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Review Article

Reporting Patient Perpetrated Violence: Development of a Theoretically Informed Framework

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Abstract

Understanding of patient perpetrated violence towards the healthcare provider remains in its infancy. Patient perpetrated violence is estimated to affect as many as 92% of healthcare providers, regardless of service setting, yet exact prevalence statistics are lacking. Existing research and studies have suggested that the development of a theoretically informed framework to explain and predict provider incident reporting is needed and may enhance the ability of agencies and organizations to accurately capture the occurrence of patient perpetrated violence; thereby developing policies and programs to decrease the occurrence of the same. Currently the existing literature offers no parsimonious or falsifiable framework to explain and predict provider reporting. This article therefore aims to fill this gap by offering such a framework to examine factors contributing to non-institutional healthcare providers' reporting or failing to report incidents of patient violence and aggression. Theoretical frameworks from the fields of psychology, criminal justice, and the domestic violence literature will be used to explore a providers' reporting or failing to report instances of patient aggression and violence. The attributes of the patient, the form of abuse or aggression as well as provider characteristics will also be examined in relation to their impact on incident reporting.

Introduction

Research regarding patient perpetrated violence and aggression towards healthcare providers' remains in its infancy. In the paucity of existing literature, one of the reasons for this is that there is a lack of a strong theoretically informed framework to explain and predict the phenomena of providers failing to report incidents of such violence [1-3]. This article therefore aims to fill this existing gap in the literature by offering such a framework which to examine factors contributing to non-institutional healthcare providers' reporting or failing to report incidents of patient violence and aggression. As the literature offers no singular theoretical foundation or approach specific to incident reporting and patient violence in the healthcare sector, a variety of theoretical approaches and disciplines provide guidance for the research. Theoretical frameworks from the fields of psychology, criminal justice, and the domestic violence literature will be used to explore a providers' reporting or failing to report instances of patient aggression and violence. The attributes of the patient, the form of abuse or aggression as well as provider characteristics will also be examined in relation to their impact on incident reporting.

Stress theory is utilized to explain and predict provider characteristics which impact decision making regarding intention to report incidents of patient violence and aggression. Broken windows theory is offered to explain and predict how the form abuse or aggression and the severity of the incident impact provider reporting. Finally, the theory of reasoned action is suggested to offer a foundation explaining and predicting the relationship between characteristics of the patient, the provider and the incident and the provider's reporting or failing to report the incident. Upon completion of this review of relevant theoretical frameworks, a mediational model is offered to inform future research and enhance the ability of practitioners, administrators, providers and scholars to explain and predict healthcare providers' reporting incidents of patient perpetrated violence.

A Community Science Approach

The approach for this research which examines the phenomenon of provider reporting incidents of patient violence and aggression is grounded in community science. Community science "seeks to enhance theoretical and practical understanding of human behavior in community contexts;" the goals of community science are to "promote the competence, resilience, and well-being of individual and communities and prevent problem behaviors and other harmful outcomes at the individual and community level" [4]. Utilizing such a definition, it is evident that exploration of factors contributing to healthcare providers' reporting incidents of patient aggression and violence is well grounded within this approach. Understanding determinants of provider reporting incidents can contribute to community science goals of preventing harmful outcomes for both health care

providers, patients and organizations. Within a community science approach, there are multiple theoretical frameworks which guide this exploration. While no literature found to date in the healthcare field examines the constellation of factors impacting healthcare providers' reporting incidents of abuse or aggression, considerable research exists examining the occurrences of patient violence and aggression. One of these theoretical foundations utilized in the literature and applicable to this project is stress theory. Additionally, while literature is again limited in the examination of healthcare providers' decision making processes to ensure their own safety, there is a plethora of literature existing in the criminal justice literature related to the domestic violence victim's reporting their abuse and is well understood utilizing broken windows theory. The Theory of Reasoned Action (TRA) is also of utility to provide a theoretical basis for evaluating this phenomenon and examining how characteristics of the patient perpetrating the abuse can factor into the providers decision to report or fail to report such incidents. As such, this chapter provides a theoretical basis for understanding patient violence and aggression and examines incident reporting in light of relevant theories that help explain and predict the healthcare providers reporting or failing to report incidents

Theoretical Foundation

Stress theory

With a backdrop of biology and psychophysiology, focusing on the areas of health and behavior, stress theory has been closely linked to the maladaptive responses of individuals when faced with stress [5]. Throughout the literature, stress has been defined as a transitional experience which results in subjective negative perceptions and the lack of ability to adjust to such experiences [6,7]. The concept is also defined in the literature as the experience of stressors [8,9]. Thoits identifies three major forms of stressors: chronic stressors, daily stressors and major life events. Stressors can also be defined as events which disrupt an individual's homeostasis, thereby effecting both psychological and physical well-being [10,11]. Utilizing these definitions, exposure to violence or aggression while providing care to patients in non-institutional health care services could clearly be conceptualized as stress, and therefore well explained within this theoretical framework.

Under the umbrella of stress theory, there are multiple frameworks which offer explanations and predictions for the impact of stress [12,13]. Cognitive stress theory is one such construct that will be utilized throughout this chapter. For example, [13] Stroebe et al. explain stress as a reaction to the major readjustment that is required with critical life events. These authors offer the prediction that without mediating social support to assuage the stress reaction, the intensity of stress and negative consequences of stress will become exacerbated [11]. Ursin and Erikson assert that the stress reaction is a necessary coping mechanism which occurs to create an alarm which should produce a coping behavior in reaction to the stressor. However, the authors' assert that if an adaptation is not made, the subjective stress can create adverse health effects for the individual experiencing the stress. Stress theory will be utilized in this case to examine the impact of the stressor on the provider's attitude, and how characteristics of the provider contribute to incident reporting.

Broken windows theory

Found in the criminal justice literature, with application to the issue of patient aggression and violence towards the home healthcare provider, broken windows theory is of utility in this exploration. Broken windows theory, as articulated by Wilson and Kelling [14,15], is based upon the assumption that "if a broken window is unrepaired, all the windows will soon be broken. Broken windows are a signal that no one cares." Following this rationale, the theory postulates that the physical appearance of an environment suggests social norms regarding what is, and is not, socially acceptable behavior [16-18]. Furthermore, the theory suggests that when minor offences (such as littering or loitering, or in this case verbal threats or attacks) are tolerated, it is an indication to potential offenders that delinquent behavior of more extreme consequences will be neither reported or controlled [19,20]. Broken windows theory places an emphasis on the social norms for a behavior, and argues that social deterrents are necessary to cease the perpetuation of minor crimes, thereby deterring more significant crimes [21]. In summary, the premise of broken windows theory is that ignoring or tolerating lesser criminal acts creates an environment conducive to more serious crime.

While the majority of the literature to date which examines broken windows theory has been found in the criminal justice literature, the healthcare field and social service industries are beginning to utilize this theory to explain and predict violence in the healthcare sector [20,22-24]. As this theory places an emphasis on the social norms, and also on the environment in which the violence occurs, this theory is of particular utility in explaining and predicting tolerance of lesser acts of violence and aggression by patients in non-institutional healthcare settings. In summary, broken windows theory will be utilized in this case to examine the type and severity of the form of abuse and the impact of such an incident reporting.

Theory of reasoned action

The theory of reasoned action, developed in the social psychology arena, offers a foundation to explain and predict intentions of conducting a behavior when choosing among alternatives for a single behavior [25,26]. As intentions to perform behaviors are of high utility in predicting the behavior [27], the theory of reasoned action promotes understanding providers intent and therefore predicting their action.

The theory, developed by Ajzen and Fishbein [28-30], postulates that it is an individual's attitude towards a behavior and the social norms surrounding that behavior which may explain and predict that individual's intention to complete the behavior. Attempts to explain a victim's behavior have been well studied in the fields of psychology and criminology, and it is from these fields that much of the research on this topic stems [31-33]. Examination of attitudes and social norms toward an individual behavior in relationship to patient abuse and aggression towards the non-institutional healthcare provider, however, warrants further exploration in this chapter.

The founders of the theory of reasoned action acknowledge that any observable behavior may be caused by a variety of factors. A simple example of this is offered by Ajzen&Fishbein [28] as a woman who laughs at a joke told by her husband. The causal factors for her laughter could be that the joke itself was indeed funny; the woman may have been seeking to please her husband thus she laughed; it may be that the woman's husband was funny himself and very good at the

delivery of the material where she laughed at his delivery rather than the joke. The question postulated by Ajzen and Fishbein is, which of these factors is the cause of the behavior. These authors assert that

"an actor's behavior can usually be attributed to a large number of causal factors. If the only information available to the observer is the fact that the actor has performed the behavior in question, causal attribution may be quite difficult. Frequently however the observer will have additional information about the actor, the behavior and the conditions under which the behavior was performed." [28].

Additionally, "a person's attitude represents his evaluation of the entity in question". Therefore, in the example above, the additional information which is sought in the theory of reasoned action is to determine what the woman's underlying attitude was towards laughing at her husband's joke and what the social norms were, as perceived by the wife, which influenced her behavior.

Clearly the theory of reasoned action suggests that there are several alternatives which may explain an observable behavior: characteristics of the individual performing the behavior (something about the actor), characteristics of the behavior (the object), characteristics about the specific situation (the circumstances), and a combination of the actor, object and circumstances [28,29]. These factors however are influenced by the perceived freedom to perform a behavior, the actors attitude towards the behavior, the social desirability of that behavior, and the contrast between the attitudes towards performing a behavior and the social norms towards doing so [34,35]. Exploring this relationship further, [29] Ajzen and Fishbein suggest that while an individual's attitude towards an object does influence their response, their attitude alone is not sufficient to predict any given behavior. These authors suggest that it is the intention to perform a behavior that is the best predictor of performance of the behavior, and that "the intention is a function of [the actors] attitude towards performing the behavior and [the actor's] subjective norm" [29]. Recent studies have also supported this link, indicating that "real behaviors are well predicted by behavioral intentions if those behaviors are under volitional control".

As these attitudes and social norms are thus determined critical in establishing an actor's intention to perform a behavior and prediction of that behavior, defining these constructs becomes necessary. In the theory of reasoned action, attitudes include beliefs towards an outcome and an evaluation of the outcome, whereas subjective norms include beliefs about what others think and the internal motivation to comply with what others think [30,36-38]. Attitudes and behaviors can be viewed as composed of four elements: the action, the target where the action is directed, the context of the action and the time of the action. [29] Ajzen and Fishbein thus assert that any single observable behavior consists of an action performed towards a target in a particular context at a particular time.

The theory of reasoned action postulates that the decision and intent to perform a single behavior is based upon the attitudes and societal subjective norms associated with the behavior [26,33,39,40]. Examining solely voluntary behavior, it is the individual's personal attitude towards the behavior and their thoughts about how other people would view their behavior (societal norms) which explain and predict the occurrence of the behavior. It is suggested that use of an individual's attitude to predict behavior is based upon constant factors. As Ajzen and Fishbein [27,41] argue, when an individual holds a positive attitude towards performing a behavior, they are expected to perform that behavior. Similarly, when a person holds a negative attitude towards performing a behavior, they are expected not to perform that behavior. The theory of reasoned action predicts behavior using the assumption that individuals behave rationally, thus intent to perform a behavior is "based on the assumption that human beings are usually quite rational and make systematic use of the information available to them [and] that people consider the implications of their actions before they decide to engage or not engage in a given behavior" [30].

Clearly attitudes are a key element towards predicting behavior, however social norms towards such a behavior also play a key role. While these elements are both crucial, attitudes and societal norms do not always have equal contributions to the reasoned action [42]. Indeed, while both social norms and attitudes have been found to predict individual's intentions to report incidents, some studies suggest that the subjective norm attributed to the behavior carries a heavier weight in the decision process than does the attitude about reporting [43]. The theory of reasoned action will be utilized to examine how patient and provider characteristics impact incident reporting.

Application of Theories

Evident from the literature review in the proceeding chapter, patients perpetrating violence against a healthcare provider is not an unusual occurrence [1,44-48]. Use of the aforementioned theories is of utility to explain and predict the impact of patient characteristics, provider characteristics and the form of abuse and aggression and the contribution of each to the providers reporting or failing to report incidents of abuse or violence.

Stress theory & provider characteristics

Stress theory offers a parsimonious and falsifiable framework for understanding and explaining the phenomenon of healthcare staff's perception of client violence. Violence as a stressor is well reviewed in the literature, with studies suggesting that life stressors require support to mediate the negative responses of stress [49-52]. Stress theory has been utilized extensively in the domestic violence literature to examine the constructs of victim/perpetrator relationships and attributions as well as acting violently in reaction to a stressor [53,54].

Currently, little is understood regarding the variability of a healthcare provider's response to acts of violence or aggression from patients. While the literature review in the proceeding chapter does illustrate that some providers do report such incidents, a far greater number do not [55-57]. To develop a model to both explain and predict this discrepancy, stress theory is of utility. Using this framework, a patient's act of aggression or violence towards the healthcare provider in the non-institutional healthcare setting would be viewed as the stressor and an impact on the provider's attitude and response toward the incident.

In this case, being victimized by a patient is in this case is conceptualized as the stressor to healthcare providers. Stress theory helps to explain and predict how a healthcare provider will react to a stressful event, such as when patient aggression or violence towards a provider is the stressor [51]. Lazarus asserts that stress theory acknowledges the individual's personality traits as mediating factors

in the stress response. Interestingly, in non-institutional healthcare settings, researchers have found that the environment impacts the stress response [58]. One of the founders of stress theory finds that 'unpredictable environmental conditions [effect] the processes of appraisal and coping" [51]. [59] Barling et al have also utilized a stress theory approach to gain insights into the organizational and personal consequences of client violence in the healthcare field. Their findings indicate that abuse of home healthcare staff (regardless of discipline) resulted in not only decreased quality, but also decreased quantity of work performed. As such, it is hypothesized that there are characteristics inherent in the provider which will impact their ability to process and cope with the stress of patient violence and aggression, which in turn may impact their reporting, or failing to report such an incident.

[60] Bussing and Hodge note that healthcare providers serving patients 'behind closed doors' are without the social support of colleagues and supervisors as found in other healthcare settings. This lack of perceived social support increases the severity of the stress from the patient violence or aggression and results in a more negative attitude towards and experience of the incident [59,60]. These findings were supported by two additional studies, a mixed-methods study conducted Fazzone et al [61] and a quantitative study by [62] Galinsky et al. Both of these studies find that there are discrepancies in discipline, experience, and perception of safety, based upon the social support perceived by the healthcare provider.

Broken windows theory & severity of the incident

While stress theory clearly offers explanatory and predictive functions regarding provider's experience with and exposure to violence and aggression, it fails to offer a parsimonious or falsifiable framework for exploring the severity of the incident and the impact of such. Policies which encourage incident reporting have been found to be one means to discourage future episodes of patient violence and aggression [1]. Extrapolating from these findings, when examining specifically the form and severity of violence, reporting forms of abuse such as verbal threats and verbal harassment may decrease the escalation of such events to physical violence.

Broken windows theory thus becomes of utility to explain and predict that an exacerbation of aggressive incidents from verbal non-violent to violent incidents will indeed occur. Consistent with the aforementioned findings, the theory predicts that as incidents go unreported, the severity of incidents will increase [20]. [20] Hesketh et al. Argue that as healthcare providers tolerate verbal assault and threats of assault from patients, a greater likelihood exists that violence and aggressive acts towards these providers in these settings will increase in severity, as the perpetrator sees no consequences to their actions. Additionally, the meanings that providers ascribe to patient violence and the social norms of such are impacted by the severity of the incident [55]. When verbal abuse and threats of physical assaults are tolerated in healthcare environments, more serious violence will follow [23,24]. According to researchers in this area, broken windows theory is critical for violence prevention strategies in the healthcare field and predicts that continued failure to report patient acts of aggression and violence will perpetuate further and more severe assaults [24,63,64]. The question then arises, once this abuse or violence has occurred, what are the factors that contribute to the provider deciding whether to report, or not report, the incident? Theories relevant to decision-making contribute to understanding of this behavior.

Theory of reasoned action & incident reporting

Stress theory speaks to attitudes towards and about a behavior. Broken windows theory speaks to social norms. Combining these two constructs, the theory of reasoned action offers a parsimonious and falsifiable framework for explaining and predicting a healthcare provider's reporting or failing to report an incident of patient violence and aggression. In a systematic review examining barriers to incident reporting in the healthcare field, [33] Pfeiffer et al found utility in the theory of reasoned action in explaining and predicting incident reporting. While this review did focus specifically on inpatient hospital settings and it did not differentiate form of incident (violence, medication error, patient injury, etc.), these authors found support for application of the theory of reasoned action. The theory of reasoned action would predict that a provider's attitude towards a violent or aggressive patient, and their attitude about incident reporting, in conjunction with social norms surrounding incident reporting, would both explain and predict a providers reporting or failing to report the incident. Furthermore, for those incidents that go unreported, the theory of reasoned action would explain that either the individual's attitude or the social norms regarding incident reporting were not in favor of the report.

Examining attitudes of the provider towards incident reporting, and attitudes of the provider towards the violent or aggressive patient are well explained through the use of stress theory, as articulated in previous sections of this review. Additionally, social norms regarding incident reporting are explained through broken windows theory. When combining these factors, the theory of reasoned action would suggest that for an individual health care provider to have the intent of reporting the violent or aggressive behavior, their attitude about the behavior would have to be extremely unfavorable and their attitude towards incident reporting would have to be favorable to override any social norms against incident reporting as reviewed in the preceding chapter. However, should the social paradigm shift, whereby healthcare providers place their own safety issues and their own well-being equal to that of the patients under their care, the theory of reasoned action would assert that less weight would be placed on the individual provider's attitude towards the behavior.

Explanatory Model

Using the aforementioned theoretical approaches, an explanatory model has been developed to offer a specific predictive model for providers subject to patient aggression or violence reporting or failing to report incidents. The factors which are hypothesized to contribute to this model are characteristics of the provider, characteristics of the patient, and the form of abuse. The individual theoretical foundations reviewed are insufficient in and of themselves to offer a predictive model. However, when combined, stress theory, broken windows theory and the theory of reasoned action may be utilized to create a predictive model for examining those factors which contribute to non-institutional healthcare providers reporting or failing to report incidents of patient violence and aggression perpetrated against the provider.

The theoretical review would suggest that use of stress theory explains and predicts that incident reporting, when conceptualized

as a response to the incident, is impacted by characteristics of the provider exposed to the aggression and violence. The theory postulates that non-institutional healthcare providers with the ability to react to the stress response will be more capable of responding to incidents of patient aggression and violence, and therefore more likely to report such occurrences. Use of this theoretical foundation leads to the hypothesis that providers who are exposed to violence and aggression report or fail to report incidents based upon the variables of provider age, years of experience and discipline. Additionally, use of stress theory offers the prediction that patient characteristics may also contribute to the providers' response to the stressful event and therefore impact the providers reporting of the incident.

The impact of patient characteristics also has in impact through the provider's attitudes towards violence and the social norms regarding the acceptability of violence and incident reporting. As the literature suggests that providers do not attribute culpability to patients who are perceived of vulnerable, the theory of reasoned action would predict that incidents perpetrated by patients who are deemed vulnerable would be less likely to be reported than those whereby providers assign culpability to the patient. It is therefore hypothesized that healthcare providers in non-institutional healthcare settings are less likely to file a report due to moderating characteristics of the patient: i.e., when the perpetrator is a patient with a diagnosis of dementia, acute health crisis, cognitive impairment, mental health diagnoses or under the influence of substances.

The patient perpetrating abuse and the providers' response to the exposure is also impacted by the social norms regarding violence and aggression in the non-institutional healthcare setting. Broken windows theory would postulate that the form of abuse perpetrated against the provider has an effect on the reporting of such. It is therefore hypothesized that verbal abuse and aggression are reported less frequently than acts of physical violence. Additionally, physical abuse resulting in personal injury and loss of work time is reported more frequently than physical abuse or violence that does not result in these measurable outcomes.

Conclusion

To conclude, the literature has linked the ability to react to stress events to the theory of reasoned action, as the existence of such may serve as indicators as to whether the individual may decide to override social norms against an action. This review suggests that broken windows theory well utilized in the criminal justice filed may add to the dialogue regarding social norms and attitudes utilized in the theory of reasoned action and offers a predictive model for provider incident reporting. Suggesting that despite the social norms against reporting patient violence in the non-institutional healthcare setting, a predictive model for incident reporting may be offered using stress theory, social norms and provider attitudes as factors contributing to provider incident reporting. Additionally, provider characteristics, patient characteristics and the form of abuse are examined within this framework to explore this constellation of factors and the impact of each on incident reporting.

Areas for future research are also clearly outlined through this theoretical review. Specifically studies which examine the factors that contribute to non-institutional healthcare providers reporting or failing to report incident their most recent encounter of patient violence/aggression perpetrated against them? This review has outlined a theoretically informed framework to allow future researchers and scholars to examine specifically the impact of the form of abuse or aggression perpetrated against the healthcare providers and incident reporting. Additional areas of future research still needed in the field are those which examine the impact of provider characteristics and patient characteristic on provider incident reporting. In exploring these topics, it becomes possible to develop needed strategies to decrease the prevalence of patient perpetrated violence.

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