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Bullying in medicine: a cross-sectional study among intern doctors in Sri Lanka

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Abstract

Background Bullying in medicine is common and has harmful effects on the victimized professionals, their patients and the healthcare system. This study aimed to assess the prevalence of workplace bullying among intern doctors in Sri Lanka and examine its associated factors.

Methods This was conducted as a descriptive cross-sectional study among intern doctors who had completed at least 6 months of internship. A self-administered questionnaire which incorporated the Negative Acts Questionnaire-Revised was used for data collection. Data was analyzed using SPSS version 26 and associations were analyzed using Chi Square.

Results The response rate was 78.2% ($n=208$). The results revealed that 76.9% of intern doctors experienced workplace bullying. All forms of workplace bullying were commonly reported by participants: work-related bullying was experienced in the form of having one's opinions ignored (56.7%, $n=118$),) being ordered to do work below one's level of competence (55.3%, $n=115$) and being exposed to unmanageable workload (50%, $n=104$); person-related bullying was experienced in the form of being ridiculed in connection with one's work (55.8%) and persistent criticism of errors (52.4%). Almost half (48.1%, $n=100$) had been subjected to hints or signals that they should quit their job. Physical intimidation was experienced by 61.1% ($n=127$) and 18.3% ($n=38$) reported threats of physical abuse or actual abuse. Interns that frequently felt that the assigned work was above their capacity($p<0.001$) and ethnicity ($p<0.01$) were found to be significantly associated with bullying.

Conclusions Bullying is commonly experienced by Sri Lankan intern doctors with many being subjected to physical intimidation. Rigorous steps should be taken to address workplace bullying to facilitate supportive work environments.

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Introduction

Workplace bullying is defined as 'situations where an employee is persistently exposed to negative and aggressive behaviours at work, primarily of a psychological nature with the effect of humiliating, intimidating, frightening or punishing' [1]. The classic definition of bullying which was originally used in research has conceptualized it as a phenomenon where power imbalances initiate the aforementioned negative behaviours [2]. Workplace bullying can vary from overt physical abuse to the subtle use of words or acts that erode one's confidence, reputation and progress [3].

Bullying, which is said to be as old as the medical profession itself has been reported to be rampant in medical work environments [4]. However, it has started being reported in medical literature only recently. A systematic review and meta-analysis published in 2023 reported a pooled prevalence of bullying among medical residents at 51%, with a range between 36 and 66% [5]. The medical profession is susceptible to workplace bullying due to its rigid hierarchical structure, ingrained imbalances of power, the culture of silence and the resultant tolerance of unacceptable behavior by seniors [1]. Bullying is also counterproductively viewed as a 'functional educational tool' in the medical profession [1]. Effects of bullying in medicine are felt both by the victims, and the patients they care for [3]. Victims face psychological effects such as job dissatisfaction, burnout, self-perceived loss of clinical ability and depression [3]. Patient care is indirectly affected due to ensuing medical errors that endanger patient safety, and can even result in death [3]. A profession which prides itself in compassion and care should therefore, pay more attention to taking care of their juniors.

In the South Asian region, bullying in medicine has been reported to range from 50 to 89% [6, 7]. Sri Lanka however, despite an established culture of bullying in academic and work environments has minimal research on bullying in medicine [8–10]. This gap in bullying in medicine exists on the background of objectively high levels of burnout reported among intern doctors [11]. The present study therefore, aimed to assess the prevalence and associated factors of perceived bullying in the work environment among intern doctors in Sri Lanka.

Methods

This was conducted as a descriptive cross-sectional study from January to August 2024. Intern doctors who had completed at least 6 months of internship were invited to take part in the study using voluntary response sampling via the use of electronic network groups. Trainees on maternity leave or leave for more than 1 month at the time of the study and trainees with less than 6 months of internship experience were excluded. A 6-month clinical experience cut-off was chosen, as workplace bullying is described as a persisting phenomenon and the standardized tool used to assess bullying Negative Acts Questionnaire-Revised (NAQ-R) required recall of the responder's experience for at least 6 months.

Data was collected using an investigator developed self-administered questionnaire that incorporated the NAQ-R. It was administered electronically. The questionnaire consisted of two sections: the first section gathered demographic and work-related details, and the second incorporated the NAQ-R, which measures workplace bullying. This is given as Supplementary Material 1.

The NAQ-R is a 22-item scale that measures study participants' exposure to work-related bullying, person-related bullying and physical intimidation within the past 6 months. This tool has been validated in other South and East Asian settings with excellent reliability inclusive of construct validity through factor analysis and criterion validity via its associations with relevant psychological outcomes [1, 12]. To ensure contextual appropriateness of the NAQ-R for use in the current setting, a contextual validation process was conducted. This involved review by an expert panel that assessed the relevance, clarity, and cultural sensitivity of each item in the scale. The expert panel consisted of a physician, a psychiatrist and a public health specialist who were familiar with the local workplace culture and had prior experience in scale validation or adaptation. Experts were provided with the NAQ-R and a structured evaluation form. They were asked to rate each item on three dimensions: (i) relevance to the local workplace context, (ii) linguistic clarity, and (iii) cultural appropriateness. Ratings were given on a 4-point Likert scale (1 = not relevant/clear, 4 = highly relevant/clear) with open-ended comments being invited for qualitative feedback. The feedback was analyzed to identify items that required modification or clarification. No linguistic adjustments were necessary, and no items required removal.

Data was analysed using version 26 of the IBM SPSS statistical software. Categorical variables were described as percentages and associations were analysed using Chi Square testing. In the NAQ-R, study participants rated their exposure as 'Never', 'Now and then', 'Monthly', 'Weekly' and 'Daily' for each of bullying-related exposure. Each answer was accordingly given a score of 1,2,3,4 and 5 respectively. During analysis, the total NAQ-R score was calculated for each individual and they were categorized as never bullied (score < 40), occasionally bullied (score between 40 and 56) and severely bullied (> 56) [8, 12]. A cutoff of 33 was used to categorize interns into those that experienced bullying and those that didn't [8, 12]. When assessing associations, participants were categorized into two groups as those that were bullied and those that were not using the cut-off given above;

Table 1 Sociodemographic and work-related characteristics of the study population

Characteristic	Number (Percentage)
Sociodemographic characteristics	
Sex	
Male	82 (39.4)
Female	124 (59.6)
Prefer not to say	2 (1.0)
Age category	
25–29 years	185 (88.9)
30–35 years	20 (9.6)
Ethnicity	
Sinhala	150 (72.1)
Tamil	37 (17.8)
Muslim	15 (7.2)
Burgher	0
Other	4 (1.9)
Relationship status	
Single	71 (34.1)
Married	71 (34.1)
In a relationship	66 (31.7)
Living circumstances	
Living by self at home	1 (0.5)
Living by self away from home	93 (44.7)
Living with parents	70 (33.7)
Living with parents and partner	16 (7.7)
Living with partner	28 (13.5)
Work related characteristic	
Medical school attended	
Local University under Ministry of Higher Education	147(70.7)
Local University under Ministry of Defence	53 (25.5)
Foreign University	8 (3.8)
Current specialty of internship	
Medicine	76 (36.5)
Surgery	73 (35.1)
Paediatrics	22 (10.6)
Gynaecology and Obstetrics	34 (16.3)
Paediatric Surgery	3 (1.4)
Sense that the work involved in internship is above one's capacity	
Always	24 (11.5)
Frequently	43 (20.7)
Sometimes	99 (47.6)
Rarely	35 (16.8)
Never	7 (3.4)
Difficulty in communicating in English	
Very difficult	0
Difficult	4 (1.9)
Neutral	56 (26.9)
Easy	76 (36.5)
Very easy	72 (34.5)

sociodemographic and work-related associations were accordingly tested for participants that experienced bullying during internship using Chi Square.

Ethical approval was obtained from the Ethics Review Committee of National Hospital of Sri Lanka, Colombo (AA(J)/ETH/COMM/2023/Oct). Informed written consent was obtained from all participants, and participant confidentiality was strictly maintained.

Results

This study had a response rate of 78.2% ($n = 208$).

Table 1 shows sociodemographic and work-related factors of the study population.

The majority of the participants were female (124, 59.6%) aged between 25 and 29 years ($n = 185$, 88.9%). Most participants had graduated from local universities (200, 96.2%) with only a few having studied in foreign universities ($n = 8$, 3.8%). In terms of the internship specialty, 76 (36.5%) were engaged in internship in internal medicine, 73 (35.1%) in general surgery, 22 (10.6%) in paediatrics, 34(16.3%) in gynaecology and obstetrics and 3 (1.4%) in paediatric surgery. While 20.2% ($n = 42$) participants rarely or never felt that the work involved in internship is above their capacity, the majority ($n = 166$, 79.8%) reported experiencing this feeling sometimes, frequently or always. 11.5% of the study population reported that they encountered this sentiment always. The majority did not report difficulty in communicating in English, with only a minority expressing related difficulty ($n = 4$, 1.9%).

The most salient finding of our study is that 76.9% of interns experienced workplace bullying. Table 2 shows the frequencies of participants experiencing different forms of workplace bullying.

All three forms of workplace bullying were common in this population. Work-related bullying was experienced in the form of having one's opinions ignored (56.7%, $n = 118$),) being ordered to do work below one's level of competence (55.3%, $n = 115$) and being exposed to an unmanageable workload (50%, $n = 104$). A significant proportion felt that they were subjected to person-related bullying. The majority (55.8%) were subjected to humiliation or ridiculing in connection with their work and a similar proportion (52.4%) felt that there was persistent criticism of their errors and mistakes. Almost half (48.1%, $n = 100$) had been subjected to hints or signals that they should quit their job. The frequency of physically intimidating bullying was also significant among this population. The majority (61.1%, $n = 127$) had been subjected to intimidating behaviours such as finger pointing, invasion of personal space, shoving and blocking of one's way. A number of participants (18.3%, $n = 38$) reported that they had experienced threats of violence, physical abuse

Table 2 Frequency of participants experiencing different forms of workplace bullying

Form of bullying	Of total sample *n*(*p*)				
	Never	**Occasionally**	**Frequently**		
Work-related bullying			**M**	**W**	**D**
1- Someone withholding information which affects your performance	37 (17.8)	82 (39.4)	89 (42.8)		
			10 (4.8)	54 (26)	25 (12)
2- Being ordered to do work below your level of competence	35 (16.8)	58 (27.9)	115 (55.3)		
			21 (10.1)	47 (22.6)	46 (22.1)
3- Having your opinions ignored	43 (20.7)	47 (22.6)	118 (56.7)		
			18 (8.7)	47 (22.6)	53 (25.5)
4- Being given tasks with unreasonable deadlines	58 (27.9)	47 (22.6)	103 (49.5)		
			24 (11.5)	41 (19.7)	38 (18.3)
5- Excessive monitoring of your work	77 (37)	44 (21.2)	87 (41.8)		
			17 (8.2)	40 (19.2)	30 (14.4)
6- Pressure not to claim something to which by right you are entitled (e.g. sick leave, holiday entitlement, travel expenses)	65 (31.3)	52 (25)	91 (43.8)		
			26 (12.5)	36 (17.3)	29 (13.9)
7- Being exposed to an unmanageable workload	62 (29.8)	42 (20.2)	104 (50)		
			30 (14.4)	37 (17.8)	37 (17.8)
Person-related bullying					
8- Being humiliated or ridiculed in connection with your work	43 (20.7)	49 (23.6)	116 (55.8)		
			25 (12)	46 (22.1)	45 (21.6)
9- Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks	98 (47.1)	39 (18.8)	71 (34.1)		
			23 (11.1)	27 (13)	20 (9.6)
10- Spreading of gossip and rumors about you	113 (54.3)	33 (15.9)	62 (29.8)		
			28 (13.5)	21 (10.1)	13 (6.3)
11- Being ignored or excluded	58 (27.9)	46 (22.1)	104 (50)		
			27 (13)	45 (21.6)	32 (15.4)
12- Having insulting or offensive remarks made about your person, attitudes or your private life	78 (37.5)	42 (20.2)	88 (42.3)		
			32 (15.4)	37 (17.8)	19 (9.1)
13- Hints or signals from others that you should quit your job	65 (31.3)	43 (20.7)	100 (48.1)		
			26 (12.5)	42 (20.2)	32 (15.4)
14- Repeated reminders of your errors or mistakes	70 (33.7)	61 (29.3)	77 (37)		
			32 (15.4)	32 (15.4)	13 (6.3)
15- Being ignored or facing a hostile reaction when you approach	90 (43.3)	53 (25.5)	65 (31.3)		
			27 (13)	21 (10.1)	17 (8.2)
16- Persistent criticism of your errors or mistakes	60 (28.8)	39 (18.8)	109 (52.4)		
			33 (15.9)	38 (18.3)	38 (18.3)
17- Practical jokes carried out by people you don't get along with	96 (46.2)	43 (20.7)	69 (33.2)		
			27 (13)	25 (12)	16 (7.7)

Table 2 (continued)

Form of bullying	Of total sample *n*(*p*)				
	Never	Occasionally	Frequently		
18- Having allegations made against you	81 (38.9)	43 (20.7)	84 (40.4)		
			30 (14.4)	28 (13.5)	26 (12.5)
19- Being the subject of excessive teasing and sarcasm	75 (36.1)	51 (24.5)	82 (39.4)		
			24 (11.5)	26 (12.5)	32 (15.4)
Physically intimidating bullying					
20- Being shouted at or being the target of spontaneous anger	99 (47.6)	43 (20.7)	66 (31.7)		
			27 (13)	18 (8.7)	20 (9.6)
21- Intimidating behaviors such as finger-pointing, invasion of personal space, shoving, blocking your way	39 (18.8)	42 (20.2)	127 (61.1)		
			33 (15.9)	33 (15.9)	61 (29.3)
22- Threats of violence or physical abuse or actual abuse	137 (65.9)	33 (15.9)	38 (18.3)		
			22 (10.6)	7 (3.4)	9 (4.3)

M- Monthly, W-Weekly, D- Daily

or actual abuse. Of the participants, 1.9% ($n=4$) had a score of 110, meaning that they experienced all the tested forms of bullying on a daily basis.

Associations of bullying in internship have been shown in Table 3.

The analysis of associations of bullying in internship revealed that interns of Sinhala ethnicity ($p<0.01$), which is the majority ethnicity, and interns who felt a frequent sense of internship being above one's capacity($p<0.001$) were more significantly associated with bullying. Of the interns belonging to minority ethnicities, 62.1% were bullied, whereas of interns belonging to the majority ethnicity (Sinhala), 82.7% were bullied. We found that 92.5% of interns who frequently felt that internship was above their capacity were bullied; while the corresponding figures for those who felt this sometimes was 71.7%, and those who felt this rarely was 64.3%. There was no significant difference in bullying with sex, specialty of internship or self-reported difficulty in communicating in English. It is important to note that in almost all associations tested, the proportion that was bullied was more than double the proportion that was not bullied.

Discussion

This study examines the prevalence and correlates of bullying in medicine in Sri Lanka. In a country which has an objectively high prevalence of burnout among intern doctors, it fills a data gap related to mental health of junior doctors [11]. The results revealed that most intern doctors (76.9%) experienced workplace bullying, with physical intimidation being the most commonly reported form of bullying.

High prevalence of workplace bullying in Sri Lankan medicine

The prevalence of workplace bullying in this study was higher than that reported in other Western studies, but seem to be on par with another South Asian study from Pakistan [5, 6]. Reasons for the high prevalence compared to Western reviews, may be a higher applicability of the drivers of bullying to the South Asian context. Sri Lanka appears to have a longstanding culture of bullying in medicine. A Sri Lankan study from 2004 showed how both medical students and interns are subjected to unacceptable teacher behaviours that meet the definitions of student abuse or bullying [13]. Significant proportions of medical students and interns reported that they were scolded in front of others, and that they felt humiliated for comments made by teachers on their English, a language which is not their mother tongue [13]. These findings from two decades ago, are instrumental in showing that bullying is a longstanding, deeply ingrained problem in the medical system.

Sociocultural enablers of bullying in medicine in Sri Lanka

The medical hierarchy is more strictly enforced in Sri Lanka, in a cultural background that customarily prioritizes seniority [8]. In this hierarchical framework, bullying is considered a rite of passage for junior medical professionals [8]. One cultural driver of bullying in Sri Lanka is the emphasis of punitive measures with disregard for appreciation of juniors. The abovementioned Sri Lankan study on unacceptable teacher behavior revealed that significant numbers of medical students (55.5%) and interns (25.8%) reported that they were rarely or never praised by their teachers [13]. The second cultural driver of bullying may be that Sri Lankans

Table 3 Associations of workplace bullying among intern Doctors

	Experience of bullying (NAQ Score > = 33)			Significance
	Yes (%)	No (%)	Total	
Age Category				
< 30 years	144 (77.8)	41 (22.2)	185	*P* = 0.669
30 years or more	14 (70)	6 (30)	20	
Sex Category				
Female	99 (79.8)	25 (20.2)	124	*P* = 0.357
Male	60 (73.2)	22 (26.8)	82	
Prefer not to say	1 (50)	1 (50)	2	
Ethnicity				
Sinhala	124 (82.7)	26 (17.3)	150	*P* = 0.002
Minority	36 (62.1)	22 (37.9)	58	
Relationship Status				
In a partnership	109 (79.6)	28 (20.4)	137	*P* = 0.210
Not in a partnership	51 (71.8)	20 (28.2)	71	
Living circumstances				
Living alone	70 (74.5)	24 (25.5)	94	*P* = 0.445
Living with partner/family	90 (78.9)	24 (21.1)	114	
Medical School attended				
Local University	153 (76.5)	47 (23.5)	200	*P* = 0.469
Foreign University	7 (87.5)	1 (12.5)	8	
Specialty of internship				
Medical	76 (77.6)	22 (22.4)	98	*P* = 0.839
Surgical	84 (76.4)	26 (23.6)	110	
Difficulty in communicating in English				
Easy	157 (77)	47 (23)	204	*P* = 0.927
Difficult	3 (75)	1 (25)	4	
Sense of internship being above one's capacity				
Rarely	27 (64.3)	15 (35.7)	42	*P* < 0.001
Sometimes	71 (71.7)	28 (28.3)	99	
Frequently	62 (92.5)	5 (7.5)	67	

by nature value resilience and silence about their struggles. Within the medical community itself, internship is viewed as a period of hardship during which junior doctors must silently and resiliently bear up all varieties of stressors. The combination of the punitive medical hierarchy and the cultural value placed on resolute tolerance of hardship may prevent reporting of bullying and aid its perpetuation.

The sociocultural enablers of bullying in Sri Lanka stem from a male-centric society where violence is viewed as a form of power [8]. Bullying behaviour starts at a young age in Sri Lanka, and continues into adulthood, infiltrating academic and work environments. A study done by United Nations Children's Fund (UNICEF) in 2020 reported that 47% of the Sri Lankan children surveyed ($n = 1647$) had been victims of either physical and psychological bullying [9]. Bullying behaviour pervades educated communities, as demonstrated by the high prevalence of ragging, which is a form of hazing in the Sri Lankan university system [10]. Bullying in the medical workplace may be a continuation of these damaging behaviours, enabled by the hierarchical structure, and perpetuated by the silence of victims at the bottom of the hierarchy.

High prevalence of physical forms of workplace bullying

In this study, the most common form of bullying that was experienced by the majority was physical intimidation with several having experienced threats of physical abuse or actual abuse. Common forms of medical bullying in other regions as reported in a systematic review were being repeatedly reminded of errors, being shouted at, withholding of information and persistent criticism [5]. A study from Pakistan reported that work overload was the most reported form of bullying [6]. Many studies have not explicitly reported on physical abuse, but the limited studies that do report on it report a lower prevalence of it than this study. A study from United States among pediatric residents reported a prevalence of 1% for physical abuse, and a Malaysian study among residents reported a prevalence of 12.5% for physically intimidating behaviours and 5.3% for threats of abuse or actual abuse [1, 14]. The proportions reported from Sri Lanka are staggeringly higher. This may once again reflect the strict medical

hierarchy and culture of silence that perpetuate harmful workplace behaviour. The authors wonder whether the higher prevalence of physical intimidation, which should be more evident to onlookers than verbal bullying, is a reflection of a workplace so hostile that instigators can operate without fear. The presence of such deep-rooted hostility in the medical work environment may in fact explain why other forms of bullying are more commonly seen here too.

Experience of unmanageable workloads

In this study, 50% of interns felt that they were subjected to an unmanageable load of work. From this observational study, it is difficult to establish whether this sentiment stems from the high patient-to-doctor ratio, which affects all strata of Sri Lankan doctors, or due to intern medical officers being specifically vulnerable. One related factor to note is that, 55.3% of interns also felt that they were constantly ordered to do tasks which they were not directly responsible for. This may be indicative of a local practice where Sri Lankan interns are forced to take on tasks that are the responsibilities of other healthcare categories in their absence. A second factor is that interns are expected to be on-call for 1 year without any breaks which is not the case for any other strata of doctors, or healthcare workers [11]. In the context of these two factors, it seems reasonable to speculate that while the entire unit might be subjected to high workload, there may be instances when a larger burden falls on the intern.

Associations of workplace bullying in medicine

The significant correlates that were identified to be associated with bullying were Sinhala ethnicity ($p < 0.01$), and a frequent sense of internship being above one's capacity($p < 0.001$). In most of the other studies from the West, it was seen that racial minorities experienced bullying much more frequently in contrast to what was seen in this study [5]. Despite the ethnic composition of the study population being reflective of that of the larger Sri Lankan population, the authors hypothesize that the low absolute number of ethnic minorities in this study may have prevented the detection of significant associations for them. It is also possible that minority populations are less likely to report bullying [15, 16].

With regard to bullying and a frequent sense of internship being above one's capacity, it is difficult to establish the cause-effect relationship. The emotional inundation experienced due to work may cause slowness or mishaps in work, which may then be capitalized by bullies in the workplace. It is also possible for a bullied intern to be mentally affected enough to feel that the expected work is beyond their capacity.

Implications and the way forward

Compared to the previous Sri Lankan study on unacceptable teacher behavior in 2004, we see that not much has changed in terms of medical work culture over time. The authors believe that the rigid hierarchy seen in medicine, armed with certain sociocultural enablers in Sri Lanka have created a culture of bullying in medicine. While physician wellbeing and creation of ethical workplaces are progressive considerations in the West, we see from this data that Sri Lanka has a long way to go.

The authors suggest that the rampant nature of the problem needs to be addressed by policy makers to create professional workspaces that leave no room for workplace bullying. The authors recommend teaching skills such as assertiveness to medical students and junior doctors, implementation of sound reporting mechanisms and availability of psychological support to doctors that experience bullying.

Strengths

The strengths of this study are that it fills a gap in medical research in terms of psychological welfare and that it uncovers important findings with a direct impact on the mental health of junior doctors. Additionally, the use of a validated tool to assess workplace bullying lends validity to the uncovered results and we believe that the administration of the questionnaire electronically enabled participants to fill the questionnaire truthfully and at leisure without fear of being linked to certain responses, as might happen with handwritten responses gathered physically.

Limitations

The limitations in this research are the potential for selection bias and limited representativeness due to the use of voluntary response sampling. Additional data on the strata of perpetrators, and exploration of action sought after experiencing bullying would have also enhanced the evidence generated from the study.

Conclusion

Bullying is commonly experienced by Sri Lankan intern doctors, with a high prevalence of physical intimidation and violence. There needs to be strong systemic workplace reforms in Sri Lankan medicine and improved support systems for intern doctors.

Abbreviations

NAQ-R	Negative Acts Questionnaire-Revised
UNICEF	United Nations Children's Fund

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12909-025-07306-4.

Supplementary Material 1

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Author contributions
MV-Conceptualization and writing the main manuscriptDG- Data collection, data analysisSJ-Editing the manuscriptAll authors reviewed the manuscript.

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Data availability
Data is provided within the manuscript or supplementary information files. Other datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate
Ethics approval was obtained from Ethics Review Committee of National Hospital of Sri Lanka, Colombo (AA(J)/ETH/COMM/2023/Oct). Informed consent to participate was taken from all participants. This study adhered to the principles outlined in the Declaration of Helsinki.

Consent for publication
Consent for publication was taken from all study participants.

Competing interests
The authors declare no competing interests.

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