



Stalking in nurses and other health care professionals: Prevalence, consequences, and coping strategies

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ABSTRACT

Article History

Received: 18 September 2023

Revised: 29 February 2024

Accepted: 20 March 2024

Published: 5 April 2024

Keywords

Anxiety
Depression
Harassment
Hospitals
Psychosocial risk
Victims
Workplace violence.

The aim of this study was to analyze physical and psychological symptoms, anxiety and depression, and coping strategies in a group of Italian Health Care Professional who were victims of stalking. Nurses, who are primarily involved in the physical care of patients, were compared with other types of Health Care Professionals. For research purposes, we queried a database used in previous research between 2014 and 2019. This database was created in collaboration with six hospitals in the Italian territory. 1,971 health professionals between the ages of 18 and 60 who completed an anonymous questionnaire, including 265 self-identified stalking victims (116 nurses), provided the data. The results suggest that Nurses and Health Care Professionals are equally at risk of stalking, with experiences not differing significantly by role. The data collected to date suggests that Nurses are no more likely to be victims than Health Care Professional with other roles. Overall, it appears that all victims suffer from the stalking experience and have negative feelings that affect their ability to deal with the stalker. Health care organizations can assist health care professionals by offering informational courses about the phenomenon. At the same time, strategies could be offered to address potential misconduct that, if not prevented, may lead to an escalation in the number and severity of behaviors.

Contribution/Originality: This study is unique in that it conducted a comparative analysis of Italian nurses and other healthcare workers who experienced stalking. It specifically focused on examining mental and physical symptoms, anxiety, depression, and coping techniques.

1. INTRODUCTION

Harris, Sheridan, and Robertson (2023) recent review of the literature on stalking in HCP highlighted some data that shed light on victim characteristics, consequences, and coping strategies used. That systematic review examined the prevalence and impact of stalking on HCPs, primarily nurses, psychiatrists, and psychologists. Reported prevalence ranged from 10.2% to 50%, likely reflecting differences in operationalization of stalking, sample size, and stalker-victim relationship. The data that emerge are very interesting and help to describe the victims and the consequences of the phenomenon. However, it remains unclear whether there are occupational roles within the same organizational context that are more at risk of victimization. Indeed, there are professions that are more concerned with health care, that are more in touch with the patient's body, and that need to intervene in the containment of

illness, the relief of pain, and the healing from a state of suffering. There are other professions that are more concerned with mental health, where the predominant setting is not the inpatient unit but therapy or counselling. From the perspective of the role, are there differences in the prevalence of the phenomenon of stalking, in the psychological and physical consequences, and in the types of strategies used? The aim of this work is to analyse possible differences in the experience of victimization among health professionals according to the type of role within a hospital.

1.1. Background

Mullen, Purcell, and Stuart (1999) describe the phenomenon as the situation in which one person, the stalker, imposes himself on another, the victim, and induces in him a state of fear and insecurity caused by inappropriate advances such as oppressive forms of communication and intrusion into everyday life. The phenomenon is characterized by a series of pervasive, intrusive, and irritating behaviours aimed at communicating with the victim, even when the victim resists and is intimidated by these behaviours (Pathé, Mullen, & Purcell, 2002; Sheridan, 2023). The professional environment presents a scenario in which it is possible to develop relationships that, even if not particularly worrisome at first, can later degenerate into the alarming behaviour of occupational stalking (Sheridan, North, & Scott, 2019). The existing literature defines occupational stalking as a complex phenomenon that affects some occupational groups more than others.

According to Pathé et al. (2002) and Jutasi and McEwan (2021) the professional group most affected is Health Care Professionals, such as nurses, physicians, psychologists, social workers, etc. (see <https://www.who.int/news-room/fact-sheets/detail/occupational-health--health-workers>). The awareness of having been abandoned, neglected, despised, or not treated leads to a series of behaviours that the harasser engages in to avenge the injustice suffered; these behaviours may represent the obsessive acts typical of the stalker (Henley, Underwood, & Farnham, 2020). Any professional who deals with isolated individuals who easily misinterpret the offer of help and empathy as a kind of sentimental interest is a potential victim of harassment by stalkers seeking intimacy or incompetence. Mcivor and Petch (2006) and Bulut, Usman, and Nazir (2021) attempt to describe the main reasons that may underlie the fact that HCPs can be victims of stalking and summarizes them in two main explanations: (i) These professionals come into contact with people in need and can easily fall prey to projections of affection and internalized relationships; (ii) The unrealistic expectations of certain patients can be undermined by the demands of daily work, leading to stalking as a means of seeking attention or seeking retribution for the burden of responsibility for one's own health or the well-being of loved ones. These factors are never entirely under anyone's control.

The literature review suggests that the professional group of nurses is more at risk than other professional groups. Indeed, the percentages range from 14 to 50% of the nursing population studied (Acquadro, Varetti, & Zedda, 2014; Ashmore, Jones, Jackson, & Smoyak, 2006; Harris et al., 2023). In its report, APA points out that approximately 40% of psychiatric physicians and an even higher percentage of psychiatric nurses have been assaulted by one or more patients in treatment and that a single incident can be the beginning of stalking behaviour. Galeazzi, Elkins, and Curci (2005) studied the phenomenon among 361 health professionals who were victims of stalking in Italy and found that 53% were psychiatric nurses, 30% were psychiatrists and psychologists, and the remaining 17% were from other professional groups such as therapists or educators working in rehabilitation. However, the systematic review by Harris et al. (2023) showed that none of the studies considered found a significant difference in prevalence between occupational groups.

Overall, Health Care Professionals who are victims of stalking experience both psychological and physical consequences. These include, for example, stress, anxiety symptoms, depressive symptoms, negative feelings such as increased anger and fear, and less trust in others: Ashmore et al. (2006) reported that 10.7% of participants lost friends due to stalking. This is particularly important because when support networks are diminished due to stalking, isolation can thrive and coping skills can be impaired. Although fewer physical than emotional effects were reported (see Jutasi and McEwan (2021) and Harris et al. (2023)) symptoms such as headaches, nausea, and sleep problems

were reported in studies of Health Care Professionals. At the organizational level, the relationship between experienced workplace violence and job satisfaction, the impact on nurses' job performance, and the impact on patient outcomes have been established (Arnetz et al., 2015). Nurses who have experienced violence are less satisfied with their jobs, increasing their intention to leave their jobs. It's interesting to note that in various forms of workplace violence, some victims view their intention to leave the workplace as a coping mechanism because it enables them to get away from the source of the issue (see Hoel, Einarsen, and Cooper (2002)).

About coping strategies, Spitzberg and Cupach (2007) and Spitzberg and Cupach (2014) classified the types of behaviour to cope as follows:

- Moving towards when the victim decides to interact with the stalker and renegotiate the existing relationship (e.g., ask him to stop);
- Moving away when the victim decides to avoid the stalker (e.g., ignoring him or her);
- Moving against the stalker if the victim takes action against the stalker (e.g., by verbally threatening him or her);
- Moving inward when the victim decides to control his or her emotions in terms of personal self-empowerment (e.g., through self-defence training);
- Moving outward, when the victim decides to ask a third person for help (e.g., by talking to a friend).

As Carr, Goranson, and Drummond (2014) and Liu et al. (2019) noted, Health Care Professionals are unlikely to report stalking victimization. The most plausible consideration would be the personal feeling of being able to handle this situation thanks to one's professional tools. In addition, there is the fear of causing harm to the patient for whose health one is personally responsible. Another sad barrier to filing a complaint is the fear of what other professionals might think about this decision, as if they would label them as incompetent and unfit for the role (Sheridan et al., 2019).

1.2. Current Study

In Italy, studies confirmed the international trend of violence against Health Care Professionals (Cannavò, La Torre, Sestili, La Torre, & Fioravanti, 2019; Magnavita, Heponiemi, & Chirico, 2020; Ramacciati et al., 2019). Research shows that the percentage of nurses reporting workplace violence, of any type, ranges from 48.6% to 65.9% (see, for example, Ferri, Silvestri, Artoni, and Di Lorenzo (2016)). In our country, the anti-stalking law (Penal Code, Article 612 bis, 2009; see also De Fazio (2011)) states that: "Unless the act is recognized as a more serious offense, it is an offense punishable by a term of imprisonment of 6 months to 4 years to continuously threaten or harass another person to such an extent as to cause a serious, prolonged state of anxiety or fear, or to instil in the victim or victims a well-founded fear for his or their own safety or for the safety of relatives or other persons connected to the victim or victims by kinship or emotional relationship, or to compel the victim or victims to change his or their habits of life".

A study conducted in the Italian context by Galeazzi et al. (2005) showed that of 361 health professionals who were victims of stalking, 53 (n=192) were psychiatric nurses, 30% (n=108) were psychiatrists and psychologists, and the remaining 17% (n=61) were from other professional groups such as therapists or educators working in psychiatric rehabilitation. Among the most widespread behaviours, there were: intrusive approach (75%), telephone calls (65%), following (58%), surveillance (48%), sending letters (33%), following (23%), property violation (20%), spreading slander (15%), and sending unwanted material (10%). The consequences of these harassments were very serious in some cases, up to physical assault (23%). The most frequently adopted coping strategies are changing some life habits, both private and professional, and considering a change of job or residence.

Results from an investigation conducted by Acquadro et al. (2014) on a sample of 765 nurses show that 107 were victims. The largest proportion of victims reported that the behaviours that characterized stalking included unwanted communication, following, control, assault, and threats. Stalking causes both emotional and physical consequences,

anxiety, and depressive symptoms in victims. The most commonly used coping strategies are personal protection (moving inward) and confronting the stalker to explain the disruption they are causing (moving outward). An interesting study by Compascini et al. (2016) showed that in a sample of nearly 1000 nurses, 23.3% were victims of an online stalking campaign. In another investigation conducted by the authors of this study, data showed that in a sample of 1841 Health Care Professionals, 256 (13.9%) were victims of stalking. Victims reported that they suffered more from certain physical and emotional symptoms: weight changes, stomach problems, weakness, sadness, lack of self-confidence, etc. The most commonly used coping strategies are moving away and moving towards, while the least used strategy is moving inward.

The aim of this study was to analyse physical and psychological symptoms, anxiety, depression, and coping strategies in a group of Italian health care professional victims of stalking, comparing Nurses, who are primarily concerned with the physical care of patients, with other types of Health Care Professionals (HCPOTH here in after).

Based on the literature reviewed, we hypothesize that nurses are more frequently affected by the phenomenon compared to other health professionals and that it has greater physical and psychological consequences, including depression and anxiety (HP 1). In terms of coping strategies, we expect Nurses to use more moving inward and moving outward strategies, whereas HCPOTH uses more moving away and moving towards strategies (HP 2).

2. MATERIALS AND METHODS

2.1. Participants

For research purposes, we queried a database used in previous research between 2014 and 2019. This database was created in collaboration with six hospitals on Italian territory. 1,971 health professionals between the ages of 18 and 60 completed an anonymous questionnaire that provided the data. The distribution of participants among the different professional categories is shown in Table 1 ($\chi^2 = 8.03$; $p = .154$; Cramer's V = 0.07). Before conducting the survey, we calculated the sample size. Based on the consideration that the total number of hospital employees is approximately 6000, and taking into account the frequency of reported stalking in this particular population (approximately 14%, according to Harris et al. (2023)) we calculated the sample size. The calculation resulted in a sample size of 180 cases. In our database, 265 individuals (13.4%) reported being a victim of stalking at least once (mean age: 36.6; 85% female). Thus, our observations exceeded the minimum sample size by 47.2%. Calculations were performed with Calculator.net (<https://www.calculator.net/sample-size-calculator.html>, accessed on 21 February 2023).

Table 1. Distribution of participants in the different professional categories (N = 1971).

Professional categories	n	%
Nurses	894	45.36
Physicians	272	13.80
Social workers	76	3.86
Psychologists	436	22.12
Technical and administrative staff	293	14.86

2.2. Measures

2.2.1. Prevalence of Stalking

In order to measure the prevalence of stalking, a modified Italian version of the questionnaire performed by the Network for Surviving Stalking was used (Acquadro et al., 2014). The respondents were asked whether they had experienced behaviours that could be defined as stalking (such as unusual letters, phone calls, emails, harassment, threats, or physical assault. 28 items; possible response options: yes/no).

All those participants who reported having been victimized at least once by any of the stalking behaviours were considered victims. The behaviours that characterise the experience of victimisation were taken from the same

questionnaire. These behaviours are 16 with some sub-categories (e.g., waiting: outside home – outside workplace, the possible yes/no answers).

2.2.2. Physical and Emotional Symptoms

18 items from the Italian version of the Stalking Questionnaire were used to measure the consequences of the stalking experience. 8 items examined physical symptoms (e.g., headaches, sleep disorders, gastro-intestinal disorders, panic attacks; possible response options: yes/no) and 10 items examined emotional symptoms (e.g., anger, fear, aggressiveness; possible response options: yes/no).

2.2.3. Depressive Symptoms

The depressive symptoms were assessed with the Beck Depression Inventory (BDI) ([Beck, Ward, Mendelson, Mock, & Erbaugh, 1961](#)). We used the short version of the BDI, the Italian version ([Scilligo, 1992](#)). It contains 13 items that can be used to classify symptoms and define different levels of severity: no or minimal depression (score 0–4), mild depression (5–7), moderate depression (8–15), and severe depression (> 15) (in this study, Cronbach's alpha was 0.95, indicating excellent internal consistency).

2.2.4. Anxiety Symptoms

The State-Trait Anxiety Inventory (STAI) was used to measure anxiety symptoms ([Pedrabissi & Santinello, 1989](#); [Spielberger, 1983](#)). It comprised two subscales (STAI-Y1 and STAI-Y2; 20 items each) that assessed how participants felt in the present moment (state anxiety) and how they felt most of the time (trait anxiety). The total score ranged from 20 to 80, with 40 being the threshold for anxiety symptoms. The severity levels of the rating scale were as follows: scores ranging from 40 to 50 were indicative of mild severity, scores ranging from 51 to 60 were indicative of moderate severity, and scores over 60 were indicative of severe anxiety symptoms. The Cronbach's alpha values in this study were 0.77 for the state anxiety scale and 0.88 for the trait anxiety scale (indicating good and excellent internal consistency, respectively).

2.2.5. Coping Strategies

The Italian version of the Network for Surviving Stalking questionnaire was used to assess the coping strategies. There are 17 strategies that can be answered with yes/no. An example of a strategy is "ask to stop". The strategies were classified according to the suggestions of [Spitzberg and Cupach \(2007\)](#): moving against, moving away, moving inward, moving outwards, and moving towards.

2.2.6. Statistical Analysis

IBM SPSS Statistics Version 28 software was used to generate descriptive and inferential statistics. Descriptive measures (mean \pm SD, frequencies) were calculated for all test variables for the two groups of participants (nurses and HCPOTH) and their physical and emotional consequences, anxiety and depressive symptoms, and coping strategies used. The t-test was used to assess the statistical significance of the age of the participants and the mean of the physical and emotional consequences ($p > 0.05$ was considered significantly different). Differences in stalking victimization scores (physical and emotional consequences, depression, state anxiety, and trait anxiety) and coping strategies used between the two groups (nurses and HCPOTH) were assessed using χ^2 -tests. The effect size (Cramer's V, Phi) was calculated to estimate the practical significance of the differences. Differences were considered statistically significant if $p < .05$. As a post-hoc test, standardized Pearson residuals (SPR) were determined for each cell to determine which cell differences contributed to the χ^2 tests. At a significance level of 0.05, SPRs with absolute values higher than 1.96 meant that there were a lot more cases in that cell than would be expected if the null hypotheses were true. This was true for both overrepresentation and underrepresentation.

A simple linear regression was used to analyse which variables were the best predictors of anxiety and depression among victims (Lenzo, Quattropani, Sardella, Martino, & Bonanno, 2021). Anxiety and depression scores were recorded as binary variables according to the cut-off values. Depression and anxiety scores (state, trait) were considered dependent variables, while coping strategies and symptoms (physical, emotional) were used as independent variables. Statistical significance was set at $p > .05$.

2.3. Ethical Statement and Procedure

The local ethics committee (N.277326/2017) approved this research project. All ethical guidelines were followed, including the legal requirements for research involving human subjects. Researchers, who had previously trained the research assistants, collected the data. Together with the questionnaire, they received an information letter and a consent form. The letter clearly explained the research objectives, the voluntary nature of participation, the anonymity of the data, and the elaboration of the results. Participants completed an anonymous questionnaire, which was given to them individually in paper form, and returned it immediately after the survey. It took about twenty minutes to complete the questionnaire. All respondents took part in the study on a voluntary basis and received no compensation for their participation.

3. RESULTS

3.1. The Prevalence of Stalking

Of the total 265 victims, 116 were nurses (43.8%). Among the nurses surveyed, the percentage of those who describe themselves as victims is 13%. The average age is 37.22 years (Range = 18-60 years). Most of the nurses are female (84.1%). The majority are married (33.3%), 24.6% are single, 19.3% are engaged, 13.2% are cohabiting, 8.8% are divorced, and one person is widowed. The other professions have been merged into a single category (HCPOTH). Among them, the percentage of victims is 13.83%. Their average age is 36.15 years (range = 20-60; $t = 0.76, p = .447$). Most respondents (85.2%) report being female. The majority are single (25.9%), 25.2% are engaged, 25.2% are married, 13.3% are divorced, and 10.5% are in a partnership ($X^2 = 5.27, p = .384$). In Table 2, there are the misconducts that characterize stalking behaviour.

Table 2. Behaviours characterizing the stalking campaign (Value expressed in percentage).

Behaviours	Nurses n = 116	HCP _{OTH} n = 149	X ²	P	Φ
Calls	70.1	68.9	0.03	0.488	0.012
Letters	26.8	25.5	0.04	0.491	0.014
E-mails	20.6	22.4	0.08	0.463	0.022
Text messages	39.7	45.5	0.65	0.255	0.057
Photo	4.8	8.0	0.64	0.322	0.063
Gifts	17.9	19.6	0.08	0.471	0.021
Other unwanted communication	27.5	25.2	0.11	0.435	0.026
Following	50.6	48.4	0.01	0.431	0.022
Spying	42.3	43.1	0.01	0.516	0.009
Visiting					
• Home	12.3	13.5	0.05	0.513	0.017
• Workplace	36.6	33.0	0.25	0.368	0.037
Waiting					
• Outside home	48.8	38.2	2.12	0.096	0.106
• Outside workplace	36.8	32.1	0.45	0.304	0.049
Vandalizing (Home, car, properties...)	20.9	12.7	2.00	0.116	0.109
Physical assault	14.3	11.7	0.25	0.394	0.038
Sexual assault	1.6	3.0	0.30	0.507	0.043
Threat					
• Physical assault	25.4	25.9	0.01	0.541	0.006

Behaviours	Nurses n = 116	HCP _{OTH} n = 149	X ²	P	Φ
• Sexual assault	8.1	3.0	2.05	0.145	0.113
• Third parties assault	12.9	19.6	1.22	0.187	0.086
Harass others (Relatives, friends, colleagues...)	9.5	3.0	3.09	0.081	0.138
Manipulate others	18.5	23.5	0.60	0.282	0.060
Spread rumours	30.3	34.9	0.39	0.325	0.048

Note: X² = Chi squared value; p = P value; Φ = Phi value.

3.2. Physical and Emotional Symptoms

Regarding physical symptoms, sleep disorders, fatigue, panic attacks, and weight changes seem to be the most common symptoms across the sample. The latter is more likely to be reported by Nurses ($|SPR| = 1.9$, $\phi = 0.12$). Nurses report an average of 1.50 (S.D. = 1.82) physical symptoms, while HCPOTH report 1.56 (s.d. = 1.88; $t = -0.29$, $p = .770$). Nurses are also more likely to report self-inflicted injuries ($|SPR| = 2.6$, $\phi = 0.16$). The most commonly reported emotional symptoms included fear, anger, irritation, and confusion. Fear was reported more frequently by Nurses ($|SPR| = 2.6$, $\phi = 0.16$). Nurses report an average of 2.41 (S.D. = 2.01) emotional symptoms and HCPOTH report 2.46 (S.D. = 1.83; $t = -0.22$, $p = .830$). Table 3 presents physical and emotional symptoms in Nurses and HCPOTH.

Table 3. Consequences of the victimization: Physical and emotional symptoms (Value expressed in percentage).

Symptoms	Nurses n = 116	HCP _{OTH} n = 149	X ²	P	Φ
Physical symptoms					
Weight change	23.3	14.1	3.71	0.039	0.118
Sleep disorders	40.5	40.3	0.00	0.534	0.003
Headache	18.1	24.8	1.73	0.122	0.081
Tiredness	22.4	20.8	0.10	0.433	0.019
Gastro-intestinal disorders	6.9	8.1	0.13	0.456	0.022
Self-inflicted injuries	4.3	0.0	6.55	0.015	0.157
Being hurt by stalker	1.7	2.7	0.27	0.466	0.032
Panic attacks	19.8	18.1	0.41	0.315	0.039
Emotional symptoms					
Suicidal thoughts	1.7	2.7	0.27	0.466	0.032
Sadness	12.9	9.4	0.84	0.236	0.056
Anger	50.0	51.0	0.03	0.485	0.010
Confusion	23.3	21.5	0.12	0.419	0.021
Fear	51.7	35.6	6.96	0.006	0.162
Lack of confidence in others	11.2	10.7	0.02	0.528	0.007
Aggressiveness	10.3	7.4	0.72	0.263	0.052
Paranoia	13.8	14.1	0.01	0.545	0.004
Irritation	29.3	36.2	1.41	0.145	0.073
Agoraphobia	4.3	4.7	0.02	0.563	0.009

Note: The total percentage can be over 100 because the participant could choose multiple consequences related to the stalking experience. X² = Chi-square value; p = P value; n.s. = Not statistically significant; Φ = Phi value.

3.3. Depressive and Anxiety Symptoms

Overall, victims show depressive symptoms with a BDI score of 6.29 (S.D. = 7.89; range score = 0-36), symptoms of state anxiety with a score of 56.17 (S.D. = 10.11; range scores = 25-96), and trait anxiety with a score of 54.94 (S.D. = 10.42; range scores = 24-80). Table 4 presents depressive and anxiety symptoms in Nurses and HCPOTH.

Table 4. Depressive and anxiety symptoms in nurses and HCP_{OTH} (Value expressed in percentage).

Depressive and anxiety symptoms	Nurses n = 116	HCP _{OTH} n = 149	X ²	P	ϕ
BDI:					
No/Minimal (0-4)	77.2	81.6	1.58	0.665	0.097
Mild (5-7)	15.2	9.2			
Moderate (8-15)	5.1	6.9			
Severe (>15)	2.5	2.3			
STAI Y1:					
No/Minimal (20-39)	47.4	27.6	10.1	0.018	0.249
Mild (40-50)	35.5	57.5			
Moderate (51-60)	9.2	11.5			
Severe (>60)	7.9	2.4			
STAI Y2:					
No/Minimal (20-39)	39.5	20.5	11.8	0.008	0.268
Mild (40-50)	46.1	58.0			
Moderate (51-60)	9.2	20.5			
Severe (>60)	5.3	1.1			

Note: X² = Chi-square value; p = P value; n.s. = Not statistically significant; ϕ = Phi value.

Analysed by symptom severity, the results show that there are significant differences between Nurses and HCP_{OTH}. Nurses report more mild depression on average (|SPR| = 2.5, ϕ = 0.10). Interestingly, HCP_{OTH} report more mild state anxiety on average (|SPR| = 2.8, ϕ = 0.25), whereas Nurses report more minimal state anxiety and minimal trait anxiety (|SPR| = 2.6, ϕ = 0.25 and |SPR| = 2.7, ϕ = 0.27, respectively).

3.4. Coping Strategies

In general, participants indicated that the coping strategy they were moving towards was the one they used most often. When comparing Nurses and HCP_{OTH}, it appears that the moving outward strategy was more frequently reported by Nurses (Table 5 - |SPR| = 1.9, ϕ = 0.12).

Table 5. Coping strategies in Nurses and HCP_{OTH} (Value expressed in percentage).

	Nurses n = 116	HCP _{OTH} n = 149	X ²	P	ϕ
Moving toward	60.7	61.1	0.00	0.530	0.003
Moving away	21.5	16.8	0.91	0.214	0.060
Moving against	19.6	22.8	0.38	0.325	0.038
Moving inward	48.6	49.0	0.00	0.526	0.004
Moving outward	22.4	13.4	3.55	0.044	0.118

Note: X² = Chi-square value; p = P value; n.s. = Not statistically significant; ϕ = Phi value.

3.5. Linear Regression

A linear regression analysis was performed to predict the risk of anxiety and depression in victims (Nurses and HCP_{OTH}). Depression and anxiety scores were categorised into two categories (suffering: yes/not) using the cut-off described previously (depression: suffering yes ≥17, suffering not 16 or less scores; trait and state anxiety: suffering yes ≥40, suffering not 39 or less scores).

The findings showed that Nurses' depression was associated with moving away coping and moving against strategies (see Table 6 – Predictor of depression in Nurses and HCP_{OTH} victims of stalking), while trait anxiety was associated with moving outward strategy (Table 8 - Predictors of trait anxiety in Nurses and HCP_{OTH} victims of stalking). In HCP_{OTH}, depression was associated with emotional consequence and moving outward strategy (Table 6 – Predictor of depression in Nurses and HCP_{OTH} victims of stalking), state anxiety was associated with moving

outward strategy (Table 7 - Predictors of state anxiety in Nurses and HCPOTH victims of stalking), and trait anxiety was associated with emotional consequences and moving away strategy (Table 8 - Predictors of trait anxiety in Nurses and HCPOTH victims of stalking).

Table 6. Predictors of depression in Nurses and HCPOTH victims of stalking.

Nurses (n = 116)				HCPOTH (n = 149)				
Symptoms and coping strategies	β	P	95 CI		β	P	95 CI	
			Lower	Upper			Lower	Upper
Emotional symptoms	0.22	n.s.	-0.02	0.11	0.24	0.032	0.09	2.01
Physical symptoms	0.22	n.s.	-0.02	0.12	0.08	n.s.	-0.66	1.31
Moving toward	0.06	n.s.	-0.16	0.26	-0.09	n.s.	-4.91	1.81
Moving away	0.31	0.004	0.11	0.54	0.28	0.005	1.80	9.62
Moving against	-0.30	0.005	-0.53	-0.01	0.02	n.s.	-2.95	3.78
Moving inward	-0.11	n.s.	-0.031	0.12	-0.04	n.s.	-3.07	2.96
Moving outward	0.18	n.s.	-0.02	0.37	0.37	0.001	3.87	11.84

Table 7. Predictors of state anxiety in Nurses and HCPOTH victims of stalking.

Nurses (n = 116)				HCPOTH (n = 149)				
Symptoms and coping strategies	β	P	95 CI		β	P	95 CI	
			Lower	Upper			Lower	Upper
Emotional symptoms	-0.15	n.s.	-2.25	0.97	-0.23	n.s.	-2.64	0.15
Physical symptoms	0.13	n.s.	-1.19	2.49	0.08	n.s.	-0.83	1.59
Moving toward	0.03	n.s.	-4.77	6.01	-0.00	n.s.	-4.96	4.91
Moving away	-0.21	n.s.	-10.54	1.23	-0.27	0.017	-12.05	-1.23
Moving against	0.03	n.s.	-4.97	6.27	0.01	n.s.	-4.53	5.18
Moving inward	-0.25	n.s.	-9.83	0.98	-0.05	n.s.	-5.42	3.87
Moving outward	0.21	n.s.	-0.82	9.45	-0.16	n.s.	-9.94	1.66

Table 8. Predictors of trait anxiety in Nurses and HCPOTH victims of stalking.

Nurses (n = 116)				HCPOTH (n = 149)				
Symptoms and coping strategies	β	P	95 CI		β	P	95 CI	
			Lower	Upper			Lower	Upper
Emotional symptoms	-0.01	n.s.	-1.18	1.74	-0.41	0.003	-3.67	-0.79
Physical symptoms	-0.15	n.s.	-2.78	1.17	0.22	n.s.	-0.32	2.51
Moving toward	0.10	n.s.	-4.04	8.10	0.06	n.s.	-3.81	6.38
Moving away	0.06	n.s.	-4.89	7.80	-0.28	0.012	-12.08	-1.54
Moving against	-0.01	n.s.	-6.54	5.39	-0.12	n.s.	-5.31	4.72
Moving inward	-0.28	n.s.	-11.64	0.48	0.05	n.s.	-3.50	5.35
Moving outward	0.27	0.039	0.30	11.58	-0.07	n.s.	-7.27	3.74

4. DISCUSSION

The overall data suggest a prevalence rate of stalking that ranges from 13 to 14% in the health care professional population. This confirms the data from the systematic review by [Harris et al. \(2023\)](#) so there is no difference in role in this professional group: the data collected to date suggest that Nurses are no more likely to be victims of victimisation than HCPOTH. In terms of physical and emotional consequences, there are no differences in the number of symptoms, while differences in the type of symptoms are evident: Nurses are more likely to report weight problems, self-injury, and anxiety. Regarding depression and anxiety, Nurses seem to suffer more from mild depression than HCPOTH, while HCPOTH most often reports mild anxiety. In general, scores for anxiety and depression are minimal. Thus, the first hypothesis is not confirmed.

The coping strategies used suggest that Nurses tend to use a moving-outward strategy more than HCPOTH. The difference is minimal, with both groups reporting the outward strategy as the third strategy, while the first is moving towards, followed by moving inward. Thus, the second hypothesis was also not confirmed. Finally, regarding anxiety

and depression, symptomatology is related to nurses using strategies of distance (moving away) and direct confrontation with the stalker (moving towards), while depression is related to strategies of help-seeking (moving outward). Help-seeking may be viewed as a failure of one's ability to resolve the situation, resulting in a diminished sense of self-efficacy. In HCPOTH, depression is associated with emotional consequences and help-seeking strategies. Again, a sense of diminished self-efficacy may occur, which could impact perceived occupational competence. It should be noted that the consequences of stalking affect not only the victim but also those who are in contact with the health care professional.

By this, we mean not only the family members, but also the patients themselves. One of the consequences of victimisation may be emotional distance from the patient's needs (Caruso et al., 2022; Funk, Spencer, & Herron, 2021; Stevenson, Jack, O'Mara, & LeGris, 2015). This behaviour damages not only the relationship between the patient and the health care professional but also the relationship between the patient and the hospital facility. While appropriate distance from the patient is desirable, excessive distance can make the patient seem less human, jeopardising the trust that is established in the care relationship. In addition, distance to the patient is a problem that is particularly relevant after the pandemic. Because of the pandemic's fatigue, it is more challenging for health professionals to get close to patients (Ardebili et al., 2021).

The phenomenon can be prevented at the community, organisational, and individual levels. At the community level, having knowledge about the specific activities that qualify as stalking crimes, such as the laws and punishments in place, can assist in assessing the suitability of such activity. In addition, a social campaign about the phenomenon and its prevalence could be useful to counteract the notion that the victim is a defective subject who somehow provoked the other's hostility (Korkodeilou, 2020). Specifically, in cases of workplace stalking, it has been observed that victims claim that they were not adequately informed about the possibility of developing violent behaviour in the workplace (Al-Qadi, 2021; Sharifi, Shahoei, Nouri, Almvik, & Valiee, 2020).

As a result, inadequate education and training negatively affect how workers respond. In many cases, they are unprepared and do not know exactly what useful resources are available to them to deal with the situation and how to cope with the phenomenon (Park & Song, 2023). And most importantly, the phenomenon can occur regardless of their professional skills in dealing with patients and their caregivers as well as with other people (e.g., colleagues; Zhang et al. (2022)). Educational programs could make professionals aware of the many risks that health care professionals face, explain the actions that can be taken to address violent behavior, and examine the psychological, emotional, and economic consequences as well as the impact on how they do their jobs. Employees should receive valuable tips and advice on how to deal with the adverse situation in practice, especially for newly trained professionals who are still in the early stages of their careers (Jeong & Lee, 2020; Rosi, Contiguglia, Millama, & Rancati, 2020). Training allows employees to recognize those behaviors that could develop into stalking and avoid a certain level of tolerance that comes with the tendency to downplay intimidating scenarios. This tendency is related to the fact that such behaviors are common in some settings, such as health care, or to the perception of not being able to deal with such events and/or the belief that the problem can be resolved spontaneously (Dafny & Beccaria, 2020). If a patient exhibits inappropriate behavior at first (such as asking a nurse for personal information or receiving unwanted attention), the professional may decide to stop caring for and supervising the patient and delegate the task to a colleague (Ashmore et al., 2006). In these circumstances, some misbehaviours are clear warning signs that, if properly recognised, can prevent contact with a potential stalker. Thus, learning to properly assess the risk of a stalking campaign through in-depth information, education, and training can help you avoid the intrusiveness and discomfort of this phenomenon.

Finally, it is advisable that victims maintain stable boundaries at work and avoid confusing their professional roles with their personal lives to prevent the stalker from developing false and misleading ideas (Chirico et al., 2021; Zhang, Zheng, Cai, Zheng, & Liu, 2021).

Inevitably, this study has limitations. The database on which this analysis is based was collected over the course of several years; the questionnaire was not repeated in the same structures, and the reception of the phenomenon may change. It would be useful to propose a re-examination of the same structures and to detect a possible change as a result of the pandemic situation and the increasingly massive use of technology for social contacts. For example, it might be useful to make a comparison between online and offline stalking to better understand the prevalence of the phenomenon, especially among young caregivers. Another limitation is participant bias. Participation in research on violence and stalking suffers from the limitation of self-selection by participants who may be particularly interested in the phenomenon. Alternatively, they may avoid reliving the situation that triggered negative feelings. The possibility of conducting qualitative research, that is, exploring the phenomenon and the lived experience through interviews, could shed light on these aspects of fear and reluctance to describe the lived experience. In addition, in this study, we did not consider gender differences and other sociodemographic variables, such as educational level, that might explain the use of certain coping strategies (e.g., seeking help) versus others.

Further research could address these variables. Another limiting aspect is the ward in which health care workers work. In the absence of significant differences in prevalence, type of behaviour, consequences, and coping strategies, it may be useful to examine the ward in which victims work. As the literature indicates (see, for example, (Civilotti, Berlanda, & Iozzino, 2021; Jakobsson, Axelsson, & Örmon, 2020; Jakobsson, Örmon, Berthelsen, & Axelsson, 2022)) there are some wards in which health care professionals are particularly at risk of becoming victims of stalking. Further research could be conducted with the goal of comparing different wards to understand the phenomenon and the resulting risk.

5. CONCLUSION

In conclusion, this study posits that health care workers have an equitable level of susceptibility to stalking, with no substantial variations observed in their experiences based on their respective roles. In general, it seems that all individuals who are targeted by stalkers endure the distressing ordeal and encounter adverse emotions that hinder their capacity to cope with the stalker. Healthcare institutions can support healthcare workers by providing educational courses on the subject matter. Simultaneously, it is possible to provide solutions aimed at mitigating potential misbehavior, which, if left unaddressed, may result in an increase in both the frequency and intensity of such behaviours.

Funding: This study received no specific financial support.

Institutional Review Board Statement: The Ethical Committee of the University of Torino, Italy has granted approval for this study on 3 August 2017 (Ref. No. 277326/2017).

Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: Conceptualization, D.A.M. and A.V.; formal analysis, T.B.; writing—original draft preparation, D.A.M. and T.B.; writing—review and editing, D.A.M., T.B., M.M.G. and A.V.; supervision, A.V., D.A.M. and M.M.G.; project administration, A.V. All authors have read and agreed to the published version of the manuscript.

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