



Violence, Job Satisfaction, and Employment Intentions Among Home Healthcare Registered Nurses

turnover and exit HHC, after controlling for age and tenure.

Methods

Subject Recruitment

A convenience sample of HHC RNs was recruited from 32 HHC agencies located predominantly throughout New York State. Detailed information on the data collection methodology has been previously published (Gershon et al., 2008). Signed informed consent was obtained from each respondent. All procedures had prior review and authorization of the Columbia University Medical Center Institutional Review Board and boards representing the participating agencies, where applicable.

Data Collection

Data were collected in the spring and summer of 2007. At the close of recruitment, 738 HHC RNs completed the self-administered paper survey. Respondent characteristics were found to be comparable with available demographics of RNs licensed in New York State on gender, though not on age, as the study sample was 3 years older on average (New York State Board of Nurses, 2003).

Questionnaire Design

Extensive developmental procedures, including shadowing, focus groups, and in-depth and cognitive interviews, informed the preparation of a 96-item study questionnaire. Content validity was evaluated by an advisory board panel upon review of the final draft. To facilitate rapid completion, the questionnaire was written at a 10th grade reading level.

Study Measures

The questionnaire addressed the following six domains:

1. RN-related characteristics: This measure consisted of items addressing age, gender, tenure, number of hours worked per week, and number of patients seen per week.
2. Patient-related characteristics: This measure included items on dwelling type (house, apartment building, assisted living, group home, senior housing), setting (urban, suburban, rural), and type of care received (acute, chronic/long-term, high-tech/infusion, hospice,

maternal/child health, mental health).

3. Stressful household conditions: This measure consisted of 14 stressful conditions commonly found in the household: aggressive pets, blurring of work/personal time, bothersome client family members, bothersome neighbors, demanding clients, drug use, firearms, loud noise, neighborhood crime, personal security fears, poor lighting, racial/ethnic discrimination, unsafe conditions, and unsanitary conditions.
4. Organizational safety/security climate: This seven-item measure factored into two constructs: the first, agency safety promotion climate, consisted of four items: (a) "At my agency, I am encouraged to become involved in safety and health matters"; (b) "My supervisor often discusses safe work practices with me"; (c) "My agency is adequately staffed"; and (d) "A copy of my agency's safety manual is available to me" measured on a five-item scale with scores ranging from "strongly agree" to "strongly disagree." The second subconstruct, agency safety provision measures, had two possible responses ("yes" or "no") and consisted of the availability of (a) security escort, (b) translator, and (c) driver.
5. Self-reported exposure to workplace violence: Participants' exposure to workplace violence during their tenure in HHC was determined using the question "Have you ever experienced any of the following in the home care setting (e.g., from patients, patient's families or neighbors)?" with the response options: "verbal abuse," "threat of physical harm," "actual physical assault," and "threat of theft/ damage to car." Any respondent indicating one or more incidents was considered to have a history of exposure to violence.
6. Job satisfaction and employment-related intentions: Job satisfaction was measured using the question: "How satisfied would you say you are with your job?" with four response options ranging from "not at all satisfied" to "very satisfied." Intention to turnover (i.e., change jobs) was measured using the following question: "Do you intend to change your agency (that employs you) within the next 12 months?" and had three response choices: "yes," "possibly," and "no." Intention to exit HHC was measured using: "Do you intend to leave home healthcare within the next 12 months?" and had three

response choices: “yes,” “possibly,” and “no.” The questionnaire and codebook may be obtained from the corresponding author.

Statistical Analysis

Following data cleaning and editing procedures, raw score frequency distributions were examined to describe the sample. Lifetime prevalence rates of exposure to violence in HHC were calculated and risk factors associated with violence were identified using chi-squared (χ^2) statistics and odds ratios. Level of significance was set $p < .05$. To ascertain the relationship between violence exposure, organizational safety/security climate, and stressful household conditions and job satisfaction, turnover, and exit intentions, odds ratios and their 95% confidence intervals were estimated. To control for possible confounding and test for mediational effects of other variables (e.g., age, tenure in HHC, organizational climate) hierarchical stepwise regression models were tested, which included all variables significant at the bivariate level. In addition, the Breslow-Day statistic was used to determine whether age of the RN modified the relation between self-reported violence and the outcome measures. All analyses were conducted using SPSS (SPSS for Windows, 2007).

Results

RN-Related Characteristics

The majority (95%) of respondents were female, $M_{\text{age}} = 50$, range of 22 to 78 years, with an average tenure of 22 years in HHC (Table 1).

Patient-Related Characteristics

Patient-related characteristics, such as client residence type, client resident setting, and level/type of care provided are also detailed in Table 1.


Stressful Household Conditions

Forty-eight percent of RNs reported three or more stressful household conditions present in their current caseload, including unsanitary conditions (43%), blurring of work/personal time

(38%), unsafe conditions (slips/trips/falls hazards) (36%), demanding clients (34%), presence of aggressive pets (27%), poor lighting (21%), neighborhood violence/crime (19%), clients' bothersome family members (18%), personal security fears (14%), drug use in the home (13%), firearms in the home (9%), loud noise in the home (8%), racial/ethnic discrimination (8%), and clients' bothersome neighbors (5%).

Organizational Safety/Security Climate

Many agencies had a variety of safety/security measures and policies in place. Fifty-three percent of respondents reported that their agency



This study investigated the risk and risk factors for self-reported exposure to violence in HHC, as well as the association between self-reported violence and RNs' job satisfaction and intentions to turnover and exit HHC, after controlling for age and tenure.

provided them with a cell phone for use while visiting clients and 66% reported availability of security escorts, although less than half used this service. A large proportion (66%) reported that translators were available. Although their role was to translate, focus group participants indicated that the translator's presence provided a sense of security. Only 14% of respondents indicated that their agency provided a driver.

Prevalence of Violence or Threat of Violence

Sixty-three percent ($n = 465$) of RNs reported one or more violent exposures during their tenure in HHC and 19% ($n = 140$) reported two or more violent exposures. The most prevalent violent exposure was verbal abuse (58.9%),

Table 1. Description of the Sample, Home Healthcare Registered Nurses, New York State, 2007 (*N* = 738)^a

Characteristics	<i>N</i>	%
Gender		
Female	701	95.1
Male	36	4.9
Age	\bar{x} = 49.99 years	SD = \pm 9.58
Tenure as a home health registered nurse	\bar{x} = 21.63 years	SD = \pm 10.77
Hours worked in home care (per week)	\bar{x} = 32.96 hr	SD = \pm 16.04
Clients seen (per week)	\bar{x} = 17.31	SD = \pm 12.99
Client residence (dwelling) type		
House only	220	29.8
Apartment building only	103	14.0
Assisted living/senior housing/nursing home only	15	2.0
Any combination of dwelling types	326	44.2
Client residence setting		
Urban only	294	39.8
Suburban only	193	26.2
Rural only	129	17.5
Any combination of settings	49	6.6
Level/type of care provided		
Acute only	105	14.2
Chronic only	142	19.2
Acute and chronic only	100	13.6
Acute, chronic, and high-tech/infusion only	49	6.6
High-tech/infusion only	8	1.1
Hospice only	29	3.9
Maternal/child health only	25	3.4
Mental health only	4	0.5
Combination of care types	220	29.8
Transportation to home visits		
Car	606	82.1
Public transportation (subway, bus, train, ferry)	64	8.7
Bike/walk	33	4.5
Taxi/car service	10	1.4
Combination	25	3.4

^aColumn numbers and percentages may not add to 738 or 100% due to multiple responses and missing values.

Table 2. Age and Tenure as Moderators of Self-Reported Violence and Exit Intentions (N = 738)

	Turnover Intentions ^a			Exit Intentions ^a		
	OR	95% CI	p	OR	95% CI	p
Violence						
One or more experiences						
Age ^b						
Above median	3.00	1.50–6.02	<0.001	2.47	1.30–4.68	<.005
Below median	1.44	0.86–2.42	.17	1.00	0.59–1.70	0.97
Tenure ^c						
Above median	3.66	1.74–7.71	<0.001	3.19	1.56–6.56	<.001
Below median	1.29	0.78–2.13	0.33	0.97	0.58–1.64	0.92
No experience ^d	1.00	–	–	1.00	–	–

CI = confidence interval; OR = odds ratio.

^aIntentions were reported for the next 12-month period.

^bMedian age = 50.72 years; Breslow-Day $\chi^2_{\text{Turnover}} = 2.79, p < .095$; Breslow-Day $\chi^2_{\text{Exit}} = 4.60, p < .032$.

^cMedian tenure = 22 years; Breslow-Day $\chi^2_{\text{Turnover}} = 5.37, p < .021$; Breslow-Day $\chi^2_{\text{Exit}} = 7.17, p < .007$.

^dReferent group. All odds ratios for age (above and below the median) and tenure (above and below the median) = 1.00.

followed by threat of physical harm (16.3%), threat of theft/damage to car (8.9%), and actual physical assault (3.3%).

Outcome Measures

Twenty-six percent of respondents ($n = 185$) reported low job satisfaction levels. Twenty-two percent ($n = 159$) of respondents indicated that they intended to turnover in the next 12 months, and nearly the same proportion ($n = 153, 20.1\%$) indicated that they intended to exit HHC during that same period. The correlation between self-reported turnover and exit intentions was high ($r = .68, p < .001$), with 17% of respondents reporting both intentions.

Relation Between Violence, Other Factors, and Outcome Measures

A history of exposure to violence was strongly associated with job satisfaction (odds ratio [OR] = 1.86, 95% confidence interval [CI] = 1.28–2.70), turnover intentions (OR = 1.95, 95% CI = 1.31–2.91), and exit intentions (OR = 1.53, 95% CI = 1.03–2.27). Age and tenure were found to moderate the relation between violence exposure and both turnover and exit intentions (Table 2), but the relation between a history of violence exposure and job satisfaction was not qualified by age or by tenure.

Safety promotion climate also related with both turnover (OR = 2.54, 95% CI = 1.74–3.73) and

exit intentions (OR = 1.90, 95% CI = 1.31–2.75), as was stressful household conditions (OR = 1.85, 95% CI = 1.26–2.71; OR = 1.63, 95% CI = 1.12–2.37, respectively).

To further explore the relation between violence and these other variables and employment intentions, all variables that were significantly related to turnover and exit intentions were entered into regression models via a hierarchically stepwise procedure. As shown in Table 3, job satisfaction was the only variable that remained significantly related in the final models for both employment outcomes, and only one other variable, safety promotion climate, remained in the final turnover model. Violence was no longer statistically significant when job satisfaction was entered into the models. This result suggests that job satisfaction may act as a mediator in the relation between violence and intentions to turnover or exit. That is, violence appears to “impact” a RN’s job satisfaction and job satisfaction “impacts” the employment intentions.

Discussion

A substantial proportion of study participants reported a history of one or more exposures to violence during their career in HHC, with rates similar to previously published rates (Arnetz & Arnetz, 2001; Bussing & Hoge, 2004; Geiger-Brown et al., 2007). A number of unique risk factors were

Table 3. Stepwise Regression Models for Turnover and Exit Intentions

	Final Turnover Model			Final Exit Model		
	OR	95% CI	<i>p</i>	OR	95% CI	<i>p</i>
Age	1.33	0.87–2.01	0.185	–	–	–
Stressful household conditions	1.27	0.83–1.94	0.381	1.21	0.80–1.81	0.364
Safety promotion climate	1.62	1.06–2.49	0.026	1.23	0.82–1.86	0.316
Violence	1.46	0.92–2.32	0.112	1.12	0.73–1.72	0.616
Job satisfaction	7.42	4.83–11.41	<0.001	5.29	3.47–8.06	<0.001

CI = confidence interval; OR = odds ratio.

related to violence, including stressful household conditions and organizational safety/security measures. It was also noted that a history of violence exposure was strongly related to current job satisfaction, as several studies on healthcare workers have also shown (Cox, 1987; Manderino & Berkey, 1997). Additionally, history of violence exposure was strongly related with both turnover and exit intentions. However, stepwise regression modeling indicated that violence was most closely associated with job satisfaction, and that job satisfaction was most predictive of employment intentions, which has also been reported in other work populations (Griffeth et al., 2000; Mosadeghrad et al., 2008; Tett & Meyer, 1993).

Exposure to violence in the healthcare sector not only affects the workers, but may also have implications for patient quality of care (Arnetz & Arnetz, 2001; Fazzino et al., 2000; Kendra et al., 1996). Violent incidents could result in interruptions of care or compromised care because RNs may either reduce the amount of time spent in the patient household or refuse to provide patient care outright. Violence may also result in decreased access to care for patients living in dangerous neighborhoods. Moreover, anxious or depressed/ demoralized workers may have impaired job performance. Violence can also result in strained relationships and negative social interactions between the patient and their nurse or aide.

Implications for Practice

Worksite violence prevention programs are needed to reduce the risk and adverse consequences of

violence in the HHC setting. Although healthcare organizations in general have made important strides in developing violence prevention programs, continued high reported rates of violent incidents directed at healthcare workers implies that simply having these policies and programs does not suffice. Additionally, staff may be unaware of the existence of such policies and programs (Fazzino et al., 2000) or they may be reluctant to use them. For example, only 44% of respondents who had a security escort available to them made use of this important safety measure. To effectively operationalize these policies, agencies should develop, implement, and *promote* a strong safety and security climate.

Findings from other research suggest that certain programmatic elements could positively impact safety and security climate in HHC. These include prescreening of the patient’s home, as well as initial and continuing risk assessments (Hunter, 1997). Sylvester and Reisner (2002) suggest that agencies involve the patient by requiring clients to sign a contract stating that they understand that their care may be terminated if an HHCW experiences violent or threatening activity in their household. Because of potential ramifications on patient care, the use of a contract may make patients and their family members more invested in HHCWs’ safety.

HHC agencies can strengthen the safety/security climate by providing structural support, such as the provision of cell phones to RNs. Only slightly more than half (53%) of RNs in our study reported that their agency supplied them with cell phones for use while making patient visits.

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The importance of this crucial safety measure cannot be understated; Fazzino et al. (2000) found that HHCWs considered cell phones and other mobile communications devices to be "lifelines." Providing a cell phone to the HHCW communicates to the worker that his or her agency is sensitive to the occupational hazards that HHCWs may face and will support them should a violent incident occur.

Another important approach to building a strong safety/security climate is engaging HHCWs in identifying risk reduction measures. Agencies should encourage their workers to brainstorm solutions together, as a shared awareness that these events can happen normalizes the experience, thereby reducing its emotional impact and encouraging disclosure. Educational programs, such as skills-building exercises that increase RNs' awareness of the potential for violence in HHC, can also help reduce their risk (Fazzino et al., 2000) and are a valuable opportunity for agencies to communicate violence-prevention resources and policies.

With respect to protective measures specific to urban areas, agencies may consider scheduling patient visits to known or designated unsafe neighborhoods during daytime hours, preferably with escorts, followed by check-in calls after completing a visit in such areas. Other proactive preventive measures, such as simulation-based violence awareness programs and in-service trainings that allow HHCWs to practice defensive techniques, might also be an effective means of strengthening the safety/security climate.

Limitations and Suggestions for Future Research

One limitation to this study was the sampling strategy. Due to well-recognized difficulties in accessing large numbers of HHCWs for the purpose of studying them (e.g., they are frequently out on patient visits and rarely all together at headquarters), a multimethod recruitment strategy was selected in order to provide a large sample representative of a range of communities, dwellings, care types, and experience. This approach increased the ability to recruit and enroll large numbers of participants into the study and largely resulted in a sample that was, in all respects but age, similar to available statewide RN demographics (New York State Board of Nurses, 2003). Because this sample was predominantly

recruited in New York State, generalizability may be limited, although our findings on turnover intentions are similar to those in a recent survey of New Jersey HHC RNs (Flynn, 2007). Other limitations include the well-documented tendency of healthcare workers to underreport violent incidents and underreporting of violence exposure may have occurred (Fazzino et al., 2000; Flynn, 2007). Recall bias could also result in underestimations of actual exposures. Additionally, participants may have given socially desirable responses to sensitive questions. The most serious study limitations were its cross-sectional design, which, while timely and efficient, precludes causality, and the fact that exposure to violence was historical (i.e., any exposure to violence during their tenure in HHC) and therefore may not be concurrent with the RNs' present working conditions.

Going forward, more robust study designs and intervention studies are needed. Because job satisfaction was the strongest predictor of turnover and exit, research should also focus on dissatisfaction risk factors, such as adverse working conditions in HHC. Studies that focus on correlates of job satisfaction in older RNs might be especially helpful in designing interventions that delay premature exit. Finally, research is also needed to assess the impact of exposure to a hostile environment that does not directly threaten RNs (e.g., interpersonal conflict among household members), as this type of experience has been characterized by Salston and Figley (2003) as "secondary trauma."

Conclusions

Despite OSHA's violence prevention guidelines (OSHA, 2004), it is clear that violence in HHC remains a problem. Violence prevention measures, as part of an overall safety/security program, may improve working conditions and job satisfaction and thus reduce the likelihood of turnover or exit of HHC RNs. In light of the existing and projected nursing shortage and data linking violence to adverse health outcomes, the present findings underscore the importance of protecting HHC RNs from exposure to violence. The development and implementation of policies and practices that support a strong organizational safety and security climate will help ensure a safe and healthy working environment for these workers and positively affect agencies and patients as well.

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Plain Language INSULIN GUIDE

The Agency for Healthcare Research and Quality has released plain language guides for consumers and clinicians comparing the efficacy, effectiveness, and side effects of newer premixed insulin analogues to conventional insulin (human insulin) and other preparations used to control type 2 diabetes.

The consumer guide, *Premixed Insulin for Type 2 Diabetes: A Guide for Adults*, is a primer on diabetes, diabetes testing, and treatments. It is available at http://effectivehealthcare.ahrq.gov/repFiles/Insulin_Consumer_Web.pdf.

The clinician guide, *Premixed Insulin Analogues: A Comparison with Other Treatments for Type 2 Diabetes*, includes additional information such as a confidence scale that rates available evidence. It is available at http://effectivehealthcare.ahrq.gov/repFiles/Insulin_Clinician5.pdf

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