athlete hits/pushes another athlete on the field.	2.55 (0.69)	2.77 (0.51)	-4.993 (400)	2.62 (0.60)	2.34 (0.80)	2.81 (0.50)		
A coach asks details about the personal life of an athlete.	2.19 (0.78)	2.39 (0.76)	-2.436 (399)	2.18 (0.74)				

*Statistically significant; age was not included in the table due to lack of significant differences.

d, standardised mean differences between groups (Cohen's); df, degrees of freedom; F, Fischer test (a measure of the ratio of variances); M, mean; n, number; p, probability; t, t-score (ratio of the difference between the mean of two sample sets and the variation that exists within the sample sets).

symptoms of HA ($M=0.64$, $SD=0.23$), yet they believed that other SMPs would support their vigilance ($M=0.83$, $SD=0.18$).

Women SMPs ($M=0.94$, $SD=0.15$) expressed a greater emphasis on being vigilant than men ($M=0.90$, $SD=0.17$, $t(397) = -2.583$, $p=0.010$, $d=0.262$), as did SMPs with trauma-informed care and/or mental health expertise ($M=0.95$, $SD=0.10$, $t(401) = 3.428$, $p\leq 0.001$, $d=0.302$), compared with SMPs without this training ($M=0.90$, $SD=0.18$). Furthermore, SMPs aged 45–75 years ($M=0.67$, $SD=0.21$) believed that other SMPs would also be vigilant for signs and symptoms of HA more than the younger cohort (27–44 years; $M=0.61$, $SD=0.24$, $t(399) = -2.409$, $p=0.016$, $d=0.241$). They also reported feeling more confident than the younger SMPs ($M=0.75$, $SD=0.19$, $t(393) = -3.529$, $p\leq 0.001$, $d=0.356$). SMPs with <10 years' experience expressed more confidence in being vigilant for signs and symptoms of HA ($M=0.75$, $SD=0.20$, $t(394) = -3.880$, $p\leq 0.001$, $d=0.397$). Asian SMPs ($M=0.41$, $SD=0.35$) felt significantly less comfortable being vigilant for signs of HA than North American ($M=0.64$, $SD=0.24$) and European SMPs ($M=0.51$, $SD=0.29$).

Reporting of suspected cases of harassment and abuse

Overall, SMPs identified that it was important to report suspected cases of HA ($M=0.91$, $SD=0.16$), and they expressed confidence that they could report when needed ($M=0.72$, $SD=0.24$). SMPs also believed that it was their responsibility to report HA ($M=0.75$, $SD=0.27$), but they did not feel comfortable doing it ($M=0.53$, $SD=0.28$). SMPs reported lower confidence levels in their peer SMPs to report HA ($M=0.61$, $SD=0.25$). However, the participants believed that their peers would approve should they report a suspected case ($M=0.81$, $SD=0.18$).

There was no difference between men and women SMPs with respect to their intent to report suspected HA cases. SMPs between 45 and 75 years old ($M=0.78$, $SD=0.19$) were more confident about reporting compared with the younger cohort ($M=0.66$, $SD=0.26$, $t(389) = -5.248$, $p\leq 0.001$, $d=0.531$). In addition, the older cohort ($M=0.78$, $SD=0.28$) reported a stronger obligation to report HA than the younger cohort ($M=0.72$, $SD=0.26$, $t(390) = -2.049$, $p=0.041$, $d=0.207$). SMPs with trauma-informed care and/or mental health training ($M=0.76$, $SD=0.19$) expressed a greater confidence in reporting than those SMPs without this specialised training ($M=0.71$, $SD=0.25$, $t(390) = 2.137$, $p=0.034$, $d=0.218$). Asian SMPs ($M=0.50$, $SD=0.24$, $F(2,338) = 5.253$, $p=0.006$) expressed less confidence in their peers to report suspected HA than North American ($M=0.64$, $SD=0.23$) and European SMPs ($M=0.62$, $SD=0.26$). Furthermore, European SMPs ($M=0.80$, $SD=0.21$, $F(2,338) = 4.044$, $p=0.018$) reported a higher obligation to report than North American SMPs ($M=0.71$, $SD=0.33$).

Barriers to reporting harassment and abuse

SMPs expressed several barriers to reporting when confronted with suspicion or disclosure of HA. The most cited barrier was 'I don't want to breach patient confidentiality' ($M=3.54$, $SD=1.32$), followed by 'I fear making an incorrect diagnosis' ($M=3.27$, $SD=1.17$).

Differences in reporting barriers were found between the age groups, with the younger cohort (27–44 years) reporting more barriers. The older cohort (45–75 years) and the SMPs with over 10 years of experience cited different reporting barriers, including 'reporting requires too much time' and 'fearing threats or reprisals' (see [table 4](#)). In addition, women SMPs reported different barriers to reporting than men SMPs (eg,

Table 4 Age and continental differences regarding suspected cases of harassment and abuse

	Age differences			Continental differences							
	M (SD)		t (df)	p value	d	M (SD)			F	df	p value
	27–44 Y, n=182	45–75 Y, n=191				North America, n=144	Europe, n=145	Asia, n=38			
I do not want to breach patient confidentiality.	3.65 (1.22)	3.44 (1.41)	1.548 (372)	0.124	0.160	3.42 (1.31)	48 (1.36)	4.08 (1.22)	3.810	2, 323	0.023*
I fear making an incorrect diagnosis.	3.32 (1.14)	3.23 (1.21)	0.745 (372)	0.457	0.077	3.25 (1.23)	3.26 (1.10)	3.50 (1.20)	0.732	2, 324	0.482
I am unsure of the threshold to report.	3.04 (1.25)	2.46 (1.21)	4.567 (370)	<0.001*	0.474	2.42 (1.22)	2.89 (1.29)	3.16 (1.08)	8.077	2, 321	<0.001*
I have a lack of awareness of professional resources and/or reporting channels.	3.04 (1.32)	2.27 (1.34)	5.621 (373)	<0.001*	0.781	2.88 (1.31)	2.94 (1.53)	2.70 (1.37)	5.702	2, 323	0.004*
I fear threats or reprisals, or legal ramifications.	2.77 (1.38)	2.35 (1.37)	2.921 (370)	0.004*	0.303	2.60 (1.43)	2.45 (1.39)	2.39 (1.26)	0.541	2, 321	0.583
I fear reporting an alleged perpetrator who has a high sport status.	2.74 (1.36)	2.26 (1.35)	3.410 (370)	<0.001*	0.354	2.50 (1.43)	2.38 (1.29)	2.55 (1.37)	0.421	2, 321	0.657
The reporting requires too much time.	2.57 (1.26)	2.26 (1.23)	2.366 (371)	0.019*	0.245	2.17 (1.14)	2.46 (1.32)	3.00 (1.31)	7.045	2, 322	0.001*
I do not know what to do.	2.60 (1.26)	1.82 (1.15)	6.305 (371)	<0.001*	0.653	1.94 (1.16)	2.31 (1.35)	2.37 (1.26)	3.669	2, 321	0.027*
I feel alone.	2.25 (1.25)	2.09 (1.28)	1.164 (370)	0.245	0.121	2.00 (1.23)	2.33 (1.30)	2.03 (1.17)	2.728	2, 321	0.067
I have difficulties controlling my emotions.	1.92 (1.02)	1.82 (1.06)	0.991 (372)	0.322	0.102	1.78 (1.34)	1.98 (1.08)	1.67 (0.85)	1.568	2, 323	0.210
*Statistically significant; gender was not included in the table due to lack of significant differences.											
d, standardised mean differences between groups (Cohen's); df, degrees of freedom; F, Fischer test (measure of the ratio of variances); M, mean; n, number; p, probability; t, t-score (ratio of the difference between the mean of two sample sets and the variation that exists within the sample sets); Y, year.											

*Statistically significant; gender was not included in the table due to lack of significant differences.

d, standardised mean differences between groups (Cohen's d); df, degrees of freedom; F, Fischer test (measure of the ratio of variances); M, mean; n, number; p, probability; t, t-score (ratio of the difference between the mean of two sample sets and the variation that exists within the sample sets); Y, year.

'more difficulties controlling their emotions', 'feel more alone' and 'fear threats of reprisals'; $M=2.04$, $SD=1.16$, $t(369) = -2.348$, $p=0.020$, $d=0.265$). Additionally, SMPs with a background in trauma-informed care and/or mental health indicated that they have more difficulties breaching patient confidentiality ($M=3.77$, $SD=1.17$, $t(372) = 2.108$, $p=0.036$, $d=0.234$). At the same time, SMPs without this training reported different barriers: 'requires too much time' ($M=2.50$, $SD=1.26$, $t(371) = -2.328$, $p=0.020$, $d=0.279$) and 'don't know what to do' ($M=2.29$, $SD=1.28$, $t(371) = -2.575$, $p=0.011$, $d=0.293$). European ($M=3.48$, $SD=1.36$) and North American SMPs ($M=3.42$, $SD=1.36$) reported fewer difficulties breaching patient confidentiality than Asian SMPs ($M=4.09$, $SD=1.22$, $F(2,323) = 3.810$, $p=0.023$). Additionally, European SMPs ($M=2.94$, $SD=1.53$) reported a 'lack of awareness of professional resources and/or reporting mechanism' as a more serious barrier than SMPs from other continents ($M=2.88$, $SD=1.31$, $F(2,323) = 5.702$, $p=0.004$; see [table 4](#)).

Reporting pathways and training

One quarter ($n=101$, 26.2%) of the SMPs were unaware of where to report HA. The majority (53.9%) of respondents expressed a 'lack of knowledge' ($n=114$, 29.4%) or were 'uncertain of who the safeguarding officer was' ($n=95$, 24.5%) in their sports organisation. SMPs with less experience ($\chi^2(1) = 9.28$, $p=0.002$; $\chi^2(1) = 29.50$, $p\leq 0.001$), as well as the younger cohort ($\chi^2(1) = 18.99$, $p\leq 0.001$; $\chi^2(1) = 25.13$, $p\leq 0.001$), were less likely to know where to report suspected cases, or who their safeguarding officer was. Over half ($n=223$, 57.6%) reported having insufficient training to manage HA, and a similar portion ($n=208$, 53.3%) did not feel appropriately supported when dealing with HA concerns. Most SMPs ($n=324$, 84.6%) expressed interest in receiving more safeguarding education. Specifically, the SMPs without trauma-informed and violence-informed care ($\chi^2(1) = 4.28$, $p=0.039$), the less experienced ($\chi^2(1) = 21.12$, $p\leq 0.001$) and the younger cohort ($\chi^2(1) = 26.67$, $p\leq 0.001$) felt that they did not receive sufficient training. The younger cohort ($\chi^2(1) = 12.87$, $p\leq 0.001$; $\chi^2(1) = 10.89$, $p\leq 0.001$) and the less experienced ($\chi^2(1) = 8.06$, $p=0.005$; $\chi^2(1) = 8.352$, $p=0.004$) reported feeling unsupported when dealing with concerns of HA and were more interested in receiving education in managing HA. European and Asian SMPs reported that they did not receive sufficient training to deal with concerns of abuse ($\chi^2(1) = 37.21$, $p\leq 0.001$) nor felt supported when dealing with concerns of HA ($\chi^2(1) = 9.90$, $p=0.007$).

DISCUSSION

This study is the first to ascertain the perspectives of SMPs worldwide on their clinical competence to recognise and manage athlete experiences of HA. The results demonstrate that SMPs were aware of ongoing HA in the 12 months before the survey. This finding is consistent with published prevalence and incidence studies on psychological,²⁵ physical,²⁵ sexual abuse,^{26 27} and bullying.^{28 29}

Women SMP responses demonstrated a greater sensitivity to the impacts of HA and identified different barriers to reporting than the men. This gender discrepancy could be due to the lived experiences of women SMPs with HA within sport, as demonstrated in a 2022 survey of women SMPs.³⁰

Despite the recognition of HA, the SMPs were uncomfortable being vigilant for signs and symptoms of HA and similarly reporting suspicions and/or allegations of HA. In addition, just over one-quarter of the cohort were unaware of where to report HA, and over half did not know, or were uncertain, who the safeguarding officer was in their sports organisation. Participants identified many barriers

to reporting HA, including concerns regarding confidentiality, misdiagnosis, fear of reprisals, time constraints and lack of knowledge. Over half felt insufficiently trained and most respondents desired more education in the field. These findings are novel as there are no corroborating studies assessing SMPs' perceptions of comfort in recognising or reporting of HA, knowledge of reporting pathways, or barriers to reporting.

Safeguarding as a core competence in sports medicine curriculum

The inclusion of safeguarding as a core competence in sports medicine was first recommended in 2011.³¹ In 2012, a clinical approach for supporting athletes experiencing sexual HA in sport was published.¹⁸ The International Olympic Committee published a consensus statement in 2016 on HA in sports recommending that SMPs be trained in the field.¹ In response to the Dr Larry Nassar sexual abuse scandal in USA gymnastics in 2019, a call for action was published to encourage the inclusion of safeguarding competence in SMP education.^{32–33} It was not until 2020 that safeguarding competencies were included in a sports medicine curriculum.²² Existing models of core competencies for SMPs should include an additional role of protecting athletes' integrity and safeguarding given the physical and mental health impacts of HA.^{19–34–35}

The way forward

Despite several articles outlining a clinical approach to support athletes who experience HA,^{18–19–31–32–36–39} our results demonstrate that SMPs remain uncomfortable in recognising and reporting HA. While the SMP participants identified barriers to reporting, the reasons for their lack of confidence in the field remain elusive. Although there are no studies in the literature addressing barriers to reporting abuse in this context, evidence from outside sport identify several barriers including fear of retaliation,⁴⁰ ethical⁴¹ or socio-cultural factors⁴² and organisational barriers.⁴³ Protocols outlining parameters for breaking patient confidentiality are required to guide SMPs' reporting of HA. What is clear is the overwhelming desire for more education.

We must better equip SMPs with the necessary knowledge, skills and confidence to respond effectively to athletes who have experienced HA. In addition to embedding safeguarding into the curriculum of SMP training programmes, our results demonstrate that continuing medical education is needed for practising SMPs. These interventions should incorporate the findings of this study, in particular, the differences in gender perspectives and geographical nuances. There is also a need to tailor training for SMPs with and without trauma-informed and mental health expertise. Although no interventional studies to improve SMP clinical competence exist, a randomised control trial interventional study to encourage reporting of abuse for childhood care and education providers in Australia demonstrated improved knowledge and attitudes sustained for over 4 months.⁴⁴ Finally, it would be prudent to replicate this study with other athlete health and performance team members to best equip all support personnel with effective and role-appropriate skills.

Importantly, the way forward must include the voices of athlete survivors of HA to inform SMPs of the required skills beyond the mechanics of the clinical approach: trust, empathy, and authenticity.^{45–46} In the voice of an athlete survivor of sexual abuse in sport:

'I struggle seeing clinicians—not because I believe their intentions are not good or that they will harm me, but because I fear not being heard when I truly need help. I fear my pain or ailment may not be worthy of their care Optimal healing requires a commitment from all clinicians to be willing to connect with patients in new and vulnerable ways'.⁴⁶

Study strengths and limitations

A strength of this study is the large sample from around the world. There was a wide range of age (27–75 years) with good gender representation (women 47.7%), various skill sets and years of experience. Despite targeted recruitment in Africa, South America and Oceania, we acknowledge the low representation of SMPs from these continents. Recruitment may have been enhanced in these continents if more languages were included beyond English and French. There is the potential for self-selection and social desirability biases inherent in convenience sampling surveys. In addition, potential participants may not have responded to our call for participation as they (1) did not see the promotion, (2) did not care to respond or (3) did not dare to respond. Each of these scenarios could lead to unique biases. While there are limitations to the study methodology (cross-sectional design, internet-based data collection), these methods were necessary to facilitate global input from this population. A limitation of the Reasoned Action Approach methodology is that it does not guarantee immediate behaviour change. Rather, the intentions predict behaviours. As such, we measured beliefs, self-efficacy, competency and intentions as proxies for actual behaviour, which we could not measure in this study.

CONCLUSIONS

This study identifies important gaps in SMPs' confidence and training worldwide to recognise and support athletes who have experienced HA. The outcomes should underpin the development of targeted educational initiatives to improve SMPs' knowledge and clinical competence. An international safeguarding code for SPS and the multidisciplinary health and performance team should be developed. Ultimately, improving the responses of SMPs to HA can potentially improve athlete health and well-being.

Author affiliations

¹Family Medicine, McMaster University Michael G. DeGroote School of Medicine, Waterloo, Ontario, Canada

²International Research Network on Violence and Integrity in Sport (IRNOVIS), University of Antwerp, Antwerpen, Belgium

³Thomas More University of Applied Sciences, Mechelen, Belgium

⁴Department of Sports Medicine, United States Olympic and Paralympic Committee, Colorado Springs, Colorado, USA

⁵University of Colorado Denver, Denver, Colorado, USA

⁶European Tour Health and Performance Institute, Virginia Water, UK

⁷UK Collaborating Centre on Injury and Illness Prevention in Sport, IOC Research Centre, University of Edinburgh, Edinburgh, UK

⁸Michael G. DeGroote School of Medicine, Waterloo Regional Campus, McMaster University, Waterloo, Ontario, Canada

⁹Department of Movement, Human and Health Sciences, University of Rome Foro Italico, Rome, Italy

¹⁰Federation Internationale de Medecine Sportive, Lausanne, Switzerland

¹¹Physical Medicine and Rehabilitation, University Hospital of Liege, University of Liege, Liege, Belgium

¹²REFORM IOC Research Centre for Prevention of Injury and Protection of Athlete Health, Liege, Belgium

¹³Amsterdam Collaboration on Health and Safety in Sports, Department of Public and Occupational Health, Amsterdam Movement Sciences, Amsterdam UMC, University Medical Centres, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands

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X Margo Mountjoy @margo.mountjoy, Evert Verhagen @Evertverhagen and Tine Vertommen @TineVertommen

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ORCID iDs

Margo Mountjoy <http://orcid.org/0000-0001-8604-2014>

Camille Tooth <http://orcid.org/0000-0002-7937-9863>

Evert Verhagen <http://orcid.org/0000-0001-9227-8234>

Tine Vertommen <http://orcid.org/0000-0002-9304-3741>

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