Published in final edited form as:

Soc Work Health Care. 2009 July ; 48(5): 505–518.

The Use of Public Policy Analysis to Enhance the Nursing Home Reform Act of 1987

Gerald-Mark Breen, MA,

Department of Public Affairs, University of Central Florida, Orlando, Florida, USA

Jonathan Matusitz, PhD, and

Nicholson School of Communication, University of Central Florida, Orlando, Florida, USA

Thomas T. H. Wan, PhD

Department of Public Affairs, University of Central Florida, Orlando, Florida, USA

Introduction

The purpose of this policy analysis is twofold: (1) to thoroughly examine various and specific elements of the Nursing Home Reform Act (NHRA) of 1987 and (2) to illuminate how this policy is flimsy and how suggested resolutions may fortify its effectiveness. The NHRA was instituted following a Congress-launched study that revealed rampant abuse, neglect, and inadequate care targeting nursing home residents (Beaulieu, 2001; Blackburn & Dulmus, 2007; Klauber & Wright, 2001). Although this reform policy was implemented more than twenty years ago, care deficiencies in nursing homes remain common (Breen & Zhang, 2008; Zhang & Wan, 2005; Zhang, Unruh, Liu, & Wan, 2006). As such, this analysis initially focuses on the weaknesses or shortcomings of the NHRA policy and identifies rationale as to why the NHRA is lacking in effectiveness and efficiency.

Besides enumerating reasons why NHRA is compromised – such as issues related to insufficient supervision of staff, staff shortage, self-esteem issues, inadequate sanctions, low income and benefits, and ineffective compliance-gaining techniques to ensure effectiveness in occupational performance – strategies are suggested to minimize identifiable deficiencies. The top ten nursing home deficiencies are food sanitation, quality of care, accidents, professional standards, accident prevention, housekeeping, pressure sores, comprehensive care plans, dignity, and infection control (Blackburn & Dulmus, 2007; Breen & Zhang, 2008). By identifying such deficiencies, the subsequent step is to improve the implementation and enforcement of the NHRA. However, the implementation and enforcement aspects may be inherently and irreversibly flawed. Thus, by examining four social scientific theories, including extrinsic motivation theory (Petri, 1991), compliance-gaining theory (Marwell & Schmitt, 1967), social cognitive theory (Bandura, 1986), and inoculation theory (Matusitz & Breen, 2005, in press; McGuire, 1961), new techniques can be generated and applied to illuminate how nursing home staff members can improve their job performance and boost motivation vis-à-vis employee morale and motivation. One technique is specialized training for nursing home staff members.

Rationale

A main objective of this policy analysis is to deduce and suggest solutions to maximize the outcomes that the NHRA seeks to assure, that is, that residents receive benefits, equality, equity/fairness, individualism, rights, security, and sufficient care quality. These issues fall substantially within the matters of public interest (Blackburn & Dulmus, 2007; Klauber & Wright, 2001) and are becoming increasingly important concerns for the general public, especially given the fact that the elderly population is gradually rising.

Currently, there are some major gaps that exist in the NHRA that prevent the policy from meeting its objectives. For example, Klauber and Wright (2001) stated that “the extent to which the NHRA succeeds in actually improving nursing homes depends on the effectiveness of its enforcement.” Enforcement, as a concept, is especially difficult to attain, particularly in light of the fact that there are over 17,000 nursing homes nationwide, deficiencies are epidemic in scope, and more than one year can pass before any given nursing home can be or is assigned for inspection (Blackburn & Dulmus, 2007). Further, much resident abuse and inferior quality of care can be overlooked by surveyors, and complaints may not be properly directed to the authorities for investigation. In short, there are countless ways in which inspection and enforcement of NHRA can be tampered or surreptitiously fought; the targets that need to be confronted and improved are the nursing home staff members who deliver care directly to the residents. The staff members represent the caregivers. Caregivers cannot always be watched (Klauber & Wright, 2001); yet, at least they can receive specialized, theoretical and anecdotal forms of training, a strategy that could ensure a minimization of deficient care delivery and a potential resolve to the inherent and observed weaknesses of the NHRA.

Review of the Nursing Home Reform Act (NHRA) of 1987

This section will describe the Nursing Home Reform Act of 1987 by going over its origins, policy design, implementation, and enforcement issues, as well as factors affecting staff motivation to deliver quality care (i.e., staff-mix, staff shortages, income levels of nursing home staff members, the use of specific technologies, high levels of staff turnover, and the influence of the use of contracted vs. full-time staff).

Policy Design, Implementation, and Enforcement Issues

The Nursing Home Reform Act of 1987 sought to wipe away the abusive, negligent, and deficient care residents of such facilities were experiencing at the hands of their paid, in-patient healthcare providers. The essential goal behind the NHRA of 1987 is to maximize the chances that nursing home residents receive decent, dignified quality care so that they – the residents – may acquire and sustain optimal physical, mental, and psychosocial health (Beaulieu, 2001; Klauber & Wright, 2001). Although the mission of the NHRA is to secure quality care in nursing homes, the NHRA has clearly fallen short in its priority to provide the provisions it originally set forth in the policy's “Residents' Bill of Rights” (Blackburn & Dulmus, 2007). These rights are itemized as follows:

1. The right to freedom from abuse, mistreatment, and neglect;
2. The right to freedom from physical restraints;
3. The right to privacy;
4. The right to accommodation of medical, physical, psychological, and social needs;
5. The right to participate in resident and family groups;
6. The right to be treated with dignity;

7. The right to exercise self-determination;
8. The right to communicate freely;
9. The right to participate in the review of one's care plan, and to be fully informed in advance about any changes in care, treatment, or change of status in the facility; and
10. The right to voice grievances without discrimination or reprisal.

According to Wan (2003), the “HCFA On-line Survey, Certification, and Reporting System (OSCAR) database is the repository of deficiency citations by state surveyors” (p. 285), and criteria regarding care quality in all U.S nursing homes are laid out and are helpful in making evaluations of such facilities. In addition, within mass media reports (newspaper, television) – as well as specific journal or book publications – resident abuse in nursing homes takes notice in the public sphere (Castle & Engberg, 2007). Thus, the image or perception of nursing homes amongst the general public is oftentimes tarnished.

Nevertheless, this abuse can take various shapes, including violent acts of physical and sexual abuse (Robison et al., 2007) and verbal and psychological abuse (Terry, 2007). In an attempt to effectively monitor whether nursing homes were fulfilling what the NHRA stipulates, rules were established to enable a process of “certification,” allowing inspectors to make unscheduled visits to any given nursing home at any given time. These inspections can take the form of resident interviews, conducted at any time, within a minimum inspection period of every 1.3 months (Castle & Engberg, 2007; Klauber & Wright, 2001).

However, a lengthy setback occurred within the federal government between 1987 and 1994, delaying the commencement and execution of regulations and surveys, and thus extending the postponement until 1995 (Blackburn & Dulmus, 2007). Even though surveyors usually dedicate their inspections to major issues – such as quality of care and maintaining residents' integrity and personal rights – additional, deeper inspections may need to be authorized and deployed. Such cases oftentimes involve situations where a formal accusation is made, or a complaint is lodged, inciting an investigation. If a nursing home is discovered to be non-compliant in any area, the NHRA enforcement process initiates and intervenes (Blackburn & Dulmus, 2007). The degree of reprimand or remedial action is contingent upon if the identified deficiency subjects a resident to an immediate danger, and/or if the noted deficiency represents an isolated incident or a widespread problem throughout the entire nursing home.

In instances where deficiencies are serious and a rebuke or censure needs to be executed, state monitoring, civil penalties, and denials of payment (existing or future) from Medicaid or Medicare patients can transpire (Blackburn & Dulmus, 2007; Castle & Engberg, 2007). Such threats to nursing homes, if a given staff member commits an act that is discovered and pursued by NHRA agents, can financially harm and interfere with the overall functioning and objectives of the nursing home(s).

Factors Affecting Staff Motivation to Deliver Quality Care

Skilled nurses, who have advanced training and hold a RN or similar degree, are also limited and scarce (Harrington, Zimmerman, Karon, Robinson, & Beutel, 2000). Too, staff-mix, as well as staff shortages, represents other issues regarding why quality of care falls deficient in many nursing home cases (Zhang, Unruh, Liu, & Wan, 2006). Further, income levels of nursing home staff members can be a de-motivating factor in their [the staff] willingness to deliver optimal care quality to residents. By the same token, self-esteem levels on the parts of the staff members oftentimes interfere with the genuine desire to provide adequate care to residents (Castle & Engberg, 2007).

Sometimes, in nursing homes, specific technologies normally used to manage illnesses of particular residents may be absent or unaffordable (DuBeau, Ouslander, & Palmer, 2007). If a nursing home does not have the capacity or resources to provide the necessary services to their residents, irrespective of staff efforts, motivation to optimize quality delivery may be diminished. The rationale behind this logic may be that staff members see themselves as incapable or unable to serve the needs of the residents, regardless of how hard they work. If the technology is missing, and staff members need the technology to implement appropriate treatments to specific patients, a sense of despondency and/or amotivation may result. Clearly, these are barriers that affect the NHRA policy, its regulation, and best-practice care delivery to nursing home residents.

The above section delineated various reasons why nursing homes may not fulfill or may be unable to satisfy the requirements as set forth by the NHRA of 1987. In addition, reasons why the NHRA lacks effectiveness in some cases were also addressed. In the next section, suggestions are provided, applying theoretical assumptions and concepts, which may serve to improve overall quality of care in nursing homes and the service delivered by staff members themselves. Such an analysis should prove to help modify or strengthen the core of what the NHRA sets out to accomplish: optimal care and minimal deficiencies.

Other factors affecting staff motivation to deliver quality care include high levels of staff turnover, the influence of the use of contracted vs. full-time staff, access to training and education, access to supervision, and improved benefit packages. For instance, with respect to high levels of nursing staff turnover, shortages lead to complications as organizations attempt to provide consistent, high-quality patient care (Boyle & Miller, 2008). During periods of major turnover and staff shortages, higher patient-to-nurse ratios may jeopardize quality of care (Jones, 2008). Castle, Engberg, and Men (2007) also reported that high turnover is associated with poor quality. As nurse staffing decreases, burnout and job dissatisfaction increase (Boyle & Miller, 2008). This leads to the second point of this paragraph: the influence of the use of contracted vs. full-time staff. This solution has been considered a poor solution to institutional staffing shortages because the use of temporary or contract nursing staff is costly, disrupts continuity of care (Guillard 2000), and may also lead to poor patient care. In many cases, the use of contract nursing staff in nursing homes bolsters the impression that nursing homes offer poor quality care (Bourbonniere et al., 2006).

Methods to Improve Staff Performance and Resident

Quality of Care: Theoretically-Grounded Strategies

This analysis has already established that the NHRA policy has flaws. However, there may be means to resolve some of the major pitfalls of the NHRA policy. Training has been identified as a method to reduce unwanted behavior (Ray & Ksir, 2003). In this study, the unwanted behavior is deficient healthcare delivery to nursing homes residents. Those theories serve as the foundations and fundamentals to facilitate motivation and compliance with the Nursing Home Reform Act of 1987. This is designed to minimize acts of abuse, negligence, and poor-care delivery. Instead, it seeks to enforce an increased level of patient care, commitment, and dedication. Those theories explain this well.

In the following paragraphs, specific social scientific theories are addressed and then explained in relation to how nursing home staff members can put these theories into practice and be more interpersonally-effective caregivers for the elderly and disabled populations with whom they provide treatment and care. Introducing these theories to nursing home executives can help these individuals understand the psychology and needs of their staff members delivering care and services directly *vis-à-vis* the residents. These executives can

then train staff members in a manner that reflects the theoretical and conceptual underpinnings of the following notions. The goal is to strengthen the image and utility of the NHRA, a policy that has insufficiently exerted itself to reform functioning and optimize quality of care in nursing homes in the United States.

Extrinsic Motivation Theory—One particular theory that can explain how to ensure devotion of performance and responsibility to nursing home care delivery is termed extrinsic motivation theory (EMT). EMT, coined by Petri (1991), addresses that people can be motivated to achieve tasks based on external factors or pressures. The rewards of such pressures (as in the context of nursing home staff members being supervised, monitored, and sanctioned to do their jobs well), according to the NHRA of 1987, should act as a form of extrinsic motivation, forcing staff to comply and confer high quality of care and minimize deficiencies in healthcare delivery. For example, the Director of Nursing, as a sort of external entity above the direct care staff members, should constantly iterate the importance of following the NHRA policy and warn every staff member that abuse or neglect, or deficient care of any kind, will not be tolerated, both at the facility and government levels. The consequences of being caught by NHRA agents, as previously mentioned, can also be stressed by the Director of Nursing. This “extrinsic,” or external, pressure by the Director of Nursing should increase “motivation” and compliance with the NHRA, thus increasing the chances of enhanced care delivery to residents. To increase the pressure and extrinsic motivation on the parts of the nursing home staff members, more frequent visits by NHRA executives and inspectors could be made. Increased inspection and the associated fear with the anticipation of the arrival of such inspectors should boost staff motivation to comply. As such, EMT may serve to explain how nursing homes can ensure that their staff members are effectively delivering the quality care they should be to their clientele, that is, their residents. Although there is no scientific, empirical, or clinical evidence supporting in practical application (i.e., nurses who work in nursing homes), this theory of motivation has been applied successfully in other medical fields and professions (i.e., Hyman, 2006; Park & Lee, 2008).

Compliance-Gaining Theory—Along the same lines, because compliance is a critical management tool when giving instructions, compliance-gaining theory (CGT) (Marwell & Schmitt, 1967) is a practical theory to consider when contemplating ways to improve staff compliance and optimize the effectiveness of the NHRA. This theory posits that authorities (i.e., directors of nursing homes) can acquire compliance from their subordinates (i.e., RNs, RAs, directly caring for residents) by employing certain strategies, such as rewards and/or punishments. Nursing home staff members must be pressured by authorities (particularly by directors of nursing homes), in a polite, yet serious way, to comply with rules and regulations regarding the delivery of quality care and according to the sanctions set forth by the NHRA. NHRA executives and representatives can similarly stress the importance of compliance in all areas related to this policy, and how obeying the policy will keep the nursing home and staff employment intact. Given the fact that repeat deficiencies and sanctions can result in refusals for reimbursement by government agencies responsible for helping pay for in-patient, nursing home care services, staff members should be especially inclined to obey and commit themselves to effective work when they know that incidences like these can affect the financial survival of the nursing home (their place of employment) and the jobs of everybody working there.

Education is also key. Executives of nursing homes should pressure staff members to continually educate themselves by attending relevant classes and gaining additional certification. The rewards of additional education may lead to increased income and benefits for the staff members. Financial incentives sometimes succeed in increasing motivation, compliance, and performance quality. Further, posting reminders and signs about the NHRA

policy, as a form of educational reinforcement, should keep employees cognizant of the implications and corollaries of inadequate care delivery. By the same token, this continual reminding should help regularly maintain and perhaps even increase the care quality administered by staff members to the residents. Clearly, CGT is a relevant theory that may serve to explain and provide solutions to improve nursing home care and clarify the elements and requirements of the NHRA of 1987 to the caregivers (nursing homes staff members). Fisher (1995) analyzed nursing through the application of compliance gaining. He found that female nurses are more willing to comply than their male counterparts.

Social Cognitive Theory—Social cognitive theory (SCT) (Bandura, 1986) is another theory that can educate nursing home staff members to better comply and follow the rules and regulations of the NHRA. SCT posits that “when there are models in an individual’s environment – perhaps friends or family members in the interpersonal environment, people from public life, or figures in the news or entertainment media – then learning can occur through the observation of these models” (Miller, 2002, p. 240). As stated by Baran and Davis (2000), modeling can be understood as a form of mimicking, or “the direct, mechanical reproduction of behavior” (p. 184). Repetitious reminders and warnings, perhaps using visual or auditory signals or amplified messages via speakers, can repeatedly and progressively instill the rules regarding how and why to treat residents right. In other words, the tenets and underpinnings of the NHRA can be communicated via these channels. The visual reminders could depict humane, soft, and gentle care delivery, whereas another reminder could be a visual sign that rebuffs and censures mishandling or mismanaging residents. These continuous reminders should eventually become cognitively routine and habitual, thus serving as a form of cognitive-behavioral restructuring, and thereby changing behavior and maximizing the chances of improved care delivery of residents. By the same token, the effectiveness of the NHRA should likewise increase.

In terms of actual models, perhaps an agent associated with the NHRA, or a supervisory body member, can stroll the halls and areas of the nursing home, demonstrating what quality of care means, through enactment, and can conduct him- or herself in a manner that reflects how the NHRA wants nursing home staff members to behave and treat their residents. Such a model, or actor, can reinforce staff members’ notions of good care and remind them of what is not poor care. As such, SCT can illuminate how behavior amongst staff members can be improved through the use of signs, reminders, models, and/or actors. Dougherty, Johnson-Crowley, Lewis, and Thompson (2001) studied the theoretical development of nursing interventions for sudden cardiac arrest survivors using social cognitive theory. Based on the main tenets of the theory, nurses have improved their knowledge and behavioral skills to manage cardiac arrest, to increase self-confidence and self-efficacy, and to decrease anxiety. By complying and following the rules and regulations of the NHRA, nurses have learned to not overreact to cardiac arrest. Likewise, they have been conditioned to model other experienced nurses by, for instance, remaining calm and maintaining their equanimity.

Inoculation Theory—Inoculation theory (IT), originally coined by McGuire (1961), and more recently and aggressively researched by Matusitz and Breen (2005; in press) in health contexts, is a systematic process of attitudinal resistance to persuasion (Pfau, 1995). Just as inoculation as an immunological term refers to instilling vaccinations in humans periodically to eventually reach immunity to a virus or bacteria, inoculation of the mind is designed to immunize the psyche or conscience against behavior or persuasion that attempts to incite misconduct. In simple terms, inoculation is a form of behavioral modification and cognitive restructuring (see Matusitz & Breen, 2005). Although the intricacies of this theory are generally salient factors to explicate when applying the theory in empirical studies (terms such as: threat, refutational preemption, warning, weak attack, active defending)

(Pfau, 1995), the complexity of the combined elements that enables inoculation to work on humans is not relevant to this discussion. What is critical to note, however, is that inoculation is a process whereby unwanted attitudes are discarded, desired attitudes replace what was discarded, and then the newfound attitude, which is positive, undergoes a strengthening process of mental resistance (Compton & Pfau, 2004; Matusitz & Breen, in press; Pfau et al., 2001). Once the new attitude is fortified, resistance toward behavior that counters the newfound, positive attitude exists and is powerful (Pfau et al., 2001). This resistance, especially within the context of staff members abusing or mistreating nursing home residents, can cause staff members to avoid abuse and neglect toward residents. When the levels of resident abuse and nursing home deficiencies decrease as a result of such behavioral modification, the NHRA becomes more positively perceived. Thus, IT, as a cognitive-behavioral restructuring technique, and in theoretical speculation, can serve to improve behavior of staff members caring directly for residents in nursing home settings. Matusitz and Breen (2005) analyzed medical impropriety and unprofessionalism. They found that inoculation is an effective strategy to prevent medical personnel from engaging in inappropriate behavior with their patients.

Limitations

As with any study that presents limitations in its capacity to confront and solve any given issue, this current analysis is no different. To effectively fortify the NHRA, its policy implications, and the behavioral conduct that this policy seeks to amend, a challenge of great strength needs to be vigorously undertaken. Certainly theory serves its purpose in attempting to understand or change behavior; yet to actually succeed and observe reformed, improved behavior in this setting would require careful analysis of these theories, how they can work, and the availability and employment of resources, both financial and human, to commit to a program that seeks to utilize such resources vis-à-vis the objective of enhance nursing home resident care.

One step that may be missing from this analysis is more detail on how to implement such theoretical strategies in a nursing home setting, and how to ensure, gauge, and report changes in behavior that will reflect improvement in care quality, in accordance with the NHRA of 1987. Such resources would need to be considerable to assure the effective implementation of these strategies. The next stage, given the material already provided herein, is to erase this limitation by engaging the theories into practical applications that pursue and seek to attain the desired goals. Only when a cooperative effort and project is launched that aims to resolve these issues in nursing homes, nothing can be done, in purely theoretical terms, to improve the situation. Hence, scholars, researchers, and practitioners must unite in a mission to tackle this societal issue and matter of public interest.

The obstacles to the four theories listed and described in this analysis – that is, extrinsic motivation theory (Petri, 1991), compliance-gaining theory (Marwell & Schmitt, 1967), social cognitive theory (Bandura, 1986), and inoculation theory (Matusitz & Breen, 2005, in press; McGuire, 1961) – could pertain to the lack of appreciation of theory by nursing home executives. Theories spawn ideas that lead to strategies aimed at inducing compliance and change of behavior in personnel, nursing home staff members caring directly for patients.

Discussion and Future Directions

This policy analysis has reviewed the elements of the Nursing Home Reform Act (NHRA) of 1987. Even though care deficiencies in nursing homes remain common, and although weaknesses in the NHRA policy exist (perhaps due to factors such as insufficient supervision of staff, quality of care, accidents, professional standards, etc.), there are

potential methods to increase the likelihood of enhanced implementation and enforcement of the NHRA. One major goal of this analysis is to seek out remedies to improve the NHRA by examining four social scientific theories: (1) extrinsic motivation theory, (2) compliance-gaining theory, (3) social cognitive theory, and (4) inoculation theory. In doing so, this analysis has provided some innovative techniques, transferring theory into platforms for practical application, on how nursing home staff members can improve their job performance, via training, and boost motivation vis-à-vis employee morale and dedication.

Yet, we still face the legendary “public policy dilemma.” In other words, a public law cannot be enforced or be effectively engaged if agents surrounding the law do not monitor quality and apply specific sanctions. However, it might be interesting to explore the existing Centers for Medicare and Medicaid Service's (CMS) “Pay for Performance” (P4P) initiatives (Epstein, 2007) to determine if they may serve as feasible techniques of policy intervention to influence or change the behavior of nursing home facilities.

In a similar vein, it is important to understand how staff members function in their everyday lives, both while working and after work. For example, by taking into account low self-esteem levels, lack of social support and care, and insufficient income for staff, these issues need to be addressed directly to determine if tackling these staff concerns improves quality of care and boosts the NHRA image. If more support and care are provided to staff members in the way of social services (and social workers), perhaps these self-esteem levels can change (following intensive therapy and intervention). Directors of Nursing at these care facilities, and other higher-level staff members, should consider increasing their compliments and acknowledgements of staff members, a means to augment their low self-esteem levels and mitigate their dissatisfaction with their jobs.

Besides aiming to improve the moods and esteem levels of staff members, giving staff the additional and necessary technological resources they need for complex-care patients is also a major consideration. Staff members are oftentimes only qualified to work within the limits of their training. If a new resident arrives and requires advanced care and computer-based monitoring, then the staff members must have that technology available. Moreover, the staff members must be trained how to use it. Then, the staff members in that particular setting should feel a sense of satisfaction that they are able to manage a resident with such special and critical needs. However, such technology can be very expensive. Yet, in certain cases, alternatives or supplements could exist, and may fall along the lines of ehealth services (i.e., WebMD.com). Ehealth services can allow users to rapidly gather medical information from a reliable, Internet-based encyclopedia (Breen & Matusitz, 2007; Breen & Zhang, 2008). This service could largely benefit nursing homes needing additional technological support in their administration of medical care.

Continuous education on the parts of the staff members may also help improve quality of care, incentivize staff to work harder and with increased passion, and decrease deficiencies. Additional certification can also lead to increased pay, as their qualifications are higher than they were before the training courses. Some training may help keep staff members up-to-date with the ever-changing demands in nursing home care settings. Hence, strengthening the NHRA by adding continuous education for nursing staff members at these facilities may prove invaluable in improving overall care quality and staff retention and care delivery. Thus, further research should be conducted in this area to identify educational programs that could best serve the needs of staff members and improve their administration and delivery of healthcare services to their target clientele. Despite the fact that motivation related theories are useful for guiding the practice change in nursing homes, there is still a knowledge gap between the acceptable and optimal care quality in nursing homes. It is through the use of evidence-based approach to identifying factors that facilitate or impede the delivery of high

quality of nursing home care and to formulating decision support systems for quality improvement. As noted in a recent report to the National Institute of Nursing Research, Wan and his associates signify the need for development executive decision support systems or models to guide the performance improvement in both quality and efficiency of nursing home care.

Acknowledgments

This research is, in part, supported by the National Institute of Nursing Research, NIH under research grant number R01 NR008226-01A1.

References

- Bandura, A. Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall; 1986.
- Baran, SJ.; Davis, DK. Mass communication theory: Foundations, ferment, and future. Belmont, CA: Wadsworth; 2000.
- Beaulieu, EM. A guide for nursing home social workers. New York: Springer; 2001.
- Blackburn, JA.; Dulmus, CN. Handbook of gerontology: Evidence-based approaches to theory, practice, and policy. New York: Wiley; 2007.
- Bourbonniere M, Zhanlian F, Intrator O, Angelelli J, Mor V, Zin JS. The use of contract licensed nursing staff in U.S. nursing homes. Medical Care Research & Review 2006;63(1):88–109. [PubMed: 16686074]
- Boyle DK, Miller PA. Focus on nursing turnover: A system-centered performance measure. Nursing Management 2008;39(6):16–20. [PubMed: 18545217]
- Breen GM, Matusitz J. An interpersonal examination of telemedicine: Applying relevant communication theories. eHealth International Journal 2007;3(1):18–23.
- Breen GM, Zhang NJ. Introducing Ehealth to nursing homes: Theoretical analysis of improving resident care. Journal of Medical Systems 2008;32(2):187–192. [PubMed: 18461822]
- Castle NG, Engberg JB. Nursing home deficiency citations for medication use. Journal of Applied Gerontology 2007;26(2):208–232.
- Castle NG, Engberg J, Men A. Nursing home staff turnover: Impact on nursing home compare quality measures. Gerontologist 2007;47(5):650–661. [PubMed: 17989407]
- Compton JA, Pfau M. Use of inoculation to foster resistance to credit card marketing targeting college students. Journal of Applied Communication Research 2004;32(4):343–365.
- Dougherty CM, Johnson-Crowley NR, Lewis FM, Thompson EA. Theoretical development of nursing interventions for sudden cardiac arrest survivors using social cognitive theory. Advances in Nursing Science 2001;24:78–86. [PubMed: 11554535]
- DuBeau CE, Ouslander JG, Palmer MH. Knowledge and attitudes of nursing home staff and surveyors about the revised federal guidance for incontinence care. The Gerontologist 2007;47(4):468–479. [PubMed: 17766668]
- Epstein AM. Pay for performance at the tipping point. The New England Journal of Medicine 2007;356:515–517. [PubMed: 17259445]
- Fisher, S. Nursing wounds: Nurse practitioners, doctors, women patients and the negotiation of meaning. New Brunswick, NJ: Rutgers University Press; 1995.
- Harrington C, Zimmerman D, Karon S, Robinson J, Beutel P. Nursing home staffing and its relationship to deficiencies. Journal of Gerontology 2000;55(5):278–287.
- Hyman Z. Brief interventions for high-risk drinkers. Journal of Clinical Nursing 2006;15(11):1383–1396. [PubMed: 17038099]
- Jones CB. Revisiting nurse turnover costs: Adjusting for inflation. Journal of Nursing Administration 2008;38(1):11–18. [PubMed: 18157000]
- Klauber, M.; Wright, B. The 1987 Nursing Home Reform Act. Washington, D.C.: AARP; 2001.

- Marwell G, Schmitt D. Dimensions of compliance-gaining behavior: An empirical analysis. *Sociometry* 1967;30:350–364.
- Matusitz J, Breen GM. Prevention of sexual harassment in the medical setting: Applying inoculation theory. *Journal of Health and Social Policy* 2005;21(2):53–71. [PubMed: 16492640]
- Matusitz J, Breen GM. Inoculation theory: A theoretical and practical framework for the reduction of skin cancer. *Social Work in Public Health* 23(1):95–113. in press.
- McGuire W. Resistance to persuasion conferred by active and passive prior refutation of the same and alternative counterarguments. *Journal of Abnormal and Social Psychology* 1961;63:326–332.
- Miller, K. *Communication theories: Perspectives, processes, and contexts*. New York: McGraw-Hill; 2002.
- Park SR, Lee S. Multiple groups confirmatory factor analysis of the motivational factors affecting individuals' decisions about participating in action sports and an inquiry into participant action sports participatory fandom. *International Journal of Sport Management and Marketing* 2008;3(4): 348–357.
- Petri, H. *Motivation: Theory, research and application*. Belmont, CA: Wadsworth; 1991.
- Pfau, M. Designing messages for behavioral inoculation. In: Maibach, E.; Parrott, RL., editors. *Designing health messages: Approaches from communication theory and public health practice*. Thousand Oaks, CA: Sage Publications; 1995. p. 99-113.
- Pfau M, Szabo EA, Anderson J, Morrill J, Zubric J, Wan HH. The role and impact of affect in the process of resistance to persuasion. *Human Communication Research* 2001;27:216–252.
- Ray, O.; Ksir, C. *Drugs, society, and human behavior*. Los Angeles: McGraw-Hill; 2003.
- Robison J, Curry L, Gruman C, Porter M, Henderson CR, Pillemer K. Partners in caregiving in a special care environment: Cooperative communication between staff and families on dementia units. *Gerontologist* 2007;47(4):504–515. [PubMed: 17766671]
- Terry K. Compliance: What about a crackdown on patients? *Medical Economics* 2007;84(5):59–61. [PubMed: 17425279]
- Wan TTH. Nursing care quality in nursing homes: Cross-sectional versus longitudinal analysis. *Journal of Medical Systems* 2003;27(3):283–295. [PubMed: 12705460]
- Zhang NJ, Wan TTH. The measurement of nursing home quality: Multilevel confirmatory factor analysis of panel data. *Journal of Medical Systems* 2005;29(4):401–411. [PubMed: 16178337]
- Zhang NJ, Unruh L, Liu R, Wan TTH. Minimum nurse staffing ratios for nursing homes. *Nursing Economics* 2006;24(2):78–85. [PubMed: 16676750]