Second victims and quality of support resources among cardiology professionals

Segunda víctima y calidad de los recursos de apoyo a los profesionales en cardiología

To the Editor,

Health care systems are vulnerable to the commission of errors, given that to err is to be human. Studies have investigated the impact of adverse events on patients and family members (first victims), but few have investigated their effects on the health care staff involved (second victims [SV]).[1] Second victimhood has a negative impact on the well-being of staff, patient safety, and institutions.[2–4]

Because of the lack of knowledge of the SV situation in cardiology services, in May, June, and October 2021, we sent out an anonymous survey that included the validated SV Experience and Support Tool (SVEST) questionnaire[5] and demographic data to the email addresses of the Young Cardiologists group of the Spanish Society of Cardiology (SEC) and the Spanish Association of Cardiology Nurses (AEEC). The aim was to investigate the experience of these health care providers as SVs and the quality of support resources in cardiology. The study was approved by the corresponding ethics committee (CHUC_2021_13).

The SVEST comprises 29 items grouped into 9 subscales: 7 dimensions and 2 outcome variables (turnover intentions and absenteeism). Respondents indicate their degree of agreement on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Three of the dimensions measure trauma experienced by SVs (psychological distress, physical distress, impact on professional self-efficacy) and the other 4 measure sources of support (colleagues, supervisors, institution, and nonwork-related support). High scores on each dimension are indicative of more psychological distress, more physical distress, lower perceived professional self-efficacy, and perceived inadequate support. High scores on each outcome variable are indicative of more turnover intentions and greater absenteeism. The percentage of agreement for the subscales is represented by an overall mean subscale score of at least 4.0. The relationships between demographic factors and SVEST scores were tested using univariate analysis, and professional categories were studied using analysis of variance with Bonferroni correction.

In total, 198 validated surveys were obtained. Of these, 44% were completed by nurses, 43% by attending physicians, and 13% by residents (75.9%, 55.3%, and 50% were women, respectively). Table 1 shows the mean scores for each item and subscale of the SVEST.

Table 1
Percentage of agreement and overall mean scores on each item and each subscale of the validated Second Victim Experience and Support Tool by professional category

Subscales of the SVEST	Overall	Level of agreement, %	Consultants	Residents	Nursing staff	ANOVA
Dimension						
1. Psychological distress	3.46 ± 1.16	59.20	3.49 ± 1.14	3.54 ± 1.26	3.45 ± 1.12	0.69
I have experienced shame in these cases	3.58 ± 1.15	64.60	3.56 ± 1.19	3.85 ± 1.19	3.51 ± 1.11	0.42
My participation in these types of cases has made me fear future incidents	3.18 ± 1.25	50.50	3.36 ± 1.17	3.27 ± 1.40	2.98 ± 1.26	0.12
My experiences have made me feel sad	3.84 ± 1.03	72.70	3.89 ± 0.99	3.88 ± 1.24	3.78 ± 1.00	0.76
I feel deep regret for having been involved in this type of event in the past	3.22 ± 1.21	49.00	3.14 ± 1.19	3.15 ± 1.19	3.31 ± 1.24	0.63
2. Physical suffering	2.69 ± 1.18	31.45	2.61 ± 1.20	2.75 ± 1.38	2.76 ± 1.08	0.59
The mental load caused by the experience is exhausting	3.30 ± 1.17	50.00	3.26 ± 1.19	2.96 ± 1.25	3.45 ± 1.12	0.16
My experience of these events has made it hard to sleep	3.15 ± 1.30	47.50	3.11 ± 1.36	3.00 ± 1.50	3.24 ± 1.16	0.64
The stress of these situations makes me feel nauseous or dizzy	1.99 ± 1.02	8.60	1.88 ± 1.00	2.35 ± 1.29	1.99 ± 0.94	0.13
Thinking about these situations makes me lose my appetite	2.32 ± 1.21	19.70	2.19 ± 1.25	2.69 ± 1.49	2.34 ± 1.07	0.17
3. Support from co-workers	3.39 ± 0.96	53.90	3.31 ± 0.94	3.40 ± 1.05	3.47 ± 0.92	0.14
I appreciate my coworkers' attempts to comfort me, but their efforts may come at the wrong time	2.82 ± 1.08	27.80	2.68 ± 1.05	3.12 ± 1.01	2.87 ± 1.10	0.17
Talking about what happened with my coworkers gives me a sense of relief	4.10 ± 0.80	84.30	4.02 ± 0.77	4.04 ± 1.00	4.18 ± 0.75	0.39
My coworkers may be indifferent to the impact these situations have had on me	2.62 ± 1.04	24.20	2.72 ± 1.04	2.54 ± 1.17	2.54 ± 1.00	0.49
My coworkers have helped me to feel that I am still a good health care professional despite the errors	4.04 ± 0.91	79.30	3.82 ± 0.90	3.88 ± 1.03	4.30 ± 0.84	< 0.01
4. Supervisor support	3.26 ± 1.06	51.53	3.25 ± 1.09	3.25 ± 1.14	3.28 ± 1.03	0.95
I feel that my supervisor treats me appropriately after these events	3.61 ± 1.04	65.20	3.56 ± 1.06	3.54 ± 1.14	3.67 ± 1.04	0.77
My supervisor's answers are fair	3.51 ± 1.04	60.60	3.49 ± 1.03	3.42 ± 1.17	3.55 ± 1.02	0.84
My supervisor blames the people on the team when these cases occur	2.36 ± 1.13	16.70	2.40 ± 1.20	2.65 ± 1.06	2.24 ± 1.06	0.24
I feel that, in assessing these situations, my supervisor takes into account the complexity of patient care practices	3.57 ± 1.04	63.60	3.54 ± 1.06	3.38 ± 1.17	3.66 ± 0.99	0.48
5. Institutional support	2.73 ± 1.11	27.77	2.72 ± 1.11	2.73 ± 1.05	2.74 ± 1.11	0.99

Table 1 *(Continued)*
Percentage of agreement and overall mean scores on each item and each subscale of the validated Second Victim Experience and Support Tool by professional category

Subscales of the SVEST	Overall	Level of agreement, %	Consultants	Residents	Nursing staff	ANOVA
My institution understands that those involved in these cases may need help in processing and resolving any consequences they may have on health care staff	2.63 ± 1.12	23.70	2.59 ± 1.08	2.62 ± 0.98	2.68 ± 1.20	0.87
My institution offers a variety of resources to help me overcome the effects of my involvement in these cases	2.41 ± 1.04	15.70	2.29 ± 1.01	2.38 ± 1.00	2.54 ± 1.04	0.3
The concept of concern for the welfare of those who have been involved in these situations is not very strong in my institution	3.14 ± 1.17	43.90	3.27 ± 1.24	3.19 ± 1.17	2.99 ± 1.10	0.28
6. Nonwork-related support	3.94 ± 1	78.75	4.04 ± 0.92	4.06 ± 1.00	3.80 ± 1.07	0.19
I seek emotional support from close friends and relatives after any of these situations have occurred	3.81 ± 1.05	74.20	3.95 ± 0.99	3.92 ± 1.02	3.64 ± 1.11	0.13
The love of my closest friends and family helps me to overcome these events	4.06 ± 0.95	83.30	4.12 ± 0.85	4.19 ± 0.98	3.95 ± 1.02	0.38
7. Professional self-efficacy	3.06 ± 1.19	44.33	3.18 ± 1.17	3.49 ± 1.18	2.82 ± 1.12	< 0.01
Following my involvement in any of these events, I have experienced feelings of incompetence in relation to my skills in helping and caring for patients	3.23 ± 1.13	48.50	3.39 ± 1.13	3.88 ± 0.99	2.89 ± 1.06	< 0.01
My experience makes me wonder if I am really a good health care provider.	3.13 ± 1.21	49.50	3.29 ± 1.19	3.73 ± 1.28	2.78 ± 1.11	< 0.01
After these experiences, I have been afraid to attempt difficult or high-risk procedures	2.94 ± 1.20	40.40	3.14 ± 1.18	3.65 ± 1.16	2.54 ± 1.09	< 0.01
These situations do not make me question my professional abilities	2.94 ± 1.20	38.90	2.88 ± 1.16	2.69 ± 1.30	3.07 ± 1.20	0.32
Outcome variable						
1. Turnover intention	2.32 ± 1.25	22.7	2.37 ± 1.38	2.85 ± 1.33	2.11 ± 1.06	< 0.05
My experience with these cases has made me want to take a job outside of patient care	2.3 ± 1.26	22.2	2.39 ± 1.39	2.77 ± 1.34	2.07 ± 1.05	< 0.05
Sometimes the stress of being involved in these situations makes me want to quit my job	2.34 ± 1.25	23.2	2.34 ± 1.36	2.92 ± 1.32	2.15 ± 1.06	< 0.05
2. Absenteeism	1.63 ± 0.76	4.05	1.52 ± 0.72	1.69 ± 0.93	1.72 ± 0.73	0.18
The experience with an adverse event or medical error has led me to take a day off for my mental health to recover	1.68 ± 0.81	5.1	1.58 ± 0.79	1.69 ± 0.93	1.77 ± 0.77	0.32
I have taken a few days off after any of the following events occurred	1.58 ± 0.71	3	1.46 ± 0.64	1.69 ± 0.93	1.67 ± 0.68	0.12

ANOVA, one-factor analysis of variance; SVEST, validated Second Victim Experience and Support Tool.
Data are expressed as No. (%) or mean ± standard deviation

The item with the highest overall score was "Talking about what happened with my coworkers gives me a sense of relief" (4.10 ± 0.8) with 84.3% agreement. Regarding professional categories, nurses gave the highest score to the item "My coworkers have helped me feel that I am still a good health care professional despite the errors" (4.30 ± 0.84), and attending physicians and residents gave the highest score to the item "The love of my closest friends and family helps me overcome these events" (4.12 ± 0.85 and 4.19 ± 0.98, respectively). The item with the lowest score in all 3 professional categories was "I have taken a few days off after one of these cases occurred" (overall mean, 1.58 ± 0.71), with 3% agreement.

The subscales with the highest overall scores and in each professional category were "nonwork-related support" (overall score, 3.94 ± 1), with 78.75% agreement, and "psychological distress" (overall score, 3.46 ± 1.16), with 59.2% agreement. The subscale with the lowest overall score was "absenteeism" (overall score, 1.63 ± 0.76), with 4.05% agreement. In other cultures, scores on "absenteeism" can reach 9.3%.[6]

Differences were observed between residents and nurses on the 2 items of the outcome variable "turnover intention"; nurses gave the lowest scores and residents gave the highest scores ($P < .05$). Differences were observed between the 3 professional categories in relation to the first 3 items of the domain "professional self-efficacy"($P < .01$); residents gave the highest scores and nurses gave the lowest. A difference was also observed between nurses and consultants on the item "My coworkers have helped me to feel that I am still a good health care professional despite errors" (nurses: 4.3 ± 0.84 and consultants: 3.82 ± 0.9) ($P < .01$). The results of some of the comparisons may have been affected by the imbalance between the number of residents and the numbers of consultants and nurses, which were similar.

Regarding sex, higher overall SVEST scores were given by women than by men (3.1 vs 2.86; $P < .01$). When stratified by occupational category, we observed a trend toward more psychological and physical distress among women in all occupational categories. Statistically significant differences were only observed for the subscales professional self-efficacy and turnover intentions and only between residents and nurses (2.84 ± 1.23 vs 2.23 ± 1.1; $P < .05$; and 3.49 ± 0.81 vs 2.81 ± 0.67, respectively; $P < .01$). No differences were found in the overall SVEST score by years of work experience (< 5 years vs ≥ 5 years) or by type of hospital (secondary vs tertiary).

The results suggest that cardiology staff experience a significant burden of SV-related psychological distress and seek support from

colleagues. We highlight the low level of turnover intention and absenteeism. The women in the sample were more likely to experience SV symptoms.

We believe that actions are needed to prevent and adequately address this phenomenon. To our knowledge, this is the first pilot study to investigate the phenomenon of SV in cardiology. The study highlights the need to implement institutional strategies to provide adequate support for SVs and consequently improve patient care.

FUNDING

This study was funded by the Instituto de Salud Carlos III and FEDER funds (Exp. JR/21/00041).

AUTHORS' CONTRIBUTIONS

J. Bañeras, P. Jorge-Pérez, and S.G. Fidel Kinori were responsible for conceiving the idea and designing the study. All authors contributed to data collection, interpretation, and writing the article.

CONFLICTS OF INTEREST

None declared

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Available online 18 February 2022

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https://doi.org/10.1016/j.rec.2022.01.012

Percutaneous left atrial appendage closure without subsequent antiplatelet treatment in patients with a history of very severe bleeding

Cierre percutáneo de orejuela sin tratamiento antiagregante posterior en pacientes con antecedente de hemorragia muy grave

To the Editor,

Percutaneous left atrial appendage (LAA) closure is a well-established treatment for preventing ischemic events in patients with atrial fibrillation. In standard practice, patients receive postprocedural antiplatelet therapy to prevent device-related thrombosis until device endothelialization is complete. Although the EHRA/EAPCI consensus statement recommends dual antiplatelet therapy with aspirin and clopidogrel for 6 months after LAA closure,[1] some studies have demonstrated the safety of antiplatelet monotherapy in selected patients with a high bleeding risk.[2,3] The risks associated with antiplatelet therapy, however, may be excessive in patients with a history of very severe bleeding, limiting their access to this procedure.

Whether or not antiplatelet therapy of any kind can be reasonably avoided in patients with a high bleeding risk after percutaneous LAA closure remains to be determined. The aim of

Table 1
Baseline clinical characteristics, procedure characteristics, and follow-up events in patients who underwent percutaneous left atrial appendage closure without subsequent antiplatelet therapy

Baseline characteristics (n = 14)	
Age, y	76.5 ± 5.4
Women	4 (28.5)
CHA_2DS_2-VASc	5.5 ± 1.4
HAS-BLED score	4.6 ± 0.9
Annual risk of stroke/TIA/systemic embolism	9.9 ± 1.2
Annual bleeding risk	9.2 ± 1.4
Previous bleeding events	
Intracranial	6 (42.8)
Vitreous	1 (7.1)
Gastrointestinal	7 (42.8)
Procedure characteristics	
Implantation success	14 (100)
Device size, mm	23.1 ± 3.4
Residual leaks > 3 mm	0
Device-related thrombosis factors	
Spontaneous echo contrast in left atrium	0
Severe ventricular dysfunction	2 (14.3)