

Final Progress Report for NIOSH Grant R03 OH009493

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Assessment of Exposure to Physical and Non-physical Violence in Physical Therapy

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Abstract

Healthcare professionals have long been considered as a population vulnerable to workplace violence. The purpose of this project was to assess the causes and effects of physical therapists' exposure to physical and nonphysical violence by understanding the exposure experiences, and identifying intervention needs from physical therapists. To this end, a specific incident approach was used to collect qualitative data as very little is known about the exposure experiences of physical therapists.

Semi-structured interviews were conducted with 96 physical therapists from a variety of settings (acute care, out- and in-patient rehabilitation, pediatrics, geriatrics, and home health). The majority (95%) of the participants have experienced at least one incident of physical or non-physical violence committed against them in the past 12 months. The most common physical violence experienced by therapists was being pushed, grabbed, or shoved (47%), whereas the most common nonphysical violence was being yelled or sworn at (80%). Almost all of the physical violence incidents were committed by patients, whereas perpetrators of nonphysical violence incidents were distributed among patients, personnel affiliated (e.g., nurse) or not affiliated (e.g., patient family) with the facility.

Patients were most likely to commit violence against therapists during treatment and the transfer tasks. Those with certain conditions (e.g., dementia) were also more likely to strike than others. Open and frequent communication with other healthcare providers (e.g., nurses, doctors, or psychologists) informed many therapists (ranging from 38% to 85%) about patients' tendency to strike, and assisted the development of strategies to prepare for the potential assaults. Some therapists cited clear organizational policies concerning workplace violence to be helpful. Finally, self-defense and de-escalation training were considered beneficial as therapists were able to prevent major injuries to themselves or the patients by applying the techniques.

In terms of outcomes, although the majority of participants cited anxiety or anger as their primary emotional responses immediately after the incidents, some were not bothered by the incidents when they were committed by patients, as therapists perceived patients having little control over their behaviors. Interestingly, nonphysical violence from facility associated personnel tends to elicit strong negative reactions.

Finally, therapists suggested that de-escalation and self-defense training should be included as part of the curriculum of physical therapy education. Realistic job previews could also be utilized to provide to students with information about the exposure risks. Organizations should have clear policies concerning workplace violence. A team-based or interdisciplinary approach to treatment would help therapists address the assaults from patients. In addition, employers and the professional organization of physical therapy should provide seminars focusing on issues about workplace violence. Finally, supervisor and co-worker support had been identified as important resources to help therapists cope with their exposure to violence.

These results suggest that workplace violence is a threat to the health and safety of physical therapists. In addition, therapists may face assaults from a variety of perpetrators. Depending on the nature and context of the assaults, therapists assign different meanings to the same incident and have different reactions towards the incident. Finally, intervention strategies targeting curriculum, workplace, as well as the profession as a whole were identified.

SECTION 1

Highlights/Significant Findings

The current study found support that the majority of the physical therapists who participated in the study had experienced at least one incident of physical or non-physical violence committed against them in the past 12 months. These results suggest that workplace violence is a threat to the health and safety of physical therapists. In addition, therapists may face assaults from a variety of perpetrators. While most of the physical violence incidents were committed by patients, perpetrators of nonphysical violence incidents were more diverse and included patients, personnel affiliated (e.g., nurse) or not affiliated (e.g., patient family) with the facility. Depending on the nature and context of the assaults, therapists assign different meanings to the same incident and have different reactions towards the incident. Thus, the contextual characteristics of the exposure experiences are important moderators for how therapists may respond to the same type of exposure. Finally, intervention strategies targeting curriculum, workplace, as well as the profession as a whole were identified. In general, programs should aim to enhance physical therapists' awareness of workplace violence, to prepare them for potential assaults (especially from patients), and to provide instrumental and emotional resources to cope with exposure experiences.

Translation of Findings

The current study had the objective to identify intervention needs to reduce exposure risks and lessen the negative effects of exposure to violence in physical therapy. Participants identified a variety of intervention needs that may be organized into three categories based on the grounded-theory and content coding. First, interventions may be targeted at the curriculum level physical therapy education. Awareness training should be provided so that students in physical therapy are informed about the potential exposure risks of workplace violence. In addition, verbal de-escalation and self-defense skills should also be taught to prepare students to prevent incidents and to protect themselves and the patients if they are exposed to physical violence. Participants recommended various techniques, such as realistic job preview based on internship and role playing, to complement the traditional lecture style to maximize the effectiveness of such training.

A second category of intervention targets at the employers of physical therapists or the professional organizations to which physical therapists belong. Some strategies are training-based, which are similar to those recommended for physical therapy curriculum. Refresher courses to enhance awareness of workplace violence and how to handle incidents should be provided by the employers and the professional organizations for physical therapists. Other strategies may focus on establishing and communicating clear policies concerning violence (especially from patients). In addition, employers should ensure that additional personnel, such as physical therapy assistants or technicians, are available to support therapists to handle difficult patients. has been recommended by therapists. Finally, employers should promote team-based or interdisciplinary treatment of patients. These practices enhance communications between physical therapists and other healthcare providers, including nurses, physicians, and psychologists. The open communication helps therapists to better anticipate risks of exposure and develop treatment plans that incorporate facets to discourage violence from patients.

A third category of interventions centers on the role that supervisors may play to enhance the psychosocial environment of the workplace. Support from other employees, especially supervisors, was considered as an important resource for therapists to cope with their negative exposure experiences. Thus, specific training programs for managers so that they can provide

better instrumental and emotional support for the victimized therapists are likely to be helpful. Managerial training may also help develop managers' general commitment to safety, which can cultivate a positive violence prevention climate. Such a climate may encourage therapists to share their experiences with violence incidents and techniques to handle difficult patients.

Outcomes/Relevance/Impact

The current project contributes to potential improvements in occupational safety and health in three ways. First, the finding identified physical and nonphysical violence as a threat to physical therapists' occupational health and safety. To the PI's best knowledge, no research effort has been devoted to documenting the violence exposure experiences of physical therapists in the US. The results of the current finding will increase the general awareness of the issue, and encourage larger-scale research to better understand the antecedents, prevalence, and outcomes of exposure to violence in physical therapy. The PI has presented the findings at a variety of scientific meetings, including two conferences for physical therapists, in order to increase the awareness of workplace violence as an issue for physical therapy. The PI has also prepared a podcast to be available on the main website of the American Physical Therapy Association. These dissemination efforts will enhance the awareness of the exposure risk, and thereby promoting the efforts to design and implement interventions to reduce exposure or to lower the negative effects associated with the exposure.

Next, a variety of specific intervention strategies were generated based on participants' responses. These recommendations provided the PI with future directions for designing, implementing, and evaluating organization-based interventions aiming at reducing exposure to violence in physical therapy. In addition, some of these strategies are applicable to other occupational settings (e.g., category 3: management-targeted), which may have broader implications for reducing violence in the workplace in general.

Finally, the PI has started a collaborative effort with a physical therapist colleague to design practical workshops for (a) students in physical therapy programs and (b) practicing physical therapists. The workshop will include an introduction of workplace violence against physical therapists, verbal de-escalation skills, as well as general resources available for victims of violence. Such workshop, along with the podcast, will likely reach a wide audience of physical therapists in training or in practice, and information included will help increase their awareness of the issue, and provide them with practical skills to prevent exposure to violence.

SECTION 2

Scientific Report

Healthcare professionals have long been considered as a population vulnerable to workplace violence. For example, based on the National Crime Victimization Survey, between 1993 and 1999, nurses in the United States experienced the highest rate of workplace violence (22 per 1,000 workers) among all types of healthcare workers (Duhart, 2001). Among healthcare providers, nurses have received the most attention as they were identified as the professionals who are most frequently assaulted in medical settings (Duhart, 2001; Lehman, McCormick, & Kizer, 1999). Unfortunately, other than nursing, very little is known about the extent to which healthcare providers in the US are exposed to physical or nonphysical violence. Among the non-nursing professionals, physical therapy shares some risk factors with nursing in terms of the job tasks that therapists perform and the physical environment in which they perform the tasks. As such, it is crucial to begin assessing physical therapists exposure experiences in order to establish the scope of the issue.

The purpose of this project was to assess the causes and effects of physical therapists' exposure to physical and nonphysical violence by understanding the antecedents and outcomes of the exposure, and identifying intervention needs from physical therapists who had experienced violence. To achieve these specific objectives, a specific incident approach was used to collect qualitative data as very little is known about the exposure experiences of physical therapists. Based on existing literature (e.g., Cortina, Magley, Williams, & Langhout, 2001; Glomb, 2002; McComas et al., 1993; Neuman & Keashly, 2004; Robert & Hine, 2005), a list of 30 specific violence incidents were developed and served as the basis for the semi-structured interviews. Participants were asked if they had personally experienced each incident in the past year. If their answer was positive, probing questions were asked to collect more details about their experiences. Finally, open-ended questions were used to gather their ideas for intervention to prevent violence incidents and reduce the negative impact of the incidents.

A total of 96 physical therapists working in a variety of settings (acute care, out- and in-patient rehabilitation, pediatrics, geriatrics, and home health) participated in the study. The PI and two graduate assistants performed the grounded theory-based coding and content analysis for the interviews independently. Any disagreement between the coders was resolved via discussions. Content coding showed that the majority (95%) of the participants have experienced at least one incident of physical or non-physical violence committed against them in the past 12 months. The most common physical violence experienced by therapists was being pushed, grabbed, or shoved (47%), followed by being hit or slapped (36%), being kicked or punched (30%), and being subjected to unwanted touch or groping (32%). The most common nonphysical violence incidents reported by the participants were being yelled or sworn at (80%), being insulted (59%), being subjected to sexist remarks (46%), and being threatened verbally (35%). Table 1 summarized the type of exposure by therapists work setting.

Almost all of the physical violence incidents were committed by patients (e.g., pushed, grabbed, or shoved: 98%; hit or slapped: 100%; kicked or punched: 100%; unwanted touch: 95%). On the other hand, perpetrators of nonphysical violence incidents were distributed among patients, facility associated personnel, and non-facility-associated personnel (e.g., 78%, 8%, and 14% from the three groups respectively for incidents of being yelled or sworn at). Table 2 summarized these results.

Table 1 Exposure incident type and frequencies by settings

	Overall	Acute care	Pediatrics	Geriatric	Outpatient	Other
Pushed ^c	47%	58%	63%	11%	19%	40%
Hit/slapped ^b	36%	36%	63%	44%	15%	40%
Kicked/punched ^b	30%	33%	38%	17%	15%	40%
Yelled at ^a	80%	84%	100%	83%	63%	40%
Insulted	59%	67%	63%	61%	33%	60%
Sexist remarks	46%	42%	13%	28%	41%	0%

Note: ^a $p < .10$, ^b $p < .05$, ^c $p < .01$ for differences across settings

Table 2 Exposure incident type and frequencies by perpetrators

	Patient	Other staff members	Perpetrator unrelated to facility
Pushed	98%	2%	0%
Hit/slapped	100%	0%	0%
Kicked/punched	100%	0%	0%
Yelled at ^b	78% (acute care)	8% (acute care)	14% (geriatric)
Insulted ^a	63% (acute care)	19% (acute care)	18% (geriatric)
Sexist remarks ^b	75% (outpatient)	19% (acute care)	6% (pediatrics)

Note: ^a $p < .05$, ^b $p < .001$. Listed setting in parentheses is one where perpetrator group is most frequent.

Our coding also indicated that patients were most likely to commit violence against therapists during treatment and the transfer tasks (ranging from 50% to 71% depending on the incident). Many therapists (ranging from 38% to 85%) mentioned that open and frequent communication and a team-based approach for treatment involving other healthcare providers (e.g., nurses, doctors, or psychologists) helped inform them about patients' tendency to strike, and develop strategies to prepare for the potential assaults. Some therapists cited clear organizational policies concerning how to manage or respond to aggressive patients to be helpful, as they had clear guidelines for how and when to call for help or terminate therapy. Finally, a small number of therapists mentioned that self-defense and de-escalation training that they had received were beneficial as they remained calm during the assault and were able to prevent major injuries to themselves or the patients.

In terms of outcomes, the majority of participants cited anxiety or anger as their primary emotional responses immediately after the incidents (85%). However, some therapists (13%) were not bothered at all by violence when incidents were committed by patients, as therapists perceived patients having little control over their behaviors (e.g., dementia adults or children with attention deficit disorder). Others were less bothered by the verbal assaults from patients if they could attribute the patients' behaviors to certain demographic variables (e.g., being older) or

personality (e.g., just a nasty person). Interestingly, nonphysical violence from facility associated personnel tends to elicit strong negative reactions. For example, the majority of the participants (78%) who reported being yelled at by facility-related personnel (e.g., nurses; doctors) indicated that they felt angry and unfairly treated.

Finally, therapists suggested that de-escalation and self-defense training should be included as part of the curriculum of physical therapy education. Realistic job previews through internship, case studies, and role-playing could also be utilized to provide to students with information about the potential exposure risks. Organizations should have clear policies concerning workplace violence. A team-based or interdisciplinary approach to treatment would help physical therapists in terms of addressing the assaults, especially those from patients. In addition, therapists also suggested that workplace or their professional organization should provide seminars focusing on issues concerning workplace violence. Supervisor and co-worker support had also been identified by the majority of participants as important ways to help them cope with the negative effects of exposure to violence.

These results suggest that workplace violence is a threat to the health and safety of physical therapists. As such, a large-scale, survey-based study is necessary to assess the extent to which physical therapists are exposed to physical and non-physical violence, and to better understand the antecedents and outcomes of such exposure. In addition, intervention strategies targeting curriculum, workplace, as well as the profession as a whole have also been identified. These provide a clear direction for future intervention-based research to implement practices that may discourage workplace violence against physical therapists, or to reduce the negative impact of violence against therapists. Finally, we showed that victims of violence assign different meanings to the same incident depending on the contexts, and thus have different reactions towards the incident. Thus, a multi-pronged approach is necessary when considering issues associated with workplace violence against physical therapists.

Publications

The findings of the current project have been presented at three conferences, and the abstracts were published at the conference proceedings. The presentation citations were as following:

Chang, C.-H., Eatough, E. M., & Jaiprashad, D. (May, 2011). *Assessment of exposure to physical and nonphysical violence in physical therapy: A qualitative study*. Paper presented at the 9th International Conference on Occupational Stress and Health: Work Stress, and Health 2011 - Work and Well-Being in an Economic Context, Orlando, FL.

Chang, C.-H., Eatough, E. M., Golubovich, J., & Rockfeller, K. (June, 2012). *Exposure to physical and verbal violence in physical therapy practice*. Poster presented at the PT12: Annual Conference & Expo of the American Physical Therapy Association, Tampa, Florida.

Chang, C.-H., Golubovich, J., Mak, S., Eatough, E. M., & Rockfeller, K. (January, 2013). *A qualitative needs assessment for interventions to prevent and manage exposure to workplace violence in physical therapy practice*. Poster presented at the Combined Sections Meeting (CSM) 2013 of the American Physical Therapy Association, San Diego, California.

Note: Underline indicates undergraduate or graduate student co-author

In addition to conference presentation, a full length of the paper is under review at the *Physical Therapy Journal*, the flagship journal of the American Physical Therapy Association. The citation of the paper is as following:

Chang, C.-H., Golubovich, J., Mak, S., Eatough, E. M., & Rockfeller, K. (under review).
Assessment of exposure to physical and nonphysical violence in physical therapy: A qualitative study. *Physical Therapy Journal*.