Aggressive incidents in home care services and organizational support: A cross-sectional survey in Switzerland

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Abstract

**Aims:** To explore the available organizational structures addressing aggressive incidents towards home care services staff.

**Background:** Organizational structures how professional caregivers deal with care recipients' aggressive incidents.

**Methods:** An explorative cross-sectional survey using the Violence Experienced by Staff (German version revised) and the Impact of Patient Aggression on Carers Scale was conducted. Data from 852 health care professionals in the German-speaking part of Switzerland were collected between July and October 2019. Multiple logistic regression models were used to investigate associations. The STROBE-Checklist was used as the reporting guideline.

**Results:** Organizational support and management support in home care services were generally rated high and found to cause a significant decrease in negative feelings. Some self-rated skills regarding aggression management were linked to a decrease in perceived burden after aggressive incidents, whereas others increased the perceived burden.

**Conclusion:** Organizational structures including official procedures for affected professional caregivers should be established in home care services. This should contain efficient reporting systems and aggression management training for the specific setting.

**Implications for Nursing Management:** The study highlights the importance of organizational support regarding aggressive incidents in the home care setting as well as of aggression management training.

**KEYWORDS**

home care, survey methodology, community health, gerontology, violence
1 | BACKGROUND

Care recipients behaving aggressively with professional caregivers is a common phenomenon in the health care setting (Paschali et al., 2018; Yu et al., 2019). Investigations in the home care settings show that aggressive behaviour against professional caregivers occur often in the home care setting as well (Hanson et al., 2015; Schablon et al., 2018). Schnelli, Ott, et al. (2021) found that 14.8% of clients availing home care services display verbally or physically aggressive behaviour towards caregivers and that such behaviours were linked to cognitive impairment. Home care services have gained importance due to demographic changes worldwide (Genet et al., 2012). However, home care services face specific challenges such as increasing demand for care for people with dementia (Genet et al., 2012). Care for persons with dementia is often rewarded by aggressive behaviour against professional caregivers (Paschali et al., 2018; Schnelli, Mayer, et al., 2021; Yu et al., 2019). However, there is a lack of research regarding this phenomenon in the professional home care setting. Therefore, this study's research interest was directed towards aggressive behaviours in the home care setting.

The consequences of aggressive behaviour against professional caregivers include stress and burden, often resignation from the job, and post-traumatic stress (Paschali et al., 2018; Schnelli, Mayer, et al., 2021). Consequences of aggressive behaviour on behalf of the clients cause disturbances in the professional relationship and provoke increased fixations or assault from professional caregivers (Heckemann et al., 2017). Research could show ways to reduce such consequences after aggressive incidents. An important aspect that influences the perceived burden in the context of aggressive behaviour is team culture and support from the management (Heckemann et al., 2020). A positive team culture means the opportunity to discuss aggressive incidents in the team during informal conversations (Heckemann et al., 2020). Health professionals often seek support from their team members after surviving aggressive incidents (Edward et al., 2014; Heckemann et al., 2020).

Although support from colleagues is helpful, receiving support from the management was identified as being crucial as well (Schnelli et al., 2019). Support from the management includes an active role of the team leader. This means encouraging the team members to complete reporting forms, talking to affected professionals, and offering further measures such as case reviews or psychological support according to the affected person's needs. Additionally, management support includes promoting the employer’s attitude to protect the staff and not take aggressive incidents as a “normal part of the job” (Heckemann et al., 2020; Schnelli et al., 2019). Poor support from management results in non-reporting of aggressive behaviour, even if a reporting system is available (Edward et al., 2014). Further reasons for non-reporting include the fear of being seen as oversensitive or existing horizontal violence such as harassment from team colleagues (Edward et al., 2014). Reporting systems allow analysing aggressive incidents systematically and, thus, implementing changes on an organizational level to prevent them in the future. Hence, it is necessary to address the reservations and barriers to reporting. Aggression management training leads to increased confidence, improved attitude and skills, and knowledge of risk factors of aggressive behaviour (Heckemann et al., 2015).

In Switzerland, aggression management training is part of nursing education. Further standardized aggression management trainings for health care organizations are available for inpatient settings (OdASanté, 2017). These trainings include following contents: defence techniques, verbal de-escalation techniques and information about the development of aggressive behaviour (Netzwerk für Aggressionsmanagement im Gesundheits- und Sozialwesen [NAGS], 2015).

Research from inpatient settings such as hospitals, long-term care institutions or psychiatry departments show that organizational support positively affects the consequences of aggressive incidents as well as their prevention (Edward et al., 2014; Heckemann et al., 2015). Organizational support includes the general attitude in the organization towards prevention and defusion of aggressive incidents, which has a supportive effect. This is reflected in, for example, the available reporting systems, and whether the staff is obligated to report incidents, and the official responses to reported incidents. Responses include established case reviews and free availability/offer of psychological support after aggressive incidents to professional caregivers (Schnelli et al., 2019). Regarding reporting systems, it is important that professional caregivers are able to report the incident anonymously if they wish and do not have to fear negative consequences of their report (Schnelli et al., 2019). Further, availability of concepts around prevention and dealing with aggressive behaviour, frequent aggression management trainings and refresher trainings and the opportunity to call safety staff or police for instrumental support in challenging situations are aspects of organizational support that help professional caregivers to deal with aggressive incidents (Heckemann et al., 2020; Schnelli et al., 2019).

Organizational support, team support, management support and aggression management training are crucial factors that prevent negative feelings after aggressive incidents in inpatient settings. There is insufficient corresponding research for home care services despite their unique organizational structure and the fact that aggressive incidents occur in the professional home care as well and are set to increase in the future with an increasing number of persons with dementia seeking home care, a clear gap that motivated this study. Based on insights from research in inpatient settings, the study aimed to gain knowledge of the existing organizational structures around aggression management in home care services. The following research questions guided the study:

- What organizational and management support structures are in place in home care services to support professional caregivers in dealing with their client’s aggressive behaviour?
- How do these structures perceive the negative feelings experienced by professional caregivers after aggressive incidents?
- What are the training conditions for the professional caregivers in home care services and how far do they affect the negative feelings in the caregiver after aggressive incidents?
2 | METHODS

Due to the lack of existing research on organizational structures in home care services regarding aggression management and training, an explorative cross-sectional design was chosen. The Strengthening the Reporting of Observational Studies in Epidemiology Checklist (STROBE) for cross-sectional studies was chosen as the reporting guideline (von Elm et al., 2007).

2.1 | Sample/participants

The participants were adult (older than 18 years) professional caregivers working in home care services in the German-speaking part of Switzerland. Professional caregivers working in home care services of all educational levels were included: registered nurses, health specialists (a 3-year apprenticeship with a focus on basic care that ends with a diploma, but a health specialist does not have the competencies of a nurse), nursing assistants (marginal education of 17 days’ theoretical content and a 2-week practice session that ends with a certificate) and house aides (same education as nursing assistants, but with a focus on working to support households). Persons with different education (e.g., social workers) or similar education (those who work as nursing assistants) were also included, and so were persons working in direct contact with clients during nursing assignments. A total of 24 home care organizations participated in the study.

In line with the exploratory approach of the project, a convenience sampling strategy was applied. The home care service associations of non-profit organizations as well as those of the for-profit organizations in the German-speaking part of Switzerland were asked to spread the news of the study through their network. Further, the study proposal was presented in meetings of the organizational managers and spread through the professional network of the research team. Interested organizations contacted the main author for further information. The contact person, either an operational manager or a nursing expert, received instructions to provide an envelope containing a prepaid and addressed answer envelope, the hard copy of the survey and an information sheet to the employees of the home care service and to inform them in a team meeting regarding the participation of the organization in the study. They were instructed not to put pressure on employees regarding participation. The following inclusion criteria were used: age over 18 years, working in direct contact with clients and working in a participating home care service.

2.2 | Data collection

Data were obtained using the Survey of Violence Experienced by Staff (German version revised) (SOVES-G-R) (Hahn et al., 2011; McKenna, 2004), which contains the Impact of Patient Aggression on Carers Scale (IMPACS) (Needham et al., 2005). Data were collected between July and October 2019. A total of 1923 hard-copy questionnaires were provided to the contact persons of the organizations. This number was the total of adult employees working in direct contact with the clients in the participating home care service organizations, that is, the number of potential participants. The contact persons delivered the questionnaires to the participants, who were assured of anonymity and voluntary participation by the project team information sheet. This sheet, as well as the hard copy of the questionnaire, mentioned that by completing and returning the questionnaire, the participants provided their consent. The participants were instructed not to provide any identifying personal information in the questionnaire. The questionnaires were marked with a specific code for each organization.

The information sheet also stated that the participants had 2 months to answer the survey. After a month, the research team sent a reminder to the contact persons of the organizations, along with the number of the returned questionnaires. The contact persons reminded the potential participants to complete the questionnaire using the usual information sources of the specific organization (mail, meeting or information sheet). The data from the questionnaire hard copies were transferred into an SPSS file using a codebook. To ensure the correctness of the data, a double-entry check was made on 10% of the data set: The error rate was 0.2%.

2.3 | Instruments

We used the SOVES-G-R (Hahn et al., 2011; McKenna, 2004), which includes socio-demographic data as well as the IMPACS (Needham et al., 2005). It is the appropriate instrument for this investigation because it contains questions regarding organizational support, team support, management support, aggression management training and burden after aggressive incidents.

SOVES contains 65 questions across eight sections. Originally developed by McKenna (2004) and tested for content validity by the European Violence in Psychiatry Group (McKenna, 2004), SOVES was translated into German and validated by Hahn et al. (2011). This survey was also used in a long-term care facility in Switzerland (Zeller et al., 2012). To meet specific issues of the home care setting, we adapted SOVES-G-R regarding wording, influencing and triggering factors (Section D) and specific measures (Section E). Face validity was tested with a nurse, a health specialist and a nursing assistant working in home care services. Marginal changes were made based on the feedback received. In this manuscript, a total of 34 questions from Sections A and F–H were included.

General information on the participants were assessed with SOVES-G-R Section A, such as socio-demographic data, with one yes/no question and eight objective-type questions. The consequences of aggressive incidents were assessed with Section F of SOVES-G-R, which also includes IMPACS, an instrument to measure negative feelings after experiencing aggressive behaviour. Section F explores the consequences of aggressive incidents and consists of two yes/no questions (regarding fear and sick leave), one
subjective-type question to describe what factors lead to fear, one objective-type question with four choice options regarding the form of sick leave after an aggressive incident, three questions with an exit option (e.g. no threat experienced) and a 5-point Likert scale with each to assess the experience of burden (1 = not upsetting to 5 = upsetting) and a multiple-choice question to assess the support needed. Needham et al. (2005) had conducted IMPACS psychometric testing with satisfying results (Cronbach’s alpha = 06–0.78). It consists of 10 items on 5-point Likert scales (1 = never to 5 = always) with higher scores representing more negative feelings (Needham et al., 2005).

Organizational support, team support and management support were explored with the SOVES-G-R Section G, which assesses organizational support as well as documentation and reporting of aggression events with five statements regarding staff and management support on a 5-point Likert scale (1 = completely agree to 5 = completely disagree), two yes/no questions and two objective-type questions on documentation, official procedures and reporting systems.

Aggression management training was explored with Section H that assesses training in aggression management and consists of 10 statements regarding skills measured on a 4-point Likert scale (1 = very good to 4 = not good), one yes/no question and one objective-type question.

The SOVES-G-R sections not included in this study are described briefly: Section B assesses the form of aggression experienced during work time; Section C assesses the frequency, perpetrator and form of aggression experienced within the last 12 months; Section D assesses the aggressive incidents experienced within the last 7 working days; and Section E assesses which measures were taken quickly and from a long-term perspective after an aggressive incident. At the end of the survey is a free text field named ‘personal remarks and amendments’ for additional comments.

2.4 | Ethical considerations

The study was reviewed and approved by the responsible ethics committee (Project ID: 2019-00502 EKOS: 19/041).

2.5 | Data analysis

Variables were analysed using descriptive statistics (frequencies). After an explorative analysis of the data set, multiple regression models were calculated for assessing relationships between organizational support (self-rated skills) and perceived burden or negative feelings after an aggressive incident. Associations between self-rated skills and received aggression management training were investigated using logistic regression. Assumptions were checked, and outliers (cases with standardized absolute residuals greater than three) were eliminated. We conducted the statistical analysis using IBM SPSS Statistics (Version 25). A level of significance of 0.05 was assumed.

3 | RESULTS

From the 1923 questionnaires sent out, 874 were returned, or a response rate of 45.4%. We excluded 22 (2.5%) questionnaires from analysis either because the cover pages were missing (n = 1), less than 50% of the questionnaire was answered (n = 13) or socio-demographic data were not provided (n = 8). The final sample of 852 questionnaires (44.3%) was used for data analysis.

3.1 | Description of the organizations and participants

A total of 24 home care service organizations with employees ranging from 23 to 319 participated in our study. Table 1 illustrates the socio-demographic data of the participants. The mean response rate was 55.6%, ranging from 4.0% to 92.0%. The two organizations that did not allow filling the questionnaire during working hours had a response rate of under 30.0%. Whereas a majority of the participating organizations had under 50 employees (n = 12), eight organizations had 51–150 employees, and the rest (n = 4) had more than 150 employees. Four of the participating organizations were located in rural, five in urban and 15 in suburban areas. Two organizations were for-profit organizations, and the rest, non-profit.

3.2 | Organizational structures

A third (33.3%, n = 284; missing: n = 18; 2.1%) of professional caregivers reported that an official procedure for employees affected by aggressive behaviour was in place at the home care service they worked for. Meanwhile, 17.1% (n = 146) reported no official procedure, and 47.4% (n = 404) reported that they were not aware of any available official procedure. The documentation of aggressive behaviour was mostly done in the written nursing report (88.3%, n = 708, missing: n = 5; 0.6%). About 5% (n = 43) of the participants reported a protocol being followed in their organization to document aggressive behaviour, and 22.1% (n = 188) reported the availability of an official reporting system. Of the latter, 179 persons answered the question on reporting aggressive incidents: 46.9% (n = 84) reported all or nearly all of the incidents, whereas 53.1% (n = 95) reported half or less of the aggressive incidents.

A total of 61.5% (n = 524) of the professional caregivers stated that support was available at the workplace in general, whereas 61.4% (n = 523) reported that specific management team support was available. Nearly half of the participants (49.9%, n = 425) said that support from team colleagues was available, 27% (n = 230) said employees were reluctant to discuss aggressive behaviour at the workplace, and 12.8% (n = 109) said it was difficult to receive support at the workplace in general. Table 2 illustrates the correlation of the items regarding organizational support and the IMPACS items (negative feelings after aggressive incidents). Significant associations
between the items ‘support of the management is available’, ‘support of team colleagues is available’, ‘difficulty of receiving support at the workplace’, ‘employees are reluctant to discuss aggressive behaviour at the workplace’ and ‘support is available at the workplace’ with IMPACS items were found. The IMPACS item ‘I have a guilty conscience regarding the patient’ resulted in no significant correlation with the items regarding organizational support. None of the five aspects of organizational support after aggressive incidents remained in the ANOVA model with ‘I have a guilty conscience regarding the patient’, and therefore, this item is not illustrated in Table 2.

### 3.3 Aggression management training

Our survey found that 48.7% (n = 415; missing: 1.3%, n = 11) participants received aggression management training during their professional education or their work time as a professional caregiver. None of the house aides or the nursing assistants had received aggression management training. Therefore, the results regarding aggression management training do not involve these persons. Aggression management training was rated as unimportant, slightly important or moderately important by 26.2% (n = 220, missing: 1.6%, n = 14) and as important or very important by 72.5% (n = 618) of the participants. The self-rated skills regarding aggression management strategies are illustrated in Table 3. The skills ‘knowledge on physical defence techniques’, ‘ability to confront patients with their aggressive behaviour’ and ‘ability to address the needs of persons who show aggressive behaviour’ were rated the lowest.

A logistic regression model to find out if self-rated skills are associated with received aggression management training was built. The results of the logistic regression are illustrated in Table 4. Those with better knowledge of physical defence techniques (p = .000) as well as the ability to perceive their behaviour in dealing with aggressive patients (p = .013) were significantly more likely to have had training and were the only remaining items in the model. There was no significant association between the rating of the skills and aggression management training received in most items.

The analysis found that some skills influence the perception of the burden, especially after verbally aggressive events (Table 5). However, some of the higher rated self-perceived skills engraved the perceived burden after verbally aggressive incidents. Only the self-perceived skills ‘ability to seek conversation with the patient with aggressive behaviour’ (B = -.287, p = .047, F_{model}: 3.191 corr. R^2 = 0.013, df: (2; 344), \text{P}_{model} = .042, n = 347) and ‘ability to set boundaries’ (B = .301, p = .32, F_{model}: 3.191 corr. R^2 = 0.013, df: (2; 344), \text{P}_{model} = .042, n = 347) had a significant influence on such burden after physically aggressive incidents; there were none for experiencing threats.

### Table 1 Socio-demographic characteristics of the participants

| Socio-demographic characteristics | Total (n = 852) | Missing |
|-----------------------------------|---------------|---------|
|                                   | n  | (%)      | n = 2; 0.2% |
| Sex                               |    |          |            |
| Female                            | 818| 96.0     | n = 2; 0.2% |
| Age (years)                       |    |          |            |
| 18–29                             | 121| 14.2     |            |
| 30–45                             | 250| 29.3     |            |
| >45                               | 479| 56.2     |            |
| Education                         |    |          |            |
| Nurse                             | 397| 46.6     |            |
| Psychiatric nurse                 | 20 | 2.3      |            |
| Health specialist                 | 210| 24.6     |            |
| Nursing assistant                 | 131| 15.4     |            |
| House aid and others              | 80 | 9.4      |            |
| Working experience (years)        |    |          |            |
| 0–4                               | 83 | 9.7      |            |
| 5–9                               | 145| 17.0     |            |
| 10–15                             | 175| 20.5     |            |
| >15                               | 442| 51.9     | n = 7; 0.8% |
| Level of employment               |    |          |            |
| <50%                              | 300| 35.2     |            |
| 50%–79%                           | 225| 26.6     |            |
| 80%–100%                          | 320| 37.6     | n = 7; 0.8% |
| Time of direct contact with care recipient (in relation to total work time) |    |          |            |
| <30%                              | 91 | 10.7     |            |
| 30%–60%                           | 288| 33.8     |            |
| >60%                              | 461| 54.1     | n = 12; 1.4% |

Source: Schnelli, Mayer, et al. (2021).
| Support available at the workplace | Support from the management is available | Support from team colleagues is available | Employees are reluctant to discuss aggressive behaviour in the workplace | It is difficult to receive support at the workplace |
|-----------------------------------|------------------------------------------|------------------------------------------|------------------------------------------------|-----------------------------------------------|
| I have feelings of anger towards the institution I work in | $B^a$ | $-0.169$ | $0.109$ | $0.106$ | $0.001$ | 1 | 426 | .171 | 23.220 | 432 |
| $p$ | | $0.001$ | $0.009$ | | | | | |
| I experience a disturbance in the relationship with the patient | $B^a$ | $-0.281$ | | | $-0.094$ | 1 | | | 9.334 | 439 |
| $p$ | | $0.000$ | | | | | | |
| I avoid contact with the aggressive patient | $B^a$ | $-0.299$ | | | | | | | 431 | .071 | 33.888 | 433 |
| $p$ | | $0.000$ | | | | | | |
| I feel sorry for the patient | $B^a$ | | $-0.131$ | | $0.001$ | 2 | | | 8.600 | 436 |
| $p$ | | | | | | | | |
| I feel insecure at work | $B^a$ | | $-0.213$ | | | | | | 427 | .041 | 19.455 | 430 |
| $p$ | | | $0.000$ | | | | | |
| I feel that I have to deal with society's problems | $B^a$ | | $-0.234$ | | $0.101$ | 2 | | | 12.029 | 437 |
| $p$ | | | $0.000$ | | $0.023$ | | | |
| I feel insecure in working with the patient | $B^a$ | | $-0.115$ | | $0.134$ | | | | 7.758 | 439 |
| $p$ | | | $0.003$ | | $0.001$ | | | |
| I have feelings of being a failure | $B^a$ | | $-0.116$ | | | | | | 429 | .012 | 6.352 | 432 |
| $p$ | | | $0.019$ | | | | | |
| I feel ashamed of my work | $B^a$ | | $-0.046$ | | | | | | | 418 | .012 | 6.292 | 421 |
| $p$ | | | $0.013$ | | | | | |

Regression coefficient (IMPACS: 1 = never, 5 = always; organizational support: 1 = totally disagree, 5 = totally agree).
TABLE 3  Self-rating of skills in aggression management

| Organizational support (total n = 852)                        | Good or very good | Not good or bad | Missing |
|-------------------------------------------------------------|-------------------|-----------------|---------|
|                                                             | n                 | %               | n       | %      |        |
| Ability to seek conversation with the patient with aggressive behaviour | 653 76.6          | 167 19.6        | 32 3.8% |
| Ability to protect oneself against physical assaults        | 643 75.5          | 177 20.8        | 32 3.8% |
| Ability to set boundaries                                   | 632 74.2          | 187 21.9        | 33 3.9% |
| Ability to demonstrate that aggressive behaviour will not be tolerated | 618 72.5          | 200 23.5        | 34 4.0% |
| Ability to address the needs of aggressive patients         | 595 69.8          | 223 26.2        | 34 4.0% |
| Ability to show appreciation towards the aggressive person  | 625 73.4          | 183 21.5        | 44 5.2% |
| Ability to confront aggressive patients about their behaviour| 464 54.5          | 350 41.1        | 38 4.5% |
| Knowledge on physical defence techniques                    | 350 41.1          | 476 55.9        | 26 3.1% |
| Ability to perceive one’s behaviour in dealing with aggressive patients | 708 83.1          | 109 13.3        | 35 4.1% |
| Ability to show understanding of the situation of the aggressive patient | 675 79.2          | 135 15.8        | 42 4.9% |

TABLE 4  Association of aggression management training and self-rated skills

| Associated self-rated skills to received training | B* | Wald | p   | Exp(B) | Confidence interval (95%) |
|--------------------------------------------------|----|------|-----|--------|--------------------------|
| Knowledge of physical defence techniques          | -0.655 | 25.545 | .000 | .519 | 0.419–0.644               |
| Ability to perceive one’s behaviour in dealing with aggressive patients | -0.387 | 7.742 | .013 | .679 | 0.500–0.921               |

Note: Backward stepwise according to likelihood (n = 707; Hosmer–Lemeshow test: p = 0.164, Nagelkerkes R² 0.101, classification of prediction: 61.4%; \( \chi^2(2) = 55.584, p = .000, 1 = \text{very good}, 2 = \text{good}, 3 = \text{not good}, 4 = \text{bad} \)).

*Regression coefficient.

4 | DISCUSSION

To our knowledge, this is the first investigation that surveyed organizational, management and team support and aggression management training conditions and their effect on the negative consequences of aggressive incidents in home care services. It found that availability of organizational support and aggression management conditions reduced negative feelings or burden after aggressive incidents.

Regarding organizational support, there was a lack of availability of reporting systems or internal concepts to prevent or deal with aggressive incidents, in line with the insights received from inpatient settings (Heckemann et al., 2020). A third of the participants reported an established official procedure to deal with aggressive incidents, and 22.1% said there was an official reporting system available, yet the reporting rate in the latter case was poor at under 50%. This conforms to the current literature, confirming that reporting of aggressive incidents is low (Edward et al., 2014). Reasons for non-reporting in inpatient settings are high administrative burden and a lack of time, the fear of stigma after reporting an incident or of no reaction on reporting (Edward et al., 2014; Schnelli et al., 2019). Based on our data, it remains unclear why the reporting rate in the home care setting is poor, and further research on that topic is suggested. As our survey found a poor reporting rate of aggressive incidents, one can suggest that reporting systems are not well established. The importance of measures to aid the implementation of reporting systems has been emphasized by studies in the acute hospital setting (Hahn et al., 2012; Schnelli et al., 2019). In home care settings, the implementation of a reporting system is possibly more challenging because professional caregivers are not physically present in the organization, and therefore, the personal information on the reporting systems is difficult (Genet et al., 2012).

Another aspect regarding organizational support found in the survey was that the general attitude of an organization that makes the employees feel they receive support if they need it leads to reduced negative feelings after aggressive incidents: Availability of support in the workplace is strongly linked to fewer feelings of ‘disturbance of the relationship’, ‘avoidance of contact with the aggressive patient’, ‘insecurity at work’, ‘being a failure’ and ‘shame’, whereas difficulties in receiving support at the workplace provoke feelings of ‘anger’ or ‘insecurity’ when working with the patient.

In line with research from inpatient settings, the survey identified the support of the management as crucial in the prevention of
negative feelings after aggressive incidents (Heckemann et al., 2020). Availability of support from the management significantly reduces ‘anger’ and the feeling ‘to deal with society’s problems’ after aggressive incidents. Feelings such as ‘anger’, ‘disturbance of the relationship’, ‘insecurity’ or ‘shame’ as a perceived consequence of aggressive behaviour might influence the interaction between the professional caregiver and the care recipient, worsening the aggressive behaviour (Richter, 2012). These insights substantiate that organizational and management support is crucial in the primary as well as secondary prevention of aggressive behaviour against professional caregivers. This is also in line with theoretical approaches on person-centred care. McCormack and McCance’s (2016) person-centred care model establishes that the care environment, such as the workplace, is a crucial aspect of successful caregiving. They state that shared decision-making, effective staff relationships and supportive organizational systems are necessary to provide person-centred care. An organization aiming at person-centred care delivery, therefore, should establish a positive safety culture and provide organizational support. Another aspect of the care environment in a person-centred care model is the presence of effective staff relationships (McCormack & McCance, 2016), which might be influenced on the interpersonal exchange after aggressive incidents and therefore requires the availability of team support. In this study, we investigated the ‘reluctance to discuss aggressive incidents’, which yielded ambivalent results. On the one hand, this reluctance seemed to reduce feelings of compassion and insecurity in working with the patient, whereas on the other hand increasing the feeling of having to deal with society’s problems. Interestingly, ‘receiving support from team colleagues’ is strongly associated with an increased feeling of ‘anger’ after aggressive incidents. This result hints that unguided discussions between team colleagues might increase negative feelings against the care recipient. In the light the results of Schnelli, Ott et al. (2021), which disclose that staff with lower education is mostly used in the case of clients with aggressive behaviour, these insights highlight the need for guided reflexive processes. Guided reflexive processes such as case reviews might help reframe the aggressive incidents experienced. Based on these results, an extension of conducting case reviews is indicated in home care services. A lack of professional guided interpersonal discussion of aggressive incidents might decrease the chances of questioning one’s actions when working with the patient, decreasing the quality of care.

Questioning one’s actions can also be part of aggression management training. Aggression management training was also part of the survey and the results of this study are in line with results from inpatient settings (Heckemann et al., 2015). Less than half of the participants (48.7%) had received aggression management training during their education or work time. However, self-rated skills regarding aggression management were high, but the skills need to be reviewed closely because it is important to include any potential discrepancy between self-rated skills and potentially lower actual skills. The review of self-rated skills and actual skills is an important aspect in intervention development to address aggression management in home care. Increased self-rated skills of ‘perceive their behaviour in dealing with aggressive incidents’ and ‘knowledge of physical defence techniques’ were significantly associated with the group that received aggression management training. These results are partly in line with Heckemann et al. (2015), highlighting the positive effect of aggression management training on confidence, attitude, skills and knowledge. However, as Heckemann et al. (2015) state, aggressive management training might not lead to decreased aggressive incidents, but to reduced perceived burden after experiencing aggressive incidents and to increased team resources to deal with the incidents. Our study found that the most sought skills were not positively associated with the group who received aggression management training. This indicates that aggression management training is not sustainable. However, most of the survey participants (72.5%) marked training as important or very important, highlighting its benefits. Aggression management training must be refreshed at regular intervals to ensure sustainability, a practice not being followed by home care services.

It was also found that increased self-rated skills in aggression management might reduce the perceived burden after aggressive incidents, whereas other increased self-rated skills enhance the

| Self-rated skills | Burden after verbally aggressive incidents |
|-------------------|------------------------------------------|
| Ability to seek conversation with the patient with aggressive behaviour | B* Not in the model |
| Ability to protect oneself against physical assaults | B* .160* |
| Ability to set boundaries | B* Not in the model |
| Ability to demonstrate that aggressive behaviour will not be tolerated | B* .234* |
| Ability to address the needs of aggressive patients | B* .271* |
| Ability to behave appreciatively towards the aggressive person | B* .211* |
| Ability to confront aggressive patients about their behaviour | B* -.265* |
| Knowledge of physical defence techniques | B* -.194* |
| Ability to perceive own behaviour in dealing with aggressive patients | B* |
| Ability to show understanding for the situation of the aggressive patient | B* .165 |
| Ability to confront aggressive patients about their behaviour | B* |

Note: (adj. $R^2 = 0.108$, $F_{model} = 7.471$, $df_{model} = (7; 369)$, $p_{model} = .000$, n = 377).
aRegression coefficient (self-rated skills: 1 = very good, 2 = good, 3 = not so good, 4 = bad).
bDue to the direction of the scales, the signs are to be interpreted as follows: Negative implies higher burden; positive implies lower burden.
perceived burden significantly. The skills ‘addressing the needs of the patient’, ‘acting appreciatively’, ‘demonstrating that aggressive behaviour is not tolerated’ and ‘to set boundaries’ are associated with decreased perception of burden after aggressive incidents. The finding underlines the importance of knowing one’s boundaries and communicating them. The skills ‘acting appreciatively’ and ‘addressing the needs of the patient’ during aggressive behaviour indicate a person-centred nursing attitude that might improve well-being during and after aggressive incidents. A constructive way to deal with the situation by ‘acting appreciatively’ or ‘addressing the needs of the patient’ might lead to a positive end to the situation, reducing the burden. Aggression management training and nursing education must specifically address these skills in the future. The skills ‘confronting aggressive patients with their behaviour’ and ‘knowledge of physical defence techniques’ increased the perceived burden and seem to be of a more confrontative nature. These skills do not address specific situations and, when used, lead to more burden after aggressive incidents. The safety of a physically present team in the background is not assured in the home care setting, indicating that these strategies increase burden instead of decreasing it. Such aspects in the development of future aggression management training must be addressed, with a focus on specific conditions in home care settings. The conditions in home care services should be improved to provide person-centred and need-oriented care while supporting the employees.

4.1 Limitations

We conducted an explorative cross-sectional survey using a convenience sample that is not representative. Our sample is comparable to the entirety of professional home caregivers in Switzerland, although registered nurses were over-represented (Bundesamt für Statistik, 2020). This indicates that better-educated nurses are more likely to consider the topic relevant because they have more resources gained from their nursing practice. The survey studies which structures for organizational support in the organizations are available; however, the results focus on the German-speaking part of Switzerland, making the transferability of the results possible with caution. Our results are partly in line with research in the field of aggression management and its lack around home care settings. This study with an exploratory approach gains basic insights on the topic; however, further research is necessary to strengthen these insights.

5 Conclusion

Home care services in the German-speaking part of Switzerland have established organizational support structures. However, reporting systems or official procedures are present in very few organizations, and the reporting rate is only under 50%. Therefore, home care organizations should implement such structures urgently and carefully. Organizational and management support can lead to reduced negative feelings after aggressive incidents, underlining the importance of a positive safety culture and promoting guided interpersonal exchange between professional caregivers. Aggression management training should be further established in nursing education, with refreshers tailored to specific situations in home care settings. Aggression management training should especially focus on constructively learning from aggressive behaviour. Further research on organizational structures in home care services with a focus on aggression management and the implementation of aggression management concepts is necessary to improve the situation for professional caregivers and the care recipient regarding the occurrence and consequences of aggressive behaviour.

6 Implications for Nursing Management

Leadership in home care services must have a positive safety culture, and regular and specific aggression management training on the agenda. Additionally, the implementation of further measures like reporting systems or regular case reviews is necessary. To implement such measures, specific strategies that address the nature of home care services should be developed. The specific nature of home care services means that staff is not regularly in the spatial structures of the organization and staff exchange is reduced. This makes it challenging to ensure the flow of information regarding client situations or even implementation of innovations.

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Conflict of Interest

The authors declare no conflict of interest.

Ethics Statement

The study was reviewed and approved by the Ethics Committee Eastern Switzerland, Project ID: 2019-00502 EKOS: 19/041.

Author Contributions

Study design: AS, AZ, HM and SO; data collection: AS; data analysis: AS and SO; manuscript preparation: AS, AZ, SO and HM.

Data Availability Statement

Data available only on request due to privacy restrictions.
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