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EDITORIAL
Transforming America’s Sick Care System into a True Health Care System

With the passage of the 2010 Patient Protection and Affordable Care Act (ACA), the 21st Century has initiated the transformation of the United States health care system. As the largest single group of clinical health care professionals within the health system, registered nurses are fundamental to the critical shift needed in health services delivery. With the goal of transforming the current “sick care” system into a true “health care” system, nurses’ education and practice within a holistic framework that views the individual, family, and community as an interconnected system that can keep us well and help us heal has been validated and encouraged. Finally, the paradigm shift from the bio-medical model to the wellness model.

In this volume of The Journal of the New York State Nurses Association, you will find an array of articles, research, and opinions by nurses spurred by this paradigm shift. This consortium of new knowledge and innovations contribute to our professional body of knowledge and facilitates the improvement in the quality of patient care, and our workplaces. Nurses must work in healthy work environments to facilitate quality patient care.

As you read The Journal articles, you will notice a theme: the author’s realization of the impact of health care reform on nursing practice and on the workplace environment. Governmental monetary incentives are described as instrumental at determining and assuring quality patient care measures. Current perceptions of the patients’ hospital experience hold great value in measuring quality patient care, while compliance to best practices and improving efficiencies are also recognized and rewarded. As nurses, we affect all quality measures. We are, therefore, instrumental to the financial viability of our health care system.

Nurses who provide the direct care to our patients are the true leaders of our profession. As leaders, nurses in all practice settings must demonstrate a commitment to continued lifelong learning, education, and research. Leadership development must be enriched by our continuing education programs and facilitated by our employers.

Patients, by virtue of living longer and with numerous co-morbidities, also affect health care reform. The plan of care for patient’s special and individualized needs require astute and experienced nurses. The transition of patient care from “less” hospital to “more” home, requires nurses in all settings to address the variables which directly affect patient outcomes, including the physiological, psychosocial, cultural, and spiritual needs of patients.

Patient safety is the foundation of quality patient care. The nurse is quintessential to the reduction of adverse patient outcomes. The nurse’s role in supervision and coordination of care is primary. Nursing must take the lead to protect and sustain the profession with great emphasis on patient safety. Striving for excellence in patient care requires the nurse to identify quality measures: clinical efficiency; core measures; patient experiences; and nurse sensitive indicators. It is therefore honorable to recognize the nurses who use their discretionary time to publish and share their knowledge among us. They give us insight into what is possible. The articles in this publication of The Journal contain provocative topics which can promote energetic discussion opportunities between and among our peers. The written word continues to encourage the vision.

Ann Cella, MA, MEd, RN, NEA-BC
Meredith King-Jensen, MA, MSN, RN
Dana Deravin Carr, DrPH, MS, MPH, RN-BC, CCN
The practice of nursing is dynamic. Knowledge and skills change almost daily. What is declared as standard practice and what is supported by evidence-based studies today may no longer be true in the months ahead. The nurse, therefore, must be vigilant in both his or her quest for and participation in continuous education.

The literature supports the notion that those nurses who lack the motivation for lifelong continuing learning will be severely handicapped in acquiring and maintaining the skills necessary to stay abreast of the rapid changes in our health care delivery system and the changing roles of the nurse within that system. Knowledge acquired in entry-level nursing education programs quickly becomes obsolete (Huston, 2013).

The Code of Ethics for Nurses outlines nurses’ ethical responsibilities to maintain professional knowledge and competence. The Code requires nurses to: “assume responsibility and accountability for individual nursing judgments and actions,” “maintain competence in nursing,” “exercise informed judgment and individual competence and qualifications,” and “participate in activities that contribute to ongoing development of the profession’s body of knowledge” (ANA, 2015, provisions 4, 5, 6, 7).

**Abstract**

The purpose of this study was to explore the relationship between self-directed continuing learning, negotiated incentives, and participation in continuous education activities by unionized nurses employed in high- and low-benefited setting acute care hospitals in the public and private sectors in New York State. The Self-Directed Learning Aptitude Scale (SDLAS) survey identified the scores attributable to a nurse’s current level of self-directed continuing learning concerning the nurse’s learning aptitude, attitudes, abilities, and personality characteristics and measured three broad dimensions of self-directed continuing learning, including self-management, motivation, and self-monitoring. Correlation and differential analysis showed relationships between the independent variables (the intrinsic factors associated with self-directed continuing learning [self-management, motivation, and self-monitoring] and extrinsic factors associated with negotiated benefits and incentives [tuition reimbursement, certification differential, education differential, and staff-development reimbursements], age, and education level) and the nurse’s participation in continuous education activities as measured by the utilization by nurses of negotiated benefits and incentives. Barriers to participation in continuous education activities were also explored.

The results of this study have implications for collective bargaining purposes, for educational delivery purposes, for generalizing the results of this study to the nursing profession, and for future research.

**Dr. Carol Lynn Esposito** is currently the Director of Nursing Education and Practice for the New York State Nurses Association.
Continuous education and professional development takes place during the course of nurses’ careers. Categorically, nurses are motivated to engage in professional development for one of three reasons: (a) the state requires continuing education for board licensure and specialty certification/recertification, (b) the employer mandates professional development, or (c) the nurse is self-directed and self-motivated to engage in continuous education (Headley, 2006). The third category of professional development, self-directed and self-motivated, was the primary focus of this study.

While the philosophy behind continuous education has been to encourage the nurse to engage in lifelong learning, research has shown that personnel shortages and pervasive underfunding have conspired to make the undertaking of continuous education difficult. Additionally, the research shows that self-motivated, self-directed learners possess varying degrees of ability and willingness to accept responsibility for themselves as learners and often seek out assistance in the form of human or material resources (Headley, 2006; Skees, 2010).

Nursing employers, educators, and professional organizations have an interest in sustaining the enthusiasm of those who are self-motivated to engage in continuous education, while encouraging a similar eagerness in less motivated participants.

The public has a right to expect registered nurses to demonstrate professional competence throughout their careers.... [T]he registered nurse is individually responsible and accountable for maintaining professional competence.... The employer is responsible and accountable to provide an environment conducive to competent practice. Assurance of competence is the shared responsibility of the profession, individual nurses, professional organizations, credentialing and certification entities, regulatory agencies, employers, and other key stakeholders. (ANA, 2014)

Although various factors associated with nurses’ participation in continuous education activities have been identified and discussed in the literature, little has been done to compare, contrast, and examine the relationship between self-directed (intrinsic) and negotiated organizational (extrinsic) factors which might significantly influence nurses in unionized acute care hospital settings in the public and private sectors in New York State to participate in continuous education activities (Esposito, 2012).

**Purpose of the Study**

The purpose of this study was to examine the relationships among the self-directed continuing learning of nurses in high- and low-benefited settings in unionized acute care hospitals in the public and private sectors in New York State and participation in continuous education activities as measured by utilization by nurses of negotiated incentives in the form of tuition reimbursement, certification differential, education differential, and staff-development reimbursements. This study further examined how nurses described the barriers to participation in continuous education activities in high- and low-benefited settings. Lastly, this study identified which factors predicted placement within high- and low-benefited settings: self-directed continuing learning on the dimensions of self-management, motivation, or self-monitoring; utilization by nurses of negotiated incentives on the dimensions of tuition reimbursement, certification differential, education differential, or staff-development reimbursements; age, educational level, or barriers to participation in continuous education activities. Research questions guiding this study included:

| Research question one | What was the difference between the self-directed continuing learning of nurses on the dimensions of self-management, motivation, and self-monitoring in high- and low-benefited settings? |
| Research question two | What was the difference between the participation in continuous education activities as measured by utilization by nurses of negotiated incentives on the dimensions of tuition reimbursement, certification differential, education differential, and staff-development reimbursements in high- and low-benefited settings? |
| Research question three | How did nurses differ in their descriptions of the barriers to participation in continuous education activities in high- and low-benefited settings? |
| Research question four | What was the relationship between the self-directed continuing learning of nurses on the dimensions of self-management, motivation, and self-monitoring; utilization by nurses of negotiated incentives on the dimensions of tuition reimbursement, certification differential, education differential and staff-development reimbursements; and barriers to participation in continuous education activities, age, and educational level within high- and low-benefited settings? |
| Research question five | How did self-management, motivation, self-monitoring, utilization by nurses of negotiated incentives on the dimensions of tuition reimbursement, certification differential, education differential, and staff-development reimbursements, barriers to participation in continuous education activities, age, and educational level predict placement within high- and low-benefited settings? |

**Definition of Major Variables and Terms**

The definitions of the following terms (self-directed learning, self-directed continuing learning, self-management, motivation, self-monitoring, continuous education, high-benefited setting, low-benefited setting, utilization of negotiated incentives, tuition reimbursement, certification differential, education differential, and staff development) were used to define each of the major constructs under examination in this study. These definitions were derived from research and standards of nursing practice (Table 1).

...While the philosophy behind continuous education has been to encourage the nurse to engage in lifelong learning, research has shown that personnel shortages and pervasive underfunding have conspired to make the undertaking of continuous education difficult.
### TABLE 1 Definition of Major Variables and Terms

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-directed learning</strong></td>
<td>The process of engaging in self-directed instruction based upon adult learning principles.</td>
<td>Brookfield, 1993; Iwasiw, 1987; Knowles, 1975</td>
</tr>
<tr>
<td><strong>Self-directed continuing learning</strong></td>
<td>“Those personality characteristics and internal changes in consciousness” which impel an individual to continue learning over time through various means, not on the ability to engage in self-directed instruction.”</td>
<td>Oddi, 1984, p. 7; Garrison, 1987</td>
</tr>
<tr>
<td><strong>Self-management</strong></td>
<td>Those factors, processes, and external sources of assistance that “influence and facilitate learning within the natural societal setting in an active, initiating, and constructionist manner.”</td>
<td>Garrison, 1997, p. 316</td>
</tr>
<tr>
<td><strong>Motivation</strong></td>
<td>Entering motivation was defined as “the decisional process to participate in a learning experience.” Task motivation was defined as “sustain(ed) intentional effort or diligence which influences persistence and task performance” of learning activities and goals.</td>
<td>Garrison, 1997, p. 21; Garrison, 1997, p. 22</td>
</tr>
<tr>
<td><strong>Self-monitoring</strong></td>
<td>“Self-observation, self-judgement (sic), and self-reaction to tasks and activities”</td>
<td>Garrison, 1997, p. 23</td>
</tr>
<tr>
<td><strong>Continuous education</strong></td>
<td>“Educational opportunities for adults after the formal education is complete” and “a process of learning which must meet the needs of each successive phase of life.”</td>
<td>Johnson, 1987, p. 32; Johnson, 1987, p. 32, as cited in Durnell, 1971</td>
</tr>
<tr>
<td><strong>Utilization of negotiated incentives</strong></td>
<td>The influence the negotiated incentive had on motivating the intentions of the registered professional nurse to register in continuous education activities; the behavioral action and effort of attending a continuous education program; or the behavioral action of making application for receipt of the negotiated benefit incentive.</td>
<td>Esposito, 2012</td>
</tr>
<tr>
<td><strong>Negotiated incentives</strong></td>
<td>Monetary rewards and/or reimbursements provided by an employer to its employees as an agreed-to benefit and condition of employment, settled upon through the collective bargaining process.</td>
<td>Esposito, 2012</td>
</tr>
<tr>
<td><strong>Tuition reimbursement</strong></td>
<td>A sum of money payable by an employer to its employee to cover the costs incurred by the employee for tuition and fees for attendance in courses in nursing or allied health fields, including online training programs.</td>
<td>Esposito, 2012</td>
</tr>
<tr>
<td><strong>Education differential</strong></td>
<td>A sum of money payable by an employer to its employee on an annual basis as additional compensation for holding or acquiring a baccalaureate degree, a master's degree, or a doctorate degree in nursing or allied health field.</td>
<td>Esposito, 2012</td>
</tr>
<tr>
<td><strong>Certification differential</strong></td>
<td>A sum of money payable by an employer to its employee on an annual basis as additional compensation for holding or acquiring a certification in a field or area of specialization in nursing.</td>
<td>Esposito, 2012</td>
</tr>
<tr>
<td><strong>Staff-development reimbursement</strong></td>
<td>Time off without loss of pay, and a sum of money payable by an employer to an employee to cover the costs incurred by the employee for attendance at seminars, conferences, continuing education programs, workshops, long-distance learning programs, and/or home study.</td>
<td>Esposito, 2012</td>
</tr>
<tr>
<td><strong>High-benefited setting</strong></td>
<td>A unionized acute care hospital setting in the private sector in New York State with the following negotiated incentives: (a) a tuition reimbursement benefit in an annual amount ranging from a minimum reimbursement for the total cost of tuition and fees of 16 credits per year up to a maximum of $9,500 per year to a maximum reimbursement for the total cost of tuition and fees of 18 credits per year and with classes offered and held on site at the employee's place of employment; (b) a certification differential benefit in an annual amount ranging from a minimum reimbursement of $1,200 per year to a maximum reimbursement of $3,500 per year; (c) an education differential benefit in an annual amount ranging from a minimum reimbursement of $1,450 per year to a maximum reimbursement of $1,900 per year; (d) an education differential benefit in an annual amount ranging from a minimum reimbursement of $1,750 per year to a maximum reimbursement of $2,250 for those registered professional nurses who hold a baccalaureate degree in nursing, or an education differential benefit in an annual amount ranging from a minimum reimbursement of $1,900 per year to a maximum reimbursement of $2,400 for those registered professional nurses who hold a master's degree in nursing, or an education differential benefit in an annual amount ranging from a minimum reimbursement of $4,000 per year to a maximum reimbursement of $9,900 for those registered professional nurses who hold a baccalaureate degree in nursing, or an education differential benefit in an annual amount ranging from a minimum reimbursement of $400 per year to a maximum reimbursement of $1,900 per year; (e) a staff-development reimbursement benefit of unlimited numbers per year ranging from a per program maximum benefit of $150 with unlimited numbers of programs per year per registered professional nurse employee to a maximum reimbursement of unlimited amounts and unlimited numbers of workshops per registered professional nurse employee per year.</td>
<td>Esposito, 2012</td>
</tr>
<tr>
<td><strong>Low-benefited setting</strong></td>
<td>A unionized acute care hospital setting in the private and/or public sector in New York State with the following negotiated incentives: (a) a tuition reimbursement benefit in an annual amount ranging from $1,500 to $4,000 and with a sum not to exceed the annual amount of $4,000; (b) a certification differential benefit ranging from $300 to $1,375 per year and with a sum not to exceed the annual amount of $1,375; (c) an education differential benefit in an annual amount ranging from a minimum reimbursement of $400 per year to a maximum reimbursement of $1,200 for those registered professional nurses who hold a baccalaureate degree in nursing, or an education differential benefit in an annual amount ranging from a minimum reimbursement of $400 per year to a maximum reimbursement of $1,200 for those registered professional nurses who hold a doctorate degree in nursing, or an education differential benefit in an annual amount ranging from a minimum reimbursement of $1,200 per year to a maximum reimbursement of $1,200 for those registered professional nurses who hold a doctoral degree in nursing, or an education differential benefit in an annual amount ranging from a minimum reimbursement of $1,200 per year to a maximum reimbursement of $200 per registered professional nurse employee per year to a maximum reimbursement of $200 per registered professional nurse employee per year.</td>
<td>Esposito, 2012</td>
</tr>
</tbody>
</table>
Conceptual Rationale

While the literature shows that the concept of self-directed learning embodies many philosophical and theoretical bases, this study primarily focused on the constructivist paradigm.

Constructivism, as one of the newer developmental learning theories, is concerned with how learners construe events and ideas, how they make sense of their world, and how they synthesize their constantly changing experiences. Constructivism is premised on the philosophical belief that, inherently, people are continuously on a voyage of inquiry and exploration (Owen, 2002) and that meaning is constructed or created from a person’s existing knowledge base and perception of the world (Bouchard, 2008).

Constructivists believe knowledge is not taught and knowledge has no existence outside a person’s mind; the learner constructs new knowledge rather than acquires new knowledge by seeking information that supports or opposes the individual’s own worldview (McEwen & Wills, 2007). Through reflection upon their own self-directed learning experiences, learners can consider what will motivate them to self-direct their learning and to engage in processes through which they will construct new knowledge (Smith, 2008).

Translated into practice, constructivism in nursing education would support the following learning principles: (a) learning will occur through interactions with the environment; (b) cognitive conflict is the stimulus for learning; and (c) knowledge evolves through the negotiation of meaning with others (Kretchmar, 2008). Constructivism as a theoretical underpinning in self-directed continuing learning and nursing education is particularly fitting where nurses are intrinsically self-motivated to engage in continuous education in varying degrees and need external environmental stimuli and organizational rewards (such as salary increases in the form of certification and education differentials, and organizational benefits in the form of tuition reimbursements and staff-development reimbursements) to encourage and bolster their intrinsic motivational factors to engage in and undergo continuous education and achieve higher credentials in nursing (Esposito, 2012).

Literature Review

Nurses must acquire and maintain the knowledge and skills needed to provide competent care and must demonstrate their competence to the public, to their employers, to the profession, and to their patients, continuously, throughout their careers (Esposito, 2012; Whitehead & Lacey-Haun, 2008). Although there is neither a New York State nor a federal governmental standard in education for either entry-level practice into the nursing field or for license recertification, the nursing profession monitors education across work-life stages and requires all nurses to be self-motivated, self-regulated, and accountable over current practice and knowledge base.

As a result of the varying “route to practice” options, differing skill and competency levels have not been uniformly recognized in employment settings, neither by compensation nor in role differentiation. This, in turn, has been cited by many nurses as a disincentive for them to engage in continuous education and rise to a higher educational or certification level (Rambur et al., 2005).

What, then, is the return for nurses in acute hospital care settings on their investment for engaging in continuous education beyond their entry-level education? Is professional movement viewed negatively at the organizational level while an obverse expectation exists by the profession? What factors contribute to nurses engaging in self-directed, self-regulated, continuous education? What factors hinder nurses from pursuing further education? Will organizational incentives in the form of pay differentials for credentialed nurses significantly influence nurses to engage in continuous education?

Factors Facilitating the Pursuit of Continuous Education

Factors that facilitate nurses’ pursuit of continuous education and lifelong learning throughout their careers have been identified to categorically fall into two broad groupings: organizational (extrinsic) factors and personal (intrinsic) factors (del Bueno, 1990; Dolphin, 1983; Miller, Bradley, Jones, McCausland, Potempa, Rendon, & Stanley, 2002; Schmalenberg, Kramer, Brewer, Burke, Chmielewski, Cox, Kishner, Drugman, Meeks-Sjostrom, & Waldo, 2008) (Table 2).
Union Benefit Packages Motivate Nurses to Continue Their Education

### TABLE 2 Factors Facilitating the Pursuit of Continuous Education

<table>
<thead>
<tr>
<th>Organizational (Extrinsic)</th>
<th>Personal (Intrinsic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse staffing ratios are adequate.</td>
<td>Learning orientation (to fill an innate yearning for knowledge, to satisfy an inquisitive mind, to enjoy seeking knowledge, to satisfy intellectual curiosity)</td>
</tr>
<tr>
<td>Nursing compensation and rewards are based upon expertise, education, proficiency, and credentialing.</td>
<td>Sociability orientation (to fulfill a need for personal associations and friendships, to make new friends)</td>
</tr>
<tr>
<td>Incentives are in place for continuous education including funding and/or authorized time off.</td>
<td>Personal goal orientation (to increase competence in employment, to gain recognition among peers, to secure professional advancement, to learn better ways of doing things)</td>
</tr>
<tr>
<td>Certification in nursing specialty programs is offered.</td>
<td>Social goal orientation (to seek to contribute to the common good, to prepare for service in the community, to develop an understanding of the future of the profession, to become a community leader)</td>
</tr>
<tr>
<td>Nursing leaders are qualified for their position through education and credentialing.</td>
<td>Legal/social compulsion orientation (to correct deficits in the last employee evaluation, to meet the requirements of the employer, to receive continuing education paid by the employer, to get a day off with pay, to document evidence of personal/professional growth, to gain credits necessary to maintain the license to practice)</td>
</tr>
<tr>
<td>Nurse leaders have ultimate authority and accountability for nursing practice.</td>
<td></td>
</tr>
<tr>
<td>Nursing care is based upon current evidence-based practice.</td>
<td></td>
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<tr>
<td>Nurses have input into all policy development.</td>
<td></td>
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<tr>
<td>Opportunities for promotion are outlined in an objective format.</td>
<td></td>
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<tr>
<td>Collaboration between other members of the health care team exists through nurse membership on organization, bioethical, governing, policy, and clinical practice committees.</td>
<td></td>
</tr>
<tr>
<td>Nurses receive periodic, unit-based training in the utilization of technology and information systems.</td>
<td></td>
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<tr>
<td>Nurses have access to on-site library facilities and clinically focused education programs.</td>
<td></td>
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</tbody>
</table>

### Factors Hindering the Pursuit of Continuous Education

Research has identified factors which may hinder the nurse from pursuing continuous education. Regehr and Mylopoulos (2008) have noted that many of the cognitive mechanisms presumed to underlie and support the assumptions of the theoretical model of self-directed continuing learning are questionable at best. Some potential concerns they have raised are related to the presumptions that: (a) professionals are incapable of naturally and biologically reflecting on their performance for the purposes of highlighting their own weaknesses or gaps, (b) professionals will not self-assess their own weaknesses even if they reflect on their performance, (c) professionals will avoid trying to redress weaknesses through learning once those weaknesses have been identified, and (d) professionals falter when attempting to effectively incorporate knowledge acquired through education into practice (Regehr & Mylopoulos, 2008, p. S19).

In addition, the presumption that professionals will self-assess their own weaknesses even when they reflect on their performance has been questioned by Eva & Regehr (2008), who noted that most professionals will overestimate their abilities as above average in their performance. While educators and the nursing profession sees self-assessment as an activity that comprises specific teachable skills and may be informed and facilitated by external sources such as feedback to increase accuracy, medical research has reported self-assessment as an inaccurate activity.

Self-assessment requires the ability to distinguish high-quality data from imagination or projection. This task is difficult because the mind itself is ultimately both the object and the instrument of assessment, and our mental processes embed idealization directly within our self-perceptions. Our subcortical regions, especially those involved in emotion and reactions to threat, process information beneath conscious awareness, and the input from these areas directly shapes reasoning, often without our knowledge. (Epstein, Siegel, & Silberman, 2008, p. 6)

While the subcortical brain stem region is important for establishing motivational drive in self-assessment, input from the hormonal milieu also influences these subcortical processes. This subcortical input helps to create a motivational state that shapes higher cortical processes. How we feel, think, reason, make decisions, and interact with others is influenced by these subcortical processes, and this typically occurs without explicit knowledge or conscious awareness. Thus, the ability to make sound self-assessment decisions may become impaired (Epstein, Siegel, & Silberman, 2008).
The presumption that professionals will try to redress weaknesses through learning once those weaknesses have been identified has similarly been questioned. Miller (2005) has noted that health professionals will more often attend continuous education sessions that will reinforce what they already know or just want to learn rather than attend continuous education programs that would address a particular weakness in practice.

While adult learning principles are founded on the premise that nursing professionals will engage in continuous education because there are expectations by the professions that they do so and there are perceived personal and societal rewards for expending the effort, it may be exactly in areas of weakness, areas where we struggle, that adult learning principles and the principles of self-directed continuing learning may be likely to fail us (Regehr & Mylopoulos, 2008).

**Barriers Deterring the Pursuit of Continuous Education**

Barriers to nurses participating in continuous education activities documented in the research have been reported and can be categorized into situational, institutional, informational, and dispositional/attitudinal (intrinsic to the individual) barriers (Rossi, 1994) with the following seven major themes: time, lack of accessibility or adequacy of human or material resources, competing priorities when interacting with other people (such as family responsibilities), personal limitations, issues related to the use of formal learning activities, technical difficulties, and loss of intensity (Guglielmino, Asper, Findley, Luncefod, McVey, Payne, Penney, & Phares, 2005). Specific barriers identified in the literature are noted in Table 3.

**TABLE 3 Barriers to Nurses Participating in Continuous Education**

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial constraints, such as tuition costs</td>
<td>Ayer &amp; Smith, 1998; Penz, D'Arcy, Stewart, Kosteniuk, Morgan, &amp; Smith, 2007</td>
</tr>
<tr>
<td>Lack of employer support</td>
<td>Murphy, Cross, &amp; McGuire, 2006; Penz, D'Arcy, Stewart, Kosteniuk, Morgan, &amp; Smith, 2007</td>
</tr>
<tr>
<td>Lack of time off due to staff shortages</td>
<td>Bahn, 2006; Barriball &amp; While, 1996; Greenberg Edelstein &amp; Bunnell, 1978; Penz, D’Arcy, Stewart, Kosteniuk, Morgan, &amp; Smith, 2007</td>
</tr>
<tr>
<td>Lack of time due to scheduling difficulties</td>
<td>Munro, 2008; Penz, D’Arcy, Stewart, Kosteniuk, Morgan, &amp; Smith, 2007; Shepherd, 1994</td>
</tr>
<tr>
<td>Lack of time due to shift work</td>
<td>Penz, D’Arcy, Stewart, Kosteniuk, Morgan, &amp; Smith, 2007</td>
</tr>
<tr>
<td>Lack of economic reward for having undertaken continuous education and having achieved higher credentials</td>
<td>Nelson &amp; Cook, 2008; Bahn, 2006</td>
</tr>
<tr>
<td>Few opportunities for upward mobility</td>
<td>Murphy, Cross, &amp; McGuire, 2006</td>
</tr>
<tr>
<td>Limited access to child care</td>
<td>Dowswell, Bradshaw, &amp; Hewison, 2000; Penz, D’Arcy, Stewart, Kosteniuk, Morgan, &amp; Smith, 2007</td>
</tr>
<tr>
<td>Family responsibilities</td>
<td>Barriball &amp; While, 1996; Murphy, Cross, &amp; McGuire, 2006; Penz, D’Arcy, Stewart, Kosteniuk, Morgan, &amp; Smith, 2007; Shepherd, 1994</td>
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<tr>
<td>Lack of encouragement from managers and peers</td>
<td>Barriball, While, &amp; Norman, 1992; Hogston, 1995</td>
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<tr>
<td>Workplace budget constraints</td>
<td>Banning &amp; Stafford, 2008; Penz, D’Arcy, Stewart, Kosteniuk, Morgan, &amp; Smith, 2007; Rossi, 1994</td>
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<tr>
<td>Lack of access to continuous education opportunities</td>
<td>Alejandro, 2001; Barriball &amp; While, 1996; Penz, D’Arcy, Stewart, Kosteniuk, Morgan, &amp; Smith, 2007</td>
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<tr>
<td>Lack of ability to transfer learning to the workplace</td>
<td>Murphy, Cross, &amp; McGuire, 2006</td>
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<tr>
<td>Inability to alter working life</td>
<td>Hughes, 2005</td>
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<tr>
<td>Lack of educational course likely to assist in career progression</td>
<td>Murphy, Cross, &amp; McGuire, 2006</td>
</tr>
<tr>
<td>Lack of information about continuous education offerings</td>
<td>Duckett, 1993; Nolan, Owens, &amp; Nolan, 1995</td>
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<tr>
<td>Distance to education programs and conferences was too far</td>
<td>Alejandro, 2001; Ayer &amp; Smith, 1998; Greenberg Edelstein &amp; Bunnell, 1978; Penz, D’Arcy, Stewart, Kosteniuk, Morgan, &amp; Smith, 2007</td>
</tr>
<tr>
<td>Inequitable selection of staff for continuous education programs</td>
<td>Furze &amp; Pearcey, 1999; Nolan, Owens, &amp; Nolan, 1995</td>
</tr>
<tr>
<td>Learning needs are satisfied by job or in-service instruction; programs tend to be of poor quality; methods of instruction are unsatisfactory; lack of energy or stamina, feeling of “burnout”; learning needs are satisfied through self-directed readings from journals</td>
<td>Rossi, 1994; Scanlan, 1982</td>
</tr>
</tbody>
</table>
Health care staff are receiving mixed messages about continuing education and training. While there is infinite rhetoric and seemingly fairly general agreement from the nursing establishment, employers, and indeed individual staff that continuing education is a "good thing" there is less agreement on how much is needed, what (in terms of content) should be provided, who should pay, and how achievement at any particular level should be recognized and rewarded. (Dowswell, Hewison, & Hinds, 1998, p. 1332)

Research Design and Methodology

The purpose of this study was to examine the relationships between the self-directed continuing learning of unionized nurses in high- and low-benefited hospital settings in the public and private sectors in New York State and participation in continuous education activities as measured by utilization by nurses of negotiated incentives in the form of tuition reimbursement, certification differential, education differential, and staff-development reimbursements. This study further examined how nurses described the barriers to participation in continuous education activities in high- and low-benefited settings. Lastly, this study identified which factors predicted placement within high- and low-benefited settings: self-directed continuing learning on the dimensions of self-management, motivation, or self-monitoring; utilization by nurses of negotiated incentives on the dimensions of tuition reimbursement, certification differential, education differential, or staff-development reimbursements; age, educational level, or barriers to participation in continuous education activities (Esposito, 2012).

Selection of Subjects and Setting

Participants in this study included 500 randomly selected nurse employees from a pool of 6,425 unionized nurses employed in unionized public and private sector acute care hospitals located in New York State. The participants were selected from a multicultural population composed of Caucasian, Hispanic, African American, Haitian, Filipino, Asian, and other ethnicities. All high- and low-benefited settings were unionized hospitals with negotiated incentives inclusive of tuition reimbursement, certification differential, education differential and staff-development reimbursements (Esposito, 2012).

Instruments and Data Collection

The employment benefit survey was a 25-item questionnaire that contained items that determined the utilization by nurses of negotiated incentives on the dimensions of tuition reimbursement, certification differential, education differential, and staff-development reimbursements within a three-year period in high- and low-benefited settings (Esposito, 2012).

The self-directed continuing learning survey was a 26-item questionnaire and was composed of the 26-item Self-Directed Learning Aptitude Scale (SDLAS). The SDLAS identified the scores attributable to nurses’ current levels of self-directed continuing learning concerning their learning aptitude, attitudes, abilities and personality characteristics. Each nurse was assessed using the SDLAS instrument on a four-point Likert scale [strongly agree (4), agree (3), disagree (2), or strongly disagree (1)] which measured three broad dimensions of self-directed continuing learning, including self-management, motivation, and self-monitoring.

The SDLAS had 26 questions, with eight items on the dimension of self-management, nine items on the dimension of motivation, and nine items on the dimension of self-monitoring, and nurses were asked to describe themselves by indicating on a four-point Likert scale the extent to which each item was descriptive of their own characteristics (Appendix A).

The barriers to participation in continuous education activities survey was a 16-item questionnaire and identified the scores attributable to nurses’ description of the barriers to participation in continuous education activities. Each nurse was assessed using the instrument on a four-point Likert scale [strongly agree (4), agree (3), disagree (2), or strongly disagree (1)] which measured the extent to which each barrier was descriptive of the nurse’s own reasons for his or her inability to participate in continuous education activities (Appendix A).

A total of 41 surveys were returned from the high-benefited setting and 40 surveys were returned from the low-benefited setting. The participants ranged in age from 25 to 60 in the high-benefited setting, with the majority (36.8%) between 50 and 59 years of age. The participants ranged in age from 24 to 58 in the low-benefited setting, with the majority (37.9%) between 40 and 49 years of age. The majority of the participants were over the age of 40 (65.8%) in the high-benefited setting, and the majority of the participants were over the age of 40 (62.2%) in the low-benefited setting (Esposito, 2012).

Results of the Study and Key Findings

A majority of the participants (31.7%) were practicing between six and 10 years and 78% were in practice less than 20 years in the high-benefited setting. A majority of the participants (50%) were practicing between zero and five years and 82.5% were in practice less than 20 years in the low-benefited setting (Esposito, 2012).

The majority of the participants in the high-benefited setting (51.2%) entered the profession holding a baccalaureate degree, while the majority of the participants in the low-benefited setting (70%) entered the profession holding an associate’s degree (Esposito, 2012).

Attendance during the three-year contractual interval in a certification program was 26.8% in the high-benefited setting and 20% in the low-benefited setting. Similarly, attendance during the three-year contractual interval in an educational program leading to an advanced degree was 43.9% in the high-benefited setting and 32.5% in the low-benefited setting. Attendance in staff-development programs during the three-year contractual interval was undertaken by 51.2% of the participants in the high-benefited setting, and by 30% of the participants in the low-benefited setting (Esposito, 2012).

Data indicated there was no statistically significant difference between the self-directed continuing learning of nurses on the dimensions of self-management, motivation, and self-monitoring in high- and low-benefited settings. While the mean scores for each of the dimensions were not statistically different, the mean scores on the motivation and self-monitoring dimensions were higher than the mean scores on the self-management dimension, indicating nurses rated themselves higher on the personality constructs, skills, and abilities needed by an individual to engage in self-directed continuing learning instrument rather than on the management of the process of self-education (Table 4).
Union Benefit Packages Motivate Nurses to Continue Their Education

Data also indicated there was no statistically significant difference between nurses’ participation in continuous education activities as measured by utilization by nurses of negotiated incentives on the dimensions of tuition reimbursement, certification differential, education differential, and staff-development reimbursements in high- and low-benefited settings. While the mean scores for each of the dimensions were not statistically different, it is important to note that the overall mean scores on the dimensions indicated that nurses’ utilization of negotiated incentives was low in both high- and low-benefited settings (Table 5).

Additionally, data indicated there was no statistically significant difference in how nurses described the barriers to participation in continuous education activities in high- and low-benefited settings. While the mean scores for the barriers variable were not statistically significant, nurses did agree that lack of time off due to patient load, staff shortages, shift work, and scheduling difficulties, the employer not contributing enough toward the cost of tuition, fees, the cost of registration course fees, and a loss of necessary income due to out of pocket fees did constitute barriers to nurses participating in continuing education activities (Table 6).
benefited setting. Additionally, the correlation between age and the utilization of negotiated incentives in the form of tuition reimbursement and education differential was negatively associated with high-benefited settings—that is, as the age of the participant increased, the utilization of negotiated incentives on the dimension of tuition reimbursement and education differential decreased within high-benefited settings. There were weak correlations between age and any of the variables within the low-benefited setting (Table 7).

**TABLE 7 Correlation Matrix for the Dimensions of Self-Directed Continuing Learning (Self-Management, Motivation, Self-Monitoring), the Dimensions of Utilization of Nurses of Negotiated Incentives (Tuition Reimbursement, Certification Differential, Education Differential, Staff Development), Barriers, Age, and Education Level to the High- or Low-Benefited Setting**

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<th>High/Low</th>
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<th>SD</th>
<th>BAR</th>
<th>Degree</th>
<th>Age</th>
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<tbody>
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<td><strong>Self-Management</strong></td>
<td>Pearson r</td>
<td>-0.88</td>
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<td><strong>Motivation</strong></td>
<td>Pearson r</td>
<td>-0.44</td>
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<td><strong>Self-Monitoring</strong></td>
<td>Pearson r</td>
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<td><strong>Tuition Reimbursement</strong></td>
<td>Pearson r</td>
<td>0.122</td>
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<td><strong>Certification Differential</strong></td>
<td>Pearson r</td>
<td>0.092</td>
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<td><strong>Education Differential</strong></td>
<td>Pearson r</td>
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<td><strong>Staff Development</strong></td>
<td>Pearson r</td>
<td>0.127</td>
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<td><strong>Barriers</strong></td>
<td>Pearson r</td>
<td>-0.127</td>
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<td><strong>Highest Degree Held</strong></td>
<td>Pearson r</td>
<td>0.446**</td>
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<td><strong>Age</strong></td>
<td>Pearson r</td>
<td>0.159</td>
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*Note: *Significance levels: *p < 0.05, **p < 0.01, ***p < 0.001.
Lastly, data indicated that only one of the independent variables (educational level) made a unique statistically significant contribution to predicting placement to the benefited setting (high) (Table 8).

### TABLE 8 Logistic Regression Predicting Likelihood of Placement in High- or Low-Benefited Setting

<table>
<thead>
<tr>
<th>Step 1a</th>
<th>Highest Degree</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>Sig.</th>
<th>Exp(B)</th>
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</thead>
<tbody>
<tr>
<td>Highest Degree</td>
<td>2.301</td>
<td>.635</td>
<td>13.111</td>
<td>1</td>
<td>.000</td>
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<td>Constant</td>
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<td>13.245</td>
<td>1</td>
<td>.000</td>
<td>.001</td>
<td></td>
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</tbody>
</table>

a. Variable(s) entered on step 1: Highest Degree.

<table>
<thead>
<tr>
<th>Step</th>
<th>-2 Log likelihood</th>
<th>Cox &amp; Snell R Square</th>
<th>Nagelkerke R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>67.615a</td>
<td>.284</td>
<td>.381</td>
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</tbody>
</table>

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

<table>
<thead>
<tr>
<th>Observed</th>
<th>Predicted High / Low-Benefited Setting</th>
<th>Low-Benefited Setting</th>
<th>High-Benefited Setting</th>
<th>Percentage Correct</th>
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</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Low-Benefited Setting</td>
<td>20</td>
<td>16</td>
<td>55.6</td>
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<td>High-Benefited Setting</td>
<td>2</td>
<td>27</td>
<td>93.1</td>
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<td></td>
<td>Overall Percentage</td>
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<td>72.3</td>
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a. The cut value is .500

The results of this study indicate that between 30% and 50% of the participants were engaged in continuous education activities during the contractual three-year interval. Factors that may have contributed to this finding possibly include the self-reported overall high ratings on the intrinsic factors associated with self-directed continuing learning (self-management, motivation, and self-monitoring), mediated by the nurses’ interactions within the social context of their unionized work environment. Thus, the participants’ personality characteristics influence their motivations to learn, but the unionized environment and negotiated extrinsic motivating factors (tuition reimbursement, certification differential, education differential, staff-development reimbursement) played a role in positively shaping motivation and individuals’ active regulation of their motivation, thinking, and self-directed learning. This collaborative constructivist perspective supports the self-directed learning theories and model espoused by Garrison (1997).

### Conclusions

#### Research question one

Perceptions of personal characteristics (competencies) and abilities (self-efficacy) will affect the decision to participate and persist in continuous education activities. Nevertheless, perceived institutional resources and/or barriers will influence the intrinsic factors associated with self-directed continuing learning (Esposito, 2012). External contextual (environmental) factors and assessments represent a mediated construct of “anticipated control” when making decisions regarding engagement in continuous education activities. These collaborative constructivist processes helped the registered professional nurse participants in this study to determine where, when, and how often they had wanted and/or needed to invest their educational achievement energies, and were consistent with Garrison’s 1997 model of self-directed continuing learning.
Union Benefit Packages Motivate Nurses to Continue Their Education

It is important to note the majority of the participants in this study were over the age of 40, with 65.8% in the high-benefited setting and 62.2% in the low-benefited setting. This finding is consistent with the research of Reio (2004), who found that age was statistically and positively related to self-directed learning readiness, suggesting that older participants in the sample were more likely to perceive themselves as highly self-directed continuous learners.

Research question two

Between 20% and 43.9% of the participants in this study were influenced by their negotiated (extrinsic) incentives and were actively engaged in continuous studies leading to an advanced certification or educational degree during the contractual three-year period. This finding is consistent with Brookfield’s (1986) conclusions and findings that engaging in self-directed continuing learning activities may be dependent upon external controls, including: (a) educational offerings that an employer or a professional association deems are acceptable and appropriate learning activities and processes, and (b) controlling those external conditions which are in place regarding access to resources. The findings of this study reveal that participants in both benefited settings were, in part, positively influenced by their negotiated and perceived institutional resources. These negotiated benefits (extrinsic factors), therefore, represented a mediated construct between the participants’ high self-ratings on the intrinsic factors associated with self-directed continuing learning, their high self-assessments on their perceived personal competencies, and their decisions regarding engagement in continuous education activities (Esposito, 2012).

This finding is also consistent with Garrison’s (1997) conclusions that while extrinsic motivators might complement and enhance intrinsic motivators, externally imposed tasks and criteria can also reduce willingness to assume responsibility for learning; thus, self-directed continuing learning will become self-reinforcing if the environment creates conditions that tap learners’ desires to continuously construct and reconstruct worthwhile knowledge. While the negotiated benefits described in this study might have been rich enough to “tap” the desires of 20% to 43.9% of the participants to continue their learning during the contractual three-year interval, the benefits might not have been so rich as to complement and enhance the intrinsic motivators of a majority of the participants in both benefited settings.

Research question three

Nurses in low-benefited settings generally agreed that financial constraints constituted a barrier to self-directed, continuing learning (Esposito, 2012). This finding is consistent with the conclusions of Brockett and Himestra (1991), who noted that self-directed continuing learning is not facilitated where the organizational milieu does not support or promote self-directed learning. It is also consistent with the findings of Greenberg Edelstein and Bunnell (1978), who noted that one of the most prominent reasons for nurses not engaging in continuous education activities is a lack of financial support from the employer.

Additionally, participants in both high- and low-benefited settings in this study generally agreed that staffing shortages constituted a barrier (Esposito, 2012). This finding is consistent with the studies conducted by Schmalenberg, et al. (2008) and Greenberg Edelstein and Bunnell (1978), who concluded that staffing shortages prevented nurses’ attendance at continuous education activities. It is also consistent with the writings of Headley (2006), who noted that personnel shortages and pervasive underfunding have conspired to make the undertaking of continuous education difficult.

Notably, participants in both high- and low-benefited settings in this study generally disagreed with the literature that nurses will not participate in continuous education activities because their learning needs are satisfied by on-the-job training (Esposito, 2012). This finding appears to be consistent with the studies of Warren and Mills (2009), who found that offering classes at the worksite would strongly influence nurses’ participation in continuous education activities.

Of further note is the finding that participants in both high- and low-benefited settings in this study generally disagreed with the literature that nurses will not participate in continuing education activities because there are few opportunities for upward mobility or career changes, and because there is a lack of ability to alter the working life (Esposito, 2012). These findings are consistent with the findings of Dowswell, Hewison, and Hinds (1998) when those researchers concluded that future career benefits will positively influence nurses engaging in continuous education activities. These findings are also consistent with the research of Hughes (2005) when she concluded that a lack of ability to apply new knowledge to the practice setting will act as a disincentive for nurses engaging in continuous education activities. Thusly, the findings of this study seemingly support the notion that self-directed continuous learning is present in each individual to some degree, and certain environmental situations are more conducive to the facilitation of self-directed continuous learning than are others. It is the personal characteristics of the learner, including his or her qualities of mind, behavior, skills, and abilities, which ultimately determine whether self-directed continuous learning will take place. A working environment that prioritizes and positively influences continuous learning, such as one where upward mobility and applying new knowledge to the practice setting becomes a reality, will influence the level of energy expenditure taken by the self-directed continuous learner.

Research question four

There were statistically significant relationships with correlation significance at the 0.01 level among the variables to the high-benefitted setting. The results of this study indicate that organizationally negotiated
incentives in the form of monetary benefits are correlated to increased attendance at continuous education activities. Additionally, the more that nurses cognitively assessed their level of skills, abilities, and capabilities within their environment and while on the job, the more likely they were to be motivated to self-manage their educational process and engage in self-directed continuing learning activities (Esposito, 2012).

Other relationships with correlation significance at the 0.01 level between variables within the low-benefited setting included an inverse relationship between self-management ($r = -0.430$) and barriers, and self-monitoring ($r = -0.358$) and barriers, indicating that those participants who self-rated lower on self-management and self-monitoring held greater beliefs about barriers (Esposito, 2012). The breadth of the nursing literature reveals a dependence on a nurse’s willingness, learning aptitude, attitude, abilities, and personality characteristics to participate in continuous education activities. However, the literature also reveals that when the capacities of nurses are low, it may be unrealistic for the nursing profession to depend entirely on an individual’s willingness and ability to engage in self-directed, continuous education activities (ANA, 2014; Whitehead & Lacey-Haun, 2008; Headley, 2006; Williams, 2001). The results of this study would indicate, therefore, that organizationally based incentives that diminish barriers would be correlated to increased self-management and self-monitoring capabilities and a concomitant increased attendance at continuous education activities. Negotiated benefits similar to the ones described in this study that diminish identified barriers (lack of ability to apply new knowledge to practice setting, lack of upward mobility or career changes, staffing shortages, and lack of financial support from the employer) would, therefore, result in increased attendance at continuous education activities.

Additional findings from this study revealed that as the age of the participant increased, the utilization of these negotiated benefits decreased (Esposito, 2012). This finding is consistent with the research of Reio and Davis (2005) and Price, Hertzog, and Dunlosky (2010) and lends credibility to their findings that the normative level of self-directedness in learning activities begins to extinguish when individuals reach their late 50s and as they mature unless it is otherwise externally motivated.

**Research question five**

There was only one variable (education level) that made a unique statistically significant contribution to the benefited setting (high). Logistical regression was able, overall, to correctly classify 72.3% of cases, while correctly classifying 93.1% of the cases within the high-benefited settings. Indeed, the results of this study revealed a greater percentage of nurse participants were actively engaged in educational activities in the high-benefited setting. This setting was also the setting where the numbers of nurses possessing higher degrees in nursing were located (Esposito, 2012). This finding is consistent with the finding of Peña and Castillo (2006) and supports a credible conclusion that education level has a positive effect on the participation by nurses in continuous education activities, and those participants who are in possession of higher educational degrees would likely be more actively engaged in educational activities and would likely be found in a higher-benefited setting. The importance of this finding could influence those employers who are interested in recruiting and retaining nurses with greater credentials in nursing to increase the benefited offerings within their institutions.

**Recommendations**

This research provides nursing educators, health care organizations, professional associations, and nurses’ collective bargaining agents with important information regarding registered professional nurses’ motivations and barriers to engaging in continuous education activities. As a result of the findings of this study, the following recommendations are made:

- Opportunities for ongoing discussions between unionized nurses and their employers should be undertaken at collective bargaining sessions and at labor management meetings to raise awareness of the importance of nurses acquiring advanced certifications and educational degrees as a way to facilitate nurses’ participation in continuous education activities, as a way to achieve the delivery of high-quality health care services with concomitant better patient outcomes, and as a way to actively recruit and retain credentialed nurses at the bedside.
- Unionized registered professional nurses should negotiate with their employers’ influences within their work environments, which could facilitate the motivations of nurses to engage in continuous educational opportunities and activities. Negotiated influences should include, but should not be limited to, greater tuition reimbursement, certification differential, education differential, and staff-development reimbursement benefits.
- Unionized registered professional nurses should be surveyed on an ongoing basis regarding their perceptions and identifications of the barriers to participation in continuous education activities, and for ways and means to negotiate with their employers so that work settings are inclusive of financial benefits and resources, and eradicate identified barriers.

**Recommendations for Future Research**

The following recommendations are made for future research:

- Replication of this study with a larger randomized sample of registered professional nurses in unionized high- and low-benefited settings both within and outside of New York State would add to the body of knowledge regarding the findings of this study.
- Replication of this study in non-unionized benefited settings both within and outside of New York State could provide additional information and would add to the body of knowledge regarding the differences between unionized and non-unionized settings and to the findings of this study.
- Replication of this study in unionized hospital settings in New York State where there were greater variations in the benefited offerings between high- and low-benefited settings could add to the body of knowledge regarding the findings of this study.
- Further studies should be undertaken to examine the barriers to participation in continuous education activities to further inform the profession on which barriers constitute contemporary barriers to nurses engaging in self-directed continuing learning.
REFERENCES


### APPENDIX A

**Part I:** After reading each item, please indicate the degree to which you feel that the statement is true of you. Please read each item carefully and place a check mark in the box of the response which best expresses your feeling. There are no “right” or “wrong” answers. Please select the answer that immediately comes to mind.

<table>
<thead>
<tr>
<th>Item</th>
<th>1 Strongly Disagree</th>
<th>2 Disagree</th>
<th>3 Agree</th>
<th>4 Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>I am well organized in my learning</td>
<td></td>
<td></td>
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<tr>
<td>27</td>
<td>I take the challenge to learn</td>
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<td>28</td>
<td>I am aware of my own weaknesses</td>
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<td>29</td>
<td>I set up strict time frames to learn something new</td>
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<td>30</td>
<td>I am a “why” person</td>
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<tr>
<td>31</td>
<td>I can link pieces of information when I am learning</td>
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<td>32</td>
<td>I critically evaluate new ideas and knowledge</td>
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<tr>
<td>33</td>
<td>I have good management skills</td>
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<td>34</td>
<td>I pay attention to all details before making a decision</td>
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<td>35</td>
<td>I would like to evaluate the level of my learning progress</td>
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<td>36</td>
<td>I would like to set up my goals</td>
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<td>37</td>
<td>I set up planned solutions to solve my problems</td>
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<td>38</td>
<td>I would like to learn from my mistakes</td>
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<td>39</td>
<td>I correct myself when I make mistakes</td>
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<td>40</td>
<td>I can decide about the priority of my work</td>
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<td>41</td>
<td>I believe in effort to improve my performance</td>
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<tr>
<td>42</td>
<td>I am a responsible person</td>
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<td>43</td>
<td>I can manage pursuing my own learning</td>
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<td>44</td>
<td>I enjoy learning new things</td>
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<td>45</td>
<td>I judge my abilities fairly</td>
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<td>46</td>
<td>I prefer to plan my own learning</td>
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<tr>
<td>47</td>
<td>I trust my abilities to learn new things</td>
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<td>48</td>
<td>I think deeply when solving a problem</td>
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<td>49</td>
<td>I am efficient in managing my time</td>
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<td>50</td>
<td>I have positive expectations about what I am learning</td>
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<tr>
<td>51</td>
<td>I prefer to set up my criteria to evaluate my performance</td>
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## Part II: Below are reasons nurses do not participate in continuing education. Please indicate the degree to which you feel the statement is true of the reason why nurses do not participate in continuing education. There are no “right” or “wrong” answers. Please select the answer that best expresses your beliefs and feelings.

<table>
<thead>
<tr>
<th>Item</th>
<th>Reason</th>
<th>1 Strongly Disagree</th>
<th>2 Disagree</th>
<th>3 Agree</th>
<th>4 Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>My employer does not contribute enough toward the cost of tuition fees, the cost of registration or course fees</td>
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<tr>
<td>53</td>
<td>Attending continuing education programs means a loss of necessary income for me</td>
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<tr>
<td>54</td>
<td>My workplace has too many budget constraints resulting in too few reimbursement approvals</td>
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<td>55</td>
<td>Lack of time off due to patient load, staff shortages, shift work, or scheduling difficulties</td>
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<td>56</td>
<td>Limited child care arrangements</td>
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<td>57</td>
<td>Attending continuing education programs would interfere with family responsibilities</td>
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<tr>
<td>58</td>
<td>There are no economic rewards or benefits for undertaking continuous education and achieving higher credentials</td>
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<tr>
<td>59</td>
<td>There are few opportunities for upward mobility or career changes</td>
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<tr>
<td>60</td>
<td>Lack of ability to alter the working life following educational programs</td>
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<tr>
<td>61</td>
<td>Rigid course requirements that tend to demoralize me as a student</td>
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<tr>
<td>62</td>
<td>My employer does not require continuing education</td>
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<tr>
<td>63</td>
<td>I don’t need to attend continuing education to re-register my license</td>
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<tr>
<td>64</td>
<td>A majority of my learning needs are satisfied by on-the-job or in-service education</td>
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<tr>
<td>65</td>
<td>Lack of encouragement for participation from my peers or manager</td>
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<tr>
<td>66</td>
<td>Programs are scheduled at inconvenient times</td>
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<tr>
<td>67</td>
<td>Lack of information about the availability of programs</td>
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Tool developed by Esposito (2012).
Opinion Article:
Innovation in a Mental Health Course Design:
Increasing Student Engagement and Interaction

Akhtar Ebrahimi Ghassemi, PhD, MHC, MSN, RN

Abstract
This opinion article introduces the author’s teaching practice as a nurse educator with the focus of moving away from the traditional teaching paradigm or “sage on a stage.” It asserts how the author’s teaching philosophy informs her strategies for using class time, choosing assignments to meet learning outcomes, and evaluating the learning. It also discusses the interconnection of these elements in a course called Mental Health Psychiatric Nursing. Drawing on recent discoveries in cognitive psychology, this opinion article may appeal to all nurse educators interested in the science of learning and regarding the challenge of effective teaching.

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Teaching/Working Philosophy
The culture of teaching practice has shifted its focus to emphasize diverse teaching methods. The traditional teaching paradigm or “sage on a stage” is increasingly challenged as more theorists and teachers are advocating innovative teaching practices. It has been argued that educators can use knowledge about the brain to enhance pedagogical techniques. For example, a traditional didactic approach (delivering information) tends to employ the back cortex functions, while a discovery approach (proposing and testing ideas) makes use of the front cortex functions; thus, a balanced use of the back and front cortex will generate better learning (Zull, 2011). In other words, innovative teaching practices should be grounded in emerging brain research, using neuroscience to maximize the adaptive functions of the brain by challenging students to be creative, and providing activities to verify and prolong learning by using action areas of the brain (Zull, 2011).

Developing a personal teaching or educational philosophy statement is now an established practice. For example, educators can instill confidence in their students by explaining the course goals and how these will be achieved, because “a well-developed and deeply felt conviction about the importance of one’s teaching is an important element in imbuing students with a perception of one’s credibility” (Brookfield, 2006, p. 259). In addition, instruction has become an active process of constructing rather than acquiring or communicating knowledge. As “problem-posing education involves a constant unveiling of reality” (Freire, 2000, expression xi), teaching and learning are now understood to be participatory or mutual processes. Finally, educators and/or clinicians are expected to support
autonomy by “taking perspectives of others into account, providing relevant information and opportunities for choice, and encouraging others to accept more responsibilities for their own behavior” (Williams & Deci, 1998, p. 303). Instructors should empower students to take ownership of their academic pursuits by promoting democratic interactions in the classroom where students are encouraged to demonstrate critical thinking skills as they share their ideas and questions (Ahn & Class, 2011; Morrow, Kelly, & Skolits, 2013).

This opinion article explains the author’s teaching practices as a nurse educator as she demonstrates a general move away from the “sage on a stage” described above and reinforces the fact that learners should trust that trying to solve a problem serves them better than being spoon-fed the solution. It shows how the author’s personal teaching philosophy informs the strategies for using class time, choosing assignments to meet learning outcomes, determining grading rubrics, and evaluating learning. It also discusses how these various elements interconnect in a course on mental health.

Engaging Learners and Learning Assessment

Engaging students in learning increases their likelihood of success and insures retention of knowledge. Student engagement is important in all types of courses, whether online, hybrid, or face to face. An instructor decides how to use class time to engage his or her students based on a teaching/working philosophy, and constantly reminds himself or herself that learning is a process, not an outcome, where the construction of new knowledge is a result of transforming real-life experiences (Lisko & O’Dell, 2010). In essence, students hear, read, or view information when new knowledge and materials are introduced in the lecture; later, however, as the process of learning continues, they develop conceptual knowledge where they synthesize, critique, evaluate, or apply the information. Using class time effectively, the instructor must integrate innovative teaching strategies that “reinforce key materials or areas of emphasis” (Herrman, 2016, p. 4), and provide opportunities for the students to play a more active role in the process of their conscious analysis and reasoning. This philosophy affects instructional design and evaluation methods. The author agrees with McKimm & Morris (2009) that “the teacher’s role as facilitator of learning is a vital component in ensuring effective group working and engagement of all members in task and process” (p. 657). Research suggests that students must feel safe and emotionally engaged before learning occurs, a concept supporting what most educators intuitively know: a positive relationship with the teacher is crucial to student success (Goodwin & Hubbell, 2013). Additionally, research related to the science of successful learning confirms that educators need to think of testing as a way of teaching and retrieval of enhanced learning (Brown, Roediger, & McDaniel, 2014).

Learning assessment must be directly related to the course goals and objectives and it is crucial that planned activities be measurable and observable (see Figure 1). To assess learning, the author uses ADDIE, an acronym comprising the elements: analyze, design, develop, implement, and evaluate. To use this tool, one must first identify who the learners are, what knowledge gaps exist, and what they need to learn to fulfill the gaps. This knowledge is used to determine how to meet the instructional objectives, develop activities that engage the learners, utilize instructional materials and media to communicate the message, and identify the best methods to assess learning and evaluate instruction.

FIGURE 1 Core element of a course design: Course objectives

Teaching Modalities and Andragogy

Based on the teaching philosophy which features a learner-centered approach, one should use multiple teaching modalities including: interactive lecture discussion; audiovisual teaching (film clips, animations, educational DVDs, and online textbook resources); brief group work during class sessions; role play; interactive learning exercises; case studies; and simulation scenarios. As the list indicates, designing assignments that respond to diverse student learning styles should be incorporated into the teaching. One way to encourage individual student success is to spread course points over a number of course assignments.

The lecture method is one of many recognized teaching modalities. The author uses this method in a Mental Health course for the following reasons: to instill the relevance of mental health as new knowledge, and to articulate the importance of the topic to ensure students have a thorough understanding (Brookfield, 2006, 2013) of the topic before control of their learning is turned over to them. If adult-centered teaching is adopted, the instructor first needs to find out how the students are experiencing their learning, and then use what has been discovered to help them engage in learning the materials that are useful to their practice (Brookfield, 2013).

Group work is a popular teaching method. A group activity creates an atmosphere conducive for learning, especially the collaborative aspects of learning. It raises the bar for all students, but those who struggle will benefit from the work of those who excel. Students learn during team or group assignments because everyone has to contribute, and
collaboration among members of the group results in a far superior end product than one member can achieve alone (Brookfield & Preskill, 2005; Manning & Johnson, 2011). To prime the learners' minds for learning, the instructor can use a discussion topic for group work in class, for example: “A 14-year old adolescent has been diagnosed with a depressive disorder. Discuss how manifestations of depressive disorders are different in children versus adults.”

Case studies can be used to promote active learning during activities. Case studies challenge students to analyze critical aspects of case-based (i.e., real life) scenarios. The instructor can use this method to help learners develop thoughts that are central to evidence-based practice, critical thinking, and judgment so that they can draw on these skills in actual clinical situations (Tanner, 2009). Case studies are used in the mental health course to: (a) promote critical thinking; (b) learn how to assess, connect, and analyze data; (c) apply learned mental health material when answering questions; (d) use a variety of resources to gather information and answer questions; and (e) learn to prioritize within the nursing process framework.

The idea is a simple one: students review and discuss responses to a posted case study in small groups, thus allowing active learning during class time.

The process of a group activity can be summarized as follows. First, students complete the case study assignment individually. Next they review and discuss the completed assignment during a brief group work session at the beginning of the class. Each group then submits its response. Lastly, the instructor reviews the correct responses.

As its name suggests, an assignment that encourages self-awareness and self-reflection is the reflection paper. This paper is designed to emphasize the reflection-on-action element of the clinical learning experience. Briefly stated, what students learn from an experience will lead to their ongoing clinical knowledge development and strengthen their clinical judgment in future situations. The reflection assignment is used to: promote students’ self-awareness and self-monitoring of their own learning and actions (experiential learning), provide feedback about students’ learning status so that the instructor can address relevant issues in a mutual sharing session, and promote self-disciplined and self-corrected thinking. The conscious reflectiveness of this type of student work sheds light on an individual learner’s awareness of his or her performance. One student in the author’s classroom elaborated on his reflection assignment:

The learning task that I responded to better was the case studies that were given through Moodle [an instructional system] by the instructor. The case studies really helped me in targeting main points and themes of the material. I thought that the case studies/homework that was given helped me to achieve better understanding of the material that we were learning and it carried over to the first test. (A. Johnson-Smith, personal communication, Oct. 14, 2014)

Clinical Component: Teaching Methods in Community Mental Health Lab

In a bid to meet her personal teaching goals, the author has incorporated the Community Mental Health Laboratory (CMH Lab) into the Mental Health Psychiatric Nursing clinical course at the undergraduate level. One third of the course hours are allocated to community mental health with the purpose of focusing on primary prevention, health promotion, and wellness dimensions of mental health psychiatric nursing; providing innovative community-based clinical teaching methods in nontraditional settings to broaden students’ learning spectrum; and presenting and supporting new opportunities for psychiatric nursing practice that are emerging throughout mental health care. Relevant assignments include a community mental health video-recording and standardized patient project, a stress management workshop, and observational activities at the clinical sites. Much of the methodology is cutting edge. For example, the standardized patient projects and the stress management workshop are programmatic innovations; the community mental health videotape and standardized patient projects use current video-recording technology tools to enhance teaching and learning.

The community mental health video-recording project is an innovative way of integrating technology into the Mental Health Psychiatric Nursing course. In addition, it reinforces the importance of developing or expanding opportunities for senior nursing students to communicate with an aging population. The video assignment uses technology to advance students’ communication skills, and promote cultural awareness. Interviewing an older adult person in the community can promote student nurses’ interviewing skills and therapeutic communications, while at the same time increase their confidence and decrease anxiety. The project enables students to advance their knowledge about communicating with an aging population and helps them embrace cultural sensitivity in their repertoire of core competencies. Cultural sensitivity is extremely important in today’s multicultural society and is a skill that can be learned in an active clinical laboratory environment (Gaberson, Oermann, & Shellenbarger, 2014; Rowan, Rukholm, Bouque-Bearskin, & Baker, 2013). The project expects students to master the following: learn the fundamental skills of videotaping technology, such as shooting and editing video; apply reminiscent theory as it supports aging; obtain consent from older adult participants; demonstrate evidence of enhanced communication skills; select interview items or questions in collaboration with participant and family; leave the older adult participant with an oral history of his or her responses to the interview items or questions; and analyze the achieved goals using the video-taped materials.

The standardized patient project is a practice model designed to provide an opportunity for students to learn and practice their assessment and communication skills through role play in a simulated laboratory environment. Although there is limited research in the use of standardized patients in undergraduate mental health nursing education, current evidence supports the use of this method of learning as an effective strategy to foster clinical mental health skills (Stuart, 2010; Lehr & Kaplan, 2013). More specifically, two students develop a case that includes biopsychosocial assessment using a mental status examination tool, and formulate outcome criteria, possible interventions, and evaluations. The learning environment is flexible and can be modified to model a specific situation, use particular instruments, and replicate a unique patient with a diagnosed mental disorder. It is also a safe place for nursing students to perform role play and apply their knowledge in a practice setting. They videotape the role-play session and present the project at the community mental health lab. This project encourages students to be self-directed learners, and practice and critique their own communication skills; in fact, this is a crucial part of the learning process and something they will carry over into the working world. Senior undergraduate nursing students traditionally miss this type of active learning during clinical rotations and classroom time, and this is regrettable, because of what this type of learning has to offer them.
The author believes the role of the instructor is to be a helper of learning; this essential belief underpins the teaching philosophy and the teaching strategies. The standardized patient simulation project is emblematic of how the author prefers to teach. It offers a rich simulation that students can do without the instructor being present and thus transforms the paradigm of the teacher as a “charismatic performer” and allows students to learn a great deal from it. In short, the author agrees with Brookfield (2006), who opines, “The only reason we teach is to help someone to learn, and whatever we do to help them in that regard must be considered as good teaching, no matter how strange it may seem to an outsider” (p. 276).

**Andragogy and Using Technology in a Clinical Mental Health Course**

The common elements in models of instructional design are: “a need to know the learners, their capabilities, and their attitudes; the existence of clear instructional objectives; the ability to address any existing problems; and meet the overall objectives” (Manning & Johnson, 2011, p. 14). Today, a variety of instructional media can be used to meet learning objectives, and an instructor should attempt to match technological tools with her or his andragogy, or teaching philosophy. As Mastrian, McGonigle, Mahan, and Bixler (2011) noted, the advancement of technology and rapid changes in organizational structure now emphasize teamwork, and this facilitates instructional design that stimulates participants’ critical thinking and their spirit of collaboration. Collaboration involves a willingness to work together. Through collaboration, students can: develop new perspectives and learn teamwork skills, advance their critical skills and creative thinking, utilize different learning styles to achieve positive learning outcomes, and integrate or pool their knowledge and experience (Gardner & Eng, 2005).

When the author designed the Community Mental Health lab, she integrated the use of technology with teamwork and collaboration. To achieve the integrative approach in the course design, the students were asked to make video technology an integral part of their team projects by recording creative role-play scenarios. However, the instructor must not simply make this a requirement without assessing its value. First, the instructor must evaluate how accessible the technology tool actually is and take the necessary steps to ensure it is accessible to all students, including those with multiple learning needs and varying technical competencies. Second, it would also be important to assess student involvement and to consider how high performance can be achieved by using a technology tool.

### Student Learning Outcomes, Student Engagement, Collaboration, and Critical Thinking

Course learning outcomes must be clearly specified for the benefit of both teachers and learners. These will guide the teacher’s selection and handling of course materials (see Figure 2). Identifying clear learning outcomes can help the instructor to design the course content, evaluation methods, and student engagement level. Knowing the learning outcomes is equally essential from a learner’s point of view; the specification of outcomes tells them “what types of knowledge and skills are expected of them” (DeYoung, 2014, p. 54), thus directing them in their studying.

When learners engage in critical thinking, they identify and evaluate the assumptions that underlie their own conclusions, judgments, and actions. They examine multiple perspectives, make decisions, and consider the consequences of their decisions. As Kuh (2003) remarks, “Student engagement is perhaps the most obvious predictor of learning” (p. 25). In this regard, the author finds the one-minute paper extremely useful. Indeed, it is one of the most widely used techniques across various types of higher education classrooms (e.g., Chizmar & Ostrosky, 1998; Davis, 2009; Steed, 2005). With this method, students take a small amount of time at the end of a class session to answer two questions: “What was the most important thing you learned today?” and “What question remains unanswered?” This paper serves multiple purposes: It provides evidence of attendance, it confirms whether learners understood the lecture’s main points, it allows the instructor to address any misunderstandings during the class time, and it initiates student-teacher contact. The author’s students are quite positive about the one-minute paper: Some like the personalized attention; others say this type of response enhanced their learning. From the author’s point of view, it is extremely useful: One can pick up two or three questions that need to be clarified in the next class.

**Critical Thinking**

To be consistent with a philosophy of stimulating critical thinking, instructors should incorporate group work into class sessions, including...
Innovation in a Mental Health Course Design: Increasing Student Engagement and Interaction

case studies, class discussions, group projects, simulation scenarios, and interactive learning exercises. The author agrees with DeYoung (2014): “Critical thinking is using the power of the mind to view the world and to act in a discerning way. It includes having a questioning attitude, examining underlying assumptions, and considering validity of alternative solutions, in order to make reasoned judgments that are sensitive to context. It is a way of interacting with the world that is reflective, open, and generative” (p. 176). In short, in active learning, learners create and store up knowledge for themselves.

Examples of how the author has incorporated active-based teaching methods into a mental health nursing course include the following instances:

2008–2009
- Lecture; posing questions; role play in small groups; student presentations (three to four groups presented a topic in one class session).

2009–2010
- Lecture; posing questions (initiate discussion); role play in small groups; reviewing case studies in small groups and sharing the responses in class session (0 points).

2010–2011
- Lecture; posing questions (initiate discussion); role play in small groups; posting case studies on the blackboard (eight to 10 cases during the semester). Students were asked to upload their responses on the blackboard and bring a hard copy to discuss in their small group (1 to 2 points for each case study). Grades were posted on the blackboard.

2012–2013
- Lecture; posing questions (initiate discussion); role play in small groups; posting case studies on Moodle (six to eight cases during the semester); interactive learning exercises; simulation scenarios.

In the simulation scenarios mentioned for the year 2012–2013, students were asked to respond to a case study question and bring a hard copy to discuss in their small group (6 points for case studies; 50% of the points for each assignment allocated to actively completing the assigned work in a class session). The correct responses were actively reviewed after the small group role play. The instructor can then follow up with a small group teaching technique (see Figure 3). This can be built around topics or themes, clinical cases, case scenarios, and problem-based learning, and is useful to encourage a learner’s engagement with a topic and foster cooperation and teamwork (McKimm & Morris, 2009; Herrman, 2016).

Incorporating active learning strategies into a course design can help students improve their critical-thinking abilities. As a result, they are able to better perform in class examinations and on the standardized psychiatric mental health tests (Health Education System, Inc., or HESI). The HESI standardized tests are used as predictive tools for student performance in the National Council of Licensing Examination for Registered Nurses (NCLEX-RN).

The number of students with excellent and satisfactory performance levels has increased in the past four academic years (see Table 1), with the number of students in the categories of “need additional preparation” and “need improvements” having decreased from Fall 2008 to Fall 2011 (see Figures 4, 5, 6, & 7). Students’ mean scores in the HESI Specialty Exam (Psychiatric-Mental Health Nursing/BSN) improved from 676 in 2008 to 848 in 2011 (see Table 2). It is noteworthy that participants’ mean HESI scores are compared to the National Comparison over Mean Score (the pass level score is 850); their scores went up in 2009, 2010, and 2011 (see Table 2 & Figure 8). Additionally, students scored higher in the mental health section of the HESI Exit Exam (similar to the NCLEX-RN) and also scored better in the psychiatric mental health component of their NCLEX-RN exam (including psychological integrity).
Innovation in a Mental Health Course Design: Increasing Student Engagement and Interaction

TABLE 1 HESI Specialty Exam Scores Presented By Scoring Interval

<table>
<thead>
<tr>
<th>Semester/Year</th>
<th>Number of Students/ N</th>
<th>Excellent Performance N (%)</th>
<th>Satisfactory Performance N (%)</th>
<th>Need Additional Preparation N (%)</th>
<th>Need Improvements N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2008</td>
<td>28</td>
<td>3 (9%)</td>
<td>2 (6%)</td>
<td>10 (32%)</td>
<td>16 (51%)</td>
</tr>
<tr>
<td>Spring 2009</td>
<td>31</td>
<td>3 (9%)</td>
<td>2 (6%)</td>
<td>10 (32%)</td>
<td>16 (51%)</td>
</tr>
<tr>
<td>Summer 2009</td>
<td>10</td>
<td>3 (30%)</td>
<td>0 (0%)</td>
<td>2 (20%)</td>
<td>5 (50%)</td>
</tr>
<tr>
<td>Fall 2009</td>
<td>30</td>
<td>12 (40%)</td>
<td>2 (7%)</td>
<td>8 (30%)</td>
<td>8 (26%)</td>
</tr>
<tr>
<td>Spring 2010</td>
<td>17</td>
<td>5 (30%)</td>
<td>4 (24%)</td>
<td>3 (18%)</td>
<td>5 (30%)</td>
</tr>
<tr>
<td>Fall 2010</td>
<td>33</td>
<td>8 (24%)</td>
<td>7 (21%)</td>
<td>10 (30%)</td>
<td>8 (24%)</td>
</tr>
<tr>
<td>Spring 2011</td>
<td>27</td>
<td>9 (34%)</td>
<td>7 (26%)</td>
<td>8 (30%)</td>
<td>3 (11%)</td>
</tr>
<tr>
<td>Fall 2011</td>
<td>18</td>
<td>7 (39%)</td>
<td>3 (17%)</td>
<td>4 (22%)</td>
<td>4 (22%)</td>
</tr>
</tbody>
</table>

Table 1. HESI Scoring Interval: Excellent Performance (>or= 950; 900–949), Satisfactory Performance (850–899); Need Additional Preparation (800–849; 750–799); Need Improvement (700–749; 650–699; < or =694).

FIGURE 4 Comparison of percentages of students’ excellent performance

FIGURE 5 Comparison of percentages of students’ satisfactory performance

FIGURE 6 Comparison of percentages of students’ needed additional preparation

FIGURE 7 Comparison of percentages of students’ needed improvement
Innovation in a Mental Health Course Design: Increasing Student Engagement and Interaction

There is nothing tedious or routine about teaching college courses to undergraduate students. It requires enthusiasm, effort, and thought to connect with students in a manner that genuinely engages them—and at the same time, promotes learning. Incorporating innovative teaching strategies and practices that maximize the adaptive functions of the brain by challenging students to be creative, and by providing activities to verify and prolong learning by using action areas of the brain, will allow students to acquire higher levels of self-efficacy for endorsing learning-oriented goals. Students will work with each other, use modern technology tools, see the interconnection between course materials, learn to adopt a professional attitude, and develop crucial problem-solving abilities. This in turn will facilitate students’ success in the classroom and, more importantly, will help students develop skills that will allow them to succeed in life.

**TABLE 2 HESI Specialty Exam (Psychiatric-Mental Health Nursing/BSN)**

<table>
<thead>
<tr>
<th>Semester/Year</th>
<th>Number of Students</th>
<th>Mean HESI Score</th>
<th>Mean HESI Conversion Score</th>
<th>Range of HESI Score</th>
<th>National Comparison Over Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2008</td>
<td>28</td>
<td>676</td>
<td>65.41</td>
<td>390 – 897</td>
<td>844</td>
</tr>
<tr>
<td>Spring 2009</td>
<td>31</td>
<td>743</td>
<td>71.26</td>
<td>556 – 1017</td>
<td>844</td>
</tr>
<tr>
<td>Summer 2009</td>
<td>10</td>
<td>783</td>
<td>74.31</td>
<td>554 – 991</td>
<td>844</td>
</tr>
<tr>
<td>Fall 2009</td>
<td>30</td>
<td>833</td>
<td>78.16</td>
<td>534 – 1026</td>
<td>850</td>
</tr>
<tr>
<td>Spring 2010</td>
<td>17</td>
<td>833</td>
<td>78.21</td>
<td>569 – 1032</td>
<td>850</td>
</tr>
<tr>
<td>Fall 2010</td>
<td>33</td>
<td>826</td>
<td>77.74</td>
<td>468 – 1098</td>
<td>844</td>
</tr>
<tr>
<td>Spring 2011</td>
<td>27</td>
<td>863</td>
<td>80.02</td>
<td>594 – 1102</td>
<td>844</td>
</tr>
<tr>
<td>Fall 2011</td>
<td>18</td>
<td>848</td>
<td>78.58</td>
<td>479 – 1017</td>
<td>851</td>
</tr>
</tbody>
</table>

**Conclusion**

There is nothing tedious or routine about teaching college courses to undergraduate students. It requires enthusiasm, effort, and thought to connect with students in a manner that genuinely engages them—and at the same time, promotes learning. Incorporating innovative teaching strategies and practices that maximize the adaptive functions of the brain by challenging students to be creative, and by providing activities to verify and prolong learning by using action areas of the brain, will allow students to acquire higher levels of self-efficacy for endorsing learning-oriented goals. Students will work with each other, use modern technology tools, see the interconnection between course materials, learn to adopt a professional attitude, and develop crucial problem-solving abilities. This in turn will facilitate students’ success in the classroom and, more importantly, will help students develop skills that will allow them to succeed in life.
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REFERENCES


The literature continues to mount the evidence that improvements to patient safety and quality can be achieved with increased numbers of baccalaureate degree prepared nurses (Aiken et al., 2011, 2014; Blegen, Goode, Park, Vaughn, & Spetz, 2013; Cho et al., 2015; Kutney-Lee, Sloane, & Aiken, 2013). To promote high-quality care, the Institute of Medicine’s report on The Future of Nursing (Institute of Medicine, 2010) has recommended that 80% of nurses hold baccalaureate degrees by the year 2020. For many geographic areas, this is a far-reaching goal. The rural upstate New York community of Plattsburgh, New York, estimated that fewer than 30% of local nurses held bachelor’s degrees in any field, making the number who held the Bachelor of Science degree in Nursing (BSN) even fewer. To progress toward the goal of 80% by 2020, an academic-practice partnership was born.

Although the need for educational advancement was embraced by both the local hospital and university administrators, and a survey of hospital-employed associate’s degree (AD) prepared nurses revealed much interest in continuing their education toward the BSN degree, there seemed to be a reluctance to enter the university’s existing online BSN completion program. Thus the concept of an on-site program with classes offered at the hospital took shape. Three years later, the program has

**Abstract**

In an effort to make progress toward the goal espoused in the Institute of Medicine Report on the Future of Nursing (2010) of having 80% of registered professional nurses achieve a baccalaureate degree by 2020, one hospital in rural upstate New York enters into a collaboration agreement to provide registered professional nurses with an on-site program. This opinion article describes the process and success of that collaboration.

The literature continues to mount the evidence that improvements to patient safety and quality can be achieved with increased numbers of baccalaureate degree prepared nurses (Aiken et al., 2011, 2014; Blegen, Goode, Park, Vaughn, & Spetz, 2013; Cho et al., 2015; Kutney-Lee, Sloane, & Aiken, 2013). To promote high-quality care, the Institute of Medicine’s report on The Future of Nursing (Institute of Medicine, 2010) has recommended that 80% of nurses hold baccalaureate degrees by the year 2020. For many geographic areas, this is a far-reaching goal. The rural upstate New York community of Plattsburgh, New York, estimated that fewer than 30% of local nurses held bachelor’s degrees in any field, making the number who held the Bachelor of Science degree in Nursing (BSN) even fewer. To progress toward the goal of 80% by 2020, an academic-practice partnership was born.

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graduated 19 students and has another cohort in the pipeline. In this article, the authors, who were intricately involved in the creation and implementation of the program, share their views and reflect on what has contributed to its success.

The University of Vermont Health Network Champlain Valley Physicians Hospital Medical Center, also known locally as CVPH, has a proud tradition as the sole community health care provider in a medically underserved, rural area. It shares the 21st century challenge of all hospitals to transform patient care by significantly improving the use of evidence, the patient experience, staff engagement, and quality outcomes. CVPH is also similar to many rural community hospitals in that the majority of the nursing staff are graduates of the local community college and do not hold a BSN. There are generations of nurses who hold associate’s degrees and the community college in town is highly revered. Although the local university has a well-established BSN program, it is locally viewed as “for outsiders.” Informal cultural perspectives were communicated to faculty with statements such as: “If you want to be a nurse here you go to the community AD program,” “BSN degrees don’t give nurses anything useful at the bedside,” and “Anyone who pursues a BSN isn’t a real bedside nurse, doesn’t belong here, and won’t be here for long.” This well-insulated culture maintains the status quo, making the climb from the current 30% BSN workforce to the desired 80% very steep.

Adult learning has been posited to be motivated by perceived gaps in what people know and what they need to know (Knowles, Houlton, & Swanson, 2011). It has been important at CVPH to demonstrate a gap and cultivate a culture that not only communicates the strong message that a BSN is required to transform care, but also communicates the pragmatic utility of the degree and creates visible support for working students. A critical component in this process involved crafting a strong message that the vision for a BSN credentialed nurse honors the past and current AD RNs, but is focused on building a future to meet patient needs. Another component is the building of partnerships between nursing, community, and organizational leaders. Any successful strategy to change decades of history and culture requires a multifaceted plan addressing both internal and external challenges.

Internal strategies at CVPH included recognizing the critical importance of role models and updating all nursing leadership job descriptions to require a minimum of a BSN. Those in leadership positions were required to develop a plan to attain this minimum degree. New roles requiring advanced nursing degrees such as that of Clinical Nurse Specialist were created, making visible new ways to view nursing’s contributions to patient care and leading the transformation of care at the bedside. A clinical ladder program was developed to recognize and reward those RNs who provided exceptional contributions to patient care and included financial rewards for attainment of certifications and formal degrees. Information was provided for RNs considering pursuit of an advanced degree, along with contact information linking them to nurses they could talk to about their educational goals. Detailed coursework and prerequisite information from degree programs was provided.

To provide financial support, a partnership with the hospital’s foundation created scholarships for CVPH RNs working on advanced degrees, with preference for those at the bedside working on their BSN. Fundraising for the scholarship engaged the community in the efforts to advance nursing education and provided a forum to outline the need for more RNs to attain the BSN degree. This scholarship team then identified sponsors for each student enrolled in the newly minted on-site RN to BSN program, underwriting school expenses for four years of the program.

Communication about the pragmatic need for more BSNs in Plattsburgh was facilitated by several opinion editorials in the local newspaper by key nursing community leaders. These articles fueled a healthy public dialogue about nursing education. The cultural tension was demonstrated by responses published in the paper, including one person’s view that “being a caring nurse requires a big heart and hand holding, not a fancy degree,” tempered by a letter to the editor from some members of the community college nursing faculty citing research that demonstrated better patient outcomes from those RNs who attained advanced nursing education.

Queries made during the initial planning stages in 2011 revealed that more than 100 RNs at CVPH said they would be interested in enrolling in an RN to BSN program on-site at the hospital. From the data gathered a theme emerged regarding the deep-seated fear many RNs had regarding continuing their education. The available online RN to BSN programs were viewed as intimidating to some, given the technology challenges and the perceived lack of face-to-face interaction, readily accessible faculty, and fellow student support. Getting RNs from the “interest stage” to the “enrolled stage” required intense time and attention. Student concerns regarding scheduling and access were addressed. A specific “smart” classroom at the hospital was designated for the program and class times were set one year in advance. Advising was done on-site and individual assistance with technology was provided. The hospital’s library served as a resource for students without Internet access. Much “one to one” coaching and counseling by both hospital and university staff resulted in 19 CVPH RNs matriculating into the first on-site RN to BSN program at CVPH.

When first approached about the possibility of adding an on-site program at the local hospital, members of the university faculty were not unanimously in favor. For many years the State University of New York College at Plattsburgh (SUNY Plattsburgh) had offered an RN to BSN program online option, which had fairly low participation from the local population. Despite the hospital’s request for such a program, there was a general feeling among faculty that “we have already built it, and they didn’t come.” Faculty were acutely aware that the local community college education was highly regarded. In fact, several of the university faculty had graduated from the community college and had a strong allegiance to the institution. They recognized the tension in students who struggled to embrace a new level of education while remaining loyal to where they started. Faculty had heard AD RNs talk about a lack of incentive to earn a BSN degree, and felt dismayed with what appeared to be a lack of internal motivation. Thus, the request for a dedicated program at the hospital was met with skepticism. In considering the program, faculty kept going
back to the fact that there was already a program available that could serve the local students. The online, asynchronous program provided flexible scheduling, self-paced learning, and ready access to resources. The faculty prided themselves as early adopters of technology, being the only fully online degree-granting program in the university. Faculty had mastered the course management systems inherent in online technology and believed that prospective students could as well. Returning to the classroom seemed like a step backward in many ways.

The clash between systems seemed evident in early discussions about how the program would work. Representatives from the university needed to explain the workings of the academic machine to the hospital partners. There was a desire by the hospital for the cost of courses to be based only on paying for faculty salaries versus tuition charges for each student. As a state institution, SUNY Plattsburgh could not independently lower tuition or waive fees, despite the benefit of a program to the community. The costs behind the degree needed to be justified to hospital representatives, showing them that there was more to tuition than just faculty salaries.

Financial resources were also a concern. The planning for this program began as the university was in the midst of a significant budgetary crisis. Faculty were assigned heavier workloads and in general were being asked to do more with less. The proposed program, offering only one course per semester, did not justify the addition of a new faculty line, so there was ambiguity over what this might mean for faculty work assignment. Adding the concern regarding inadequate resources to the feeling of being stretched by the gloomy economic picture, individuals were reluctant to take on more. Faculty were keenly aware of the need for adequately enrolled courses, and feared that an on-site program would pilfer students from the current online program. In addition, the department had recently undergone a major curriculum revision process for both the pre-licensure program and the RN to BSN program option. The element of change fatigue seemed to overshadow many meetings devoted to decision-making regarding this proposed program.

One of the biggest hurdles for faculty was in understanding the challenges faced by the nurse-as-student. While faculty recognized poverty in some of the pre-licensure students they worked with, they knew the nurses at the hospital had jobs, and well-paying ones at that. What was not recognized was that many of them were sole breadwinners, heads of families, or single parents. The state-regulated tuition was low compared to private colleges and universities, but it could be an insurmountable burden for those living from one paycheck to the next. Technology was also a challenge; some prospective students still connected to the Web via a modem, did not have Internet in their homes, or did not even own a computer. Faculty had themselves done what it took to earn advanced degrees and could not understand the paralyzing fear that some nurses had about going back to school. The privilege of working in academia created insensitivity to the barriers that were all too real for some nurses.

A former instructor at the community college who was a current SUNY Plattsburgh associate professor volunteered to teach the first course in the hospital-site program. She was familiar with most of the enrolled students and knew they had a strong foundation in nursing skills and concepts. These students were well respected in the institution, and many held leadership positions. To further strengthen their practice, education was needed in the core competencies for nursing (Cronenwett et al., 2007). The transitional course entitled “Theoretical Foundations of Nursing” was a natural place to introduce content related to these competencies, and was modified to address the needs of students who ranged in experience from one to 30 years as nurses. An initial informal poll of this group revealed concerns regarding their ability to do BSN-level coursework, technology expectations, and a fear of other classmates’ perception of them in their new “student” role. Students who were experienced administrators were in class with subordinates, which added an additional level of self-consciousness regarding performance. The initial lack of interaction and discussion was challenging and was addressed in several ways. Seating was arranged so that students with administrative positions did not sit together and the concept of the classroom being a “safe” place to exchange ideas with assurance of confidentiality was reinforced. Students began sharing their thoughts and experiences, applying Institute Of Medicine (IOM) recommendations and recognizing their own roles in quality and safety (IOM, 2010). At the completion of the course, students were asked to reflect upon their performance and how the course had influenced their practice. Comments regarding feeling more comfortable speaking up in clinical situations and having more evidence supporting decision-making practices was common, which supported the observation that “more highly educated employees have a higher degree of confidence that translates into better care” (Implementing the IOM Future of Nursing Report - Part 1, 2011). At semester’s end, several groups of students presented topics at a “Nursing Showcase” for hospital and community members, further increasing their confidence level and giving recognition to students’ success in the program. One student stated: “At the completion of the first year, I have already found a new confidence in my professional life. It has been, without a doubt the right decision. Our BSN nursing staff will be equipped to help transform care at CVPH.”

There is a shared pride in the students’ efforts as role models for advancing nursing education in a rural community. They serve as living proof that cultures can change. The effort took the partnering of persistent champions committed to academic progression and willing to learn from each other’s perspectives.Forging new partnerships and engaging in an ongoing dialogue will bring the institutions closer to meeting their mutual goal of “80% BSN by 2020.” A seamless transition for local nursing students across each level of nursing is one such effort.


Purpose of Study

The purpose of this article is to bring several decades’ worth of high-quality research that highlights an alternative approach to the prevention and reversal of coronary heart disease to the attention of the primary-care provider. This alternative approach involves intensive lifestyle changes, including the adoption of a whole-foods, plant-based diet. The argument proposed is that not only is this diet evidence-based in its success, but it also is well accepted and adhered to by patients, improves quality of life, and is a more cost-effective approach to managing heart disease and its risk factors. Furthermore, this diet has the benefit of protecting against and/or reversing several other diseases including cancer and diabetes.

Background and Significance

According to the Centers for Disease Control and Prevention (CDC), coronary heart disease (CHD) takes the life of 600,000 individuals each year in the United States and is responsible for health care expenditures of $108.9 billion each year. Direct and indirect costs in 2008 for both heart disease and stroke were nearly $300 billion and were reported by the American Heart Association to be greater than any other diagnostic group (CDC, 2012). Put another way, 2,200 Americans die each day from this disease and approximately 150,000 of those annual deaths occur before the age of 65 (Roger et al., 2012). There are both geographic and ethnic variances, with certain populations disproportionately affected by CHD. Heart-disease-related deaths in 2008 were 25% of the overall total;
while highest among Caucasians at 25.1%, they were closely followed by African Americans at 24.5%. The lowest rates of CHD death were among American Indians or Alaska Natives at 18% (CDC, 2012). Geographically, CHD mortality is the lowest in the western states (109.8 to 315.2 per 100,000 over the age of 35), while in the south, CHD causes 458.3 to 750.8 deaths per 100,000 individuals over age 35 each year (CDC, 2012).

- Key risk factors for heart disease include hypertension, hyperlipidemia, diabetes, obesity, smoking, poor diet, lack of physical activity, and excessive alcohol intake (CDC, 2012). In the United States the disease burden of these known risk factors includes:
  - 33% of adults over the age of 20 are diagnosed with hypertension, of which 71% are being treated with antihypertensive medication (Roger et al., 2012);
  - 33,600,000 adults have total cholesterol levels greater than 240 mg/dL (Roger et al., 2012);
  - 8% or 18,300,000 adults are diagnosed with diabetes mellitus with a substantial additional group of individuals either undiagnosed or considered pre-diabetic (Roger et al., 2012);
  - 33.7% of adults are obese (BMI ≥ 30) and 16.9% of children between the ages of two and 19 are obese, equaling 12.6 million children affected by this epidemic (Roger et al., 2012).

What is notable in this list of risk factors is that, with the possible exception of the first three, they are all lifestyle related and thus reversible in many cases. Furthermore, research has shown that even hypertension, hyperlipidemia, and certain types of diabetes can be controlled and often reversed through a plant-based lifestyle change.

**Methods**

A literature search using CINAHL, PubMed, and Cochrane was conducted. Key words included vegan, vegetarian, plant-based diet, and plant-strong diet. Additional literature searches focused on key researchers (e.g., Dean Ornish, Caldwell B. Esselstyn, Neal Barnard, and T. Colin Campbell). Finally, searches were completed for specific articles that were discussed in continuing-education offerings. The above searches yielded more than 500 articles; however, after eliminating duplicates and excluding irrelevant articles, 25 articles were chosen for in-depth review, including three randomized controlled trials (RCT). Studies that were greater than five years old were kept when considered classics in the field of plant-based medicine.

Included articles focused on the relationship between CHD and/or CHD risk factors (i.e., hyperlipidemia, hypertension, or biomarkers) and the adherence to a plant-based diet. Two additional articles were selected that reviewed the risk associated with treatment of hyperlipidemia with statin drugs. Articles were excluded if they focused on single-nutrient supplementation or had no methodology section.

**Description of Diet/Lifestyle and Patient Adherence**

Most researchers in this area avoid the narrow focus of diet alone or lifestyle alone, with the recognition that these are interrelated, and that sustainable, effective change needs to encompass more than, for example, just decreasing saturated-fat intake. The plant-based diet proposed herein has been given different names by different scholars (e.g., whole-foods plant-based diet, vegan, strict-vegetarian, starch-based diet). For the purposes of this study, it will be referred to as a whole-foods plant-based diet, or plant-based diet.

Interestingly, the roots of a plant-based diet can actually be traced to biblical times. In Daniel 1:8-14 (NIV), the Daniel Fast excludes all animal products from the diet. Similarly, the present-day plant-based diet would replace processed foods, preservatives, sweeteners, caffeine, and alcohol with fruits, vegetables, whole grains, nuts, seeds, and oil (Bloomer et al., 2010). A similar lifestyle is also followed by the Seventh-Day Adventists, of whom a relatively large percentage (compared to that seen among the general U.S. population) maintains a whole-foods plant-based diet (Seventh-Day Adventist Church Manual, 2010).

Some health care providers may benefit from a detailed description of the diet regarding monitoring and calculating percentages of calories. Scholars typically agree that while maintaining this diet, it is not necessary to count calories or grams of protein. As long as patients are not overly restricting their dietary intake, they can be assured they are obtaining adequate nutrients, with the exception of vitamin B12, including protein (Campbell & Campbell, 2006). The diet used in studies conducted by Dr. Ornish and his colleagues allowed for 10% of calories from fat, 75% from complex carbohydrates, and 15% from protein (Govil, Weidner, Merritt-Worden, & Ornish, 2009; Koertge et al., 2003; Ornish et al., 1998). Though Ornish’s studies did allow for small amounts of nonfat dairy and egg whites, other researchers have recommended against inclusion of these items in the diet because casein, the main protein found in dairy, has been shown to be a potent carcinogen and eggs have been linked to prostate cancer (Campbell & Campbell, 2006).

Though health care providers may voice concern over the ability of a patient to accept and comply with a strict dietary and lifestyle regimen, studies have shown that this lifestyle change is actually well accepted. A five-year, randomized controlled trial (RCT) with 48 participants suffering from moderate-to-severe CHD revealed that 71% of them were able to maintain changes (Ornish et al., 1998). A large prospective study, with 2,974 participants from 24 socioeconomically diverse sites, demonstrated that 88% of participants remained in the program at 12 weeks and the one-year retention rate remained high at 78.1% (Silberman et al., 2010).

Govil et al. (2009), with a sample of 869 nonsmoking patients with CHD, sought to determine the effects of socioeconomic status (SES) on the ability to maintain lifestyle changes. Though this study’s racial makeup was predominately white, potentially limiting its generalizability, the results are significant. The low-SES group did have higher risk factors at the beginning of the study (e.g., history of smoking, more sedentary, diet high in fat, greater risk of being overweight, or suffering from depression); however, despite these initial risk factors, when this group was evaluated after 12 weeks, compliance with diet and lifestyle was similar to that of participants from the higher-SES group. Members of both groups met the program requirements of consuming only 10% of their calories from fat, maintaining greater than 3.5 hours of exercise each week, and engaging in regular stress management. Researchers in this study also measured attendance at twice-weekly on-site sessions, including nurse case management, lectures, and cooking demonstrations. Attendance...
was correlated with educational backgrounds: those with college degrees attended at a rate of 88%, whereas those with a high-school diploma attended at a rate of 94%. Significantly, 93% of the participants in this study were enrolled in a health insurance plan that covered the full cost of the intervention. Without health insurance coverage, attendance at the on-site sessions and compliance with lifestyle changes may not have been as high.

### Cardiovascular Risk Factors

#### Obesity

In the United States, 72 million adults were suffering from obesity, which is reported to cost our nation $147 billion annually (CDC, 2010). As rates of obesity continue to rise, so too will associated costs, especially with regard to its contribution as a key risk factor for heart disease. It is relevant to discuss the multitude of studies that have demonstrated that vegetarians, on average, have a significantly lower BMI and individuals who switch to a plant-based diet experience BMI reductions within the first 12 weeks of making this change.

One of the most significant studies is the Lifestyle Heart Trial, which looked at the benefits of switching to a plant-based diet in 440 individuals, with a mean age of 58, who were diagnosed with heart disease by angiography, positron emission tomography (PET), stress test, or echocardiogram, or previously had a coronary artery bypass graft (CABG). This study found that both men and women were able to decrease their body weight from a baseline of 86.8 kg ± 17.7 (men) and 77.1 kg ± 17.7 (women) to 82.8 kg ± 14.3 and 72.5 kg ± 16.3, respectively, at three months and maintain that loss at one year (p < 0.001) (Koertge et al., 2003). The ability to maintain the weight loss on a plant-based diet is significant, though not surprising, as studies have shown that vegetarians, on average, have lower BMIs than healthy omnivores (Ingenbleek & McCully, 2012). In a large-cohort study comparing 171 male vegetarians to age-matched healthy omnivores, researchers found that vegetarians had lower BMIs, 23.6 ± 4 and 24.4 ± 2.7, respectively (Yang et al., 2011).

A prospective study with 2,974 participants demonstrated a 7.8% decrease (p < 0.005) in BMI maintained over a year; and an RCT with 48 participants demonstrated the experimental group lost 23.9 lbs. after one year on a plant-based diet, and after five years managed to keep their weight down an average of 12.8 lbs., compared to the control group participants whose weight remained close to baseline (Ornish et al., 1998; Silberman et al., 2010). Given the significant reduction in weight, the cost of obesity, and obesity’s relationship to debilitating diseases (e.g., heart disease, diabetes, and cancer), patients could benefit from their health care professionals discussing the successes associated with a plant-based diet. Indeed, given the research findings, health care professionals may now have an obligation to discuss these successes with their patients as alternative forms of treatment.

#### Hypertension

In the United States, 67 million people suffer from hypertension (CDC, 2012a). Individuals with hypertension are four times more likely to die from a stroke and are three times more likely to die from heart disease. The direct costs of hypertension in 2010 were $69.9 billion, and it is estimated that the costs will increase to $200.3 billion by the year 2030. Additionally indirect costs (e.g., loss of productivity) will increase during that same time frame from $23.6 billion to $39.8 billion (Bunik, Gao, & Moore, 2006).

The Seventh-Day Adventists have been studied by many different researchers, as they typically avoid risk factors such as cigarette smoking and alcohol consumption, and they also have a higher percentage of vegetarians than the general U.S. population (Seventh-Day Adventist Church Manual, 2010). One such cohort study evaluated 500 Caucasian participants recruited from the Adventist Health Study; 10% of the participants were vegan (i.e., abstaining from all animal products), 36% lacto-ovo vegetarian (consuming dairy and eggs, but no meat, chicken, or fish), and 14% partial vegetarian (eating meat on occasion). The goal of the study was to determine if there were lower rates of hypertension among vegetarians. Researchers found that only 10% of the vegans in the group were taking antihypertension medications, whereas 28.8% of the non-vegetarians were on these medications. Though it could be argued that vegans would be less likely to take medications and that one cannot conclude from this a decreased need for medications, it was found that those not on medications still had lower blood pressures than non-vegetarians taking medications (122.5/74.8 mm Hg versus 133.3/76.3 mm Hg, respectively) (Pettersen, Anousheh, Fan, Jaceldo-Siegl, & Fraser, 2012). Other studies have had similar findings. For example, in a large (N=2,974) prospective study by Silberman et al. (2010), researchers found substantial decreases in both systolic and diastolic blood pressures at 12 weeks, 8.7% and 8.8% respectively, which continued to maintain significance at one year (p < 0.005); and in just 21 days on a whole-foods plant-based diet, a small (N=43) study group demonstrated a systolic drop in blood pressure from 114.65 ± 2.34 mm Hg to 105.93 ± 2.12 mm Hg (p < 0.05) (Bloomer et al., 2010).

Consistently, the literature denotes these dietary changes result in significant decreases in blood pressure that are maintained over time. It is valid, therefore, to conclude that this dietary pattern will save significant health care dollars and improve the quality of life for those who would otherwise face a lifetime of costly medications with potentially unpleasant side effects given the findings shown in the literature.

### Hypercholesterolemia

Having an elevated total cholesterol level (i.e., greater than 200 mg/dL) nearly doubles a patient’s risk of developing heart disease; yet this is the average cholesterol level in the United States (CDC, 2012b). Though combinations of statin and lifestyle modification are the recommended course of treatment for hypercholesterolemia, research supports the use of lifestyle modification alone. This should be especially palatable to those who are paying close attention to the cost of pharmaceuticals. With statin costs ranging from $12 per month (lovastatin, 10 mg) to $510 per month (sustained-release lovastatin, 40 mg), there is an opportunity to reduce health care costs significantly by decreasing dependence on medications (Consumer Reports, 2012).

In addition to the cost-prohibitive nature of pharmaceuticals, there have also been studies demonstrating the risk of taking statins. A large prospective study followed a group of 774 participants over a mean of 2.6 years. The mean age of the participants was 62, and 48% were female. Statins were used by 19% of participants at baseline and 23% at follow-up.
Researchers measured percentage appendicular lean mass, leg strength, leg-muscle quality (LMQ), and fall risk in statin and non-statin users. The results were decreased leg strength in statin users (-502 kg, 95% confidence interval (CI) -9.65 to -0.40), decreased LMQ (0.30 kg/kg, 95% CI 0.59 to -0.01), and increased risk of falls; no difference was found based on the type of statin the patient was taking (Scott, Blizzard, Fell, & Jones, 2009). Though results have not been replicated in all studies, another group of researchers did find significant muscle damage in statin users, which would support the above findings. Using a moderate sample (N=83), the researchers divided participants into groups, including two control groups, and biopsies were taken from the vastus lateralis. If 2% or more of the muscle fibers were damaged, the muscle was considered injured. Muscle injury was present in 24 out of the 44 patients with myopathy and one patient without myopathy. Of those with muscle damage, only one had a creatine kinase (CK) level greater than 1950, which is the level at which a health care provider is to discontinue a statin (Mohaupt et al., 2009). Though this study has flaws (e.g., selected patients had a history of myopathy), it also could have underestimated the degree of damage as a result of only taking biopsies from the vastus lateralis, which is not commonly affected by myopathy (Mohaupt et al., 2009).

When considering the potential for this commonly prescribed class of drug to result in muscle-fiber damage, decreased strength, increased risk of falls, and increased cost to an already overburdened health care system, it would seem that offering an alternative, low-cost, evidence-based solution to patients should become a standard of care. Plant-based diets significantly lower total cholesterol and LDL (Bloomer et al., 2010; Chainani-Wu et al., 2011; Esselstyn, 1999; Esselstyn, Ellis, Medendorp, & Crowe, 1995; Koertge et al., 2003; Silberman et al., 2010; Yang et al., 2011). Only two of the studies reviewed did not show significantly reduced cholesterol levels when comparing vegetarians to non-vegetarians, both of which used very small sample sizes and had flawed methods. The first compared 24 rural vegetarian males to 15 urban non-vegetarian males, and the second compared 26 vegetarians to 26 omnivores. However, the “vegetarians” did not include any who ate a primarily plant-based diet; in fact, seven of them ate fish and/or chicken, and they all consumed eggs and/or dairy (Ingenbleek & McCully, 2012; Karabudak, Kiziltan, & Cigerim, 2008).

As part of a China Study, researchers found that in rural Chinese who consumed a primarily plant-based diet (i.e., only 10% of the average animal-protein intake of the United States, half the fat intake, and three times the fiber intake), total cholesterol levels were 127 mg/dL on average, compared to the U.S. average of 203 mg/dL for individuals between the ages of 20 and 74 (Campbell, Parpia, & Chen, 1998). Though this was an observational study, the findings are substantiated by a high-quality RCTs.

Ornish (1998) and colleagues demonstrated in their five-year RCT that patients’ LDL decreased 40% in one year and at the five-year follow-up maintained a 20% reduction over baseline; the control group obtained a similar benefit with a 19.3% reduction at five years. Sixty percent of the control group was taking cholesterol-lowering medications, while none of the experimental group was on medication (Ornish et al., 1998). Similarly, after one year, researchers in the Lifestyle Heart Trial saw reductions in total cholesterol from 195 mg/dL to 179 mg/dL (men) and from 218 mg/dL to 200 mg/dL (women); in LDL from 120 mg/dL to 104 mg/dL (men) and from 132 mg/dL to 111 mg/dL (women); and in HDL from 35 mg/dL to 34 mg/dL (men) and from 44 mg/dL to 45 mg/dL (women); no statistically significant difference in triglycerides was identified (Koertge et al., 2003).

An RCT with 120 participants between the ages of 30 and 65 compared a control group assigned a low-fat diet and an experimental group placed on a “low-fat-plus” diet. Though the low-fat-plus diet was not entirely plant-based, participants were encouraged to consume greater amounts of vegetables, legumes, and whole grains. The findings were that the group consuming more vegetables, legumes, and whole grains decreased their total cholesterol by 17.6 mg/dL, compared to the low-fat group who decreased theirs by 9.2 mg/dL; there was a similar reduction in LDL of 13.8 mg/dL and 7.0 mg/dL, respectively. Neither group showed statistically significant changes in HDL or triglyceride levels (Gardner et al., 2005).

Another study was able to demonstrate how quickly these reductions in cholesterol levels occur. In just 21 days, 43 participants reduced their total cholesterol from 171.07 mg/dL ± 4.57 to 138.69 mg/dL ± 4.39 and their LDL-C from 98.38 mg/dL ± 3.89 to 76.07 mg/dL ± 3.53. Though HDL-C also decreased, it only did so minimally from 55.65 mg/dL ± 2.50 to 47.58 mg/dL ± 2.19, thus maintaining its protective effects (Bloomer et al., 2010).

In order to provide greater generalizability of results, a large (N=2974), diverse, multisite study evaluated participants at three months and 12 months. The results again demonstrated improved lipid panels with a plant-based diet. Total cholesterol decreased by 14.9% and remained 6.2% lower than baseline after one year; LDL decreased by 17.6% and remained 7.5% lower than baseline. Though HDL decreased by 12.9% at three months, after one year it was only down 1.1%, hence explaining some of the rebound of total cholesterol (Silberman et al., 2010).

Though the longest study discussed above followed patients for five years and showed that there was some tendency for cholesterol levels to increase mildly over time, there is a small, longitudinal study in which a physician followed a group of patients on a plant-based diet for over 12 years. In that study, patients maintained a total mean cholesterol level of 145 mg/dL. Of the patients in this 12-year study, 100% of them (N=11) had no angiographic evidence of worsening disease, and 73% (n=8) actually saw disease regression (Esselstyn, 1999). Disease arrest and regression should be the aim of care provided to patients, not the current system of disease maintenance.

**Vessel Function**

Intima-media thickness (IMT), which is defined as the distance between the intimal-luminal interface and the medial-adventitial interface, is a predictor of future coronary events (Polak et al., 2011). Researchers comparing vegetarians to a control group of healthy, age-matched...
omnivores found that IMT was thinner in the vegetarian group (0.59 cm ± 0.16 versus 0.63 cm ± 0.10, p < 0.05), even after controlling for age, smoking, drinking, and medical history (Yang et al., 2011). Another measure of artery function is flow-mediated dilatation (FMD), which is an ultrasound measurement of brachial artery diameter before and after inflation of a sphygmomanometer cuff to 250 mm Hg; this correlates with coronary endothelial function (Raitakari & Celermajer, 2000). As part of the Multisite Cardiac Lifestyle Intervention Program, researchers compared 27 patients who were placed on a plant-based diet and instructed on lifestyle interventions to 20 matched participants receiving care as usual. In addition to improvement in risk factors such as total cholesterol, LDL, and CRP, they also found that FMD improved significantly in the experimental group; whereas during that same 12-week period, FMD worsened in the care-as-usual group (p < 0.0001) (Dod et al., 2010).

In addition to decreased IMT and increased FMD, patients with severe CHD also experienced decreases in mean arterial stenosis. In this study patients experienced a 7% decrease in stenosis (95% CI, 3.30–10.7, p < 0.05). Moreover, in 11 of the 22 participants disease was clinically stopped; 11 of the 25 originally identified lesions regressed, the remaining 14 remained stable, and none of the patients had a new myocardial infarction. Interestingly, of the 11 patients who remained in the study for more than five years, six of them continued following a plant-based diet and experienced no further cardiac events, whereas the five patients who were no longer following this diet reported 10 cardiac events (Esselstyn et al., 1995).

Though the above study is small, its longevity and scientific rigor make it clinically significant. If angiographic evidence of CHD can be significantly reversed with lifestyle intervention, it may be possible to delay, or avoid, surgical interventions that significantly impact quality of life. This is exactly what a research team sought to investigate as part of the Multisite Cardiac Lifestyle Intervention Program, previously described. This study showed that 89% of patients who were eligible at the start of the study to receive revascularization procedures managed to successfully avoid this surgery with intensive diet and lifestyle changes; and at 12 weeks, even with avoiding revascularization, there were still more cardiac events in the usual-care group than in the experimental group, with this increased risk maintaining significance over three years (Pischke et al., 2010).

**Mortality**

A large (N=98, 469 [38,180 men and 60,289 women]) study sought to determine if there was a correlation between flavonoid intake and cardiovascular-related deaths in the United States. The researchers found that flavonoids, which are found in fruits and vegetables, significantly reduce cardiovascular- and stroke-related deaths. This effect is dose dependent with greater flavonoid intake lowering the risk of fatal CHD. Individuals with the highest flavonoid intake had an 18% decrease in mortality from CHD, with even greater benefit noted in reduction of stroke-related deaths (McCullough et al., 2012). Individuals following a plant-based diet consume the greatest amount of fruits and vegetables, which explains why these individuals live longer and suffer from fewer cardiovascular-related deaths. A large (N=10,802) prospective study demonstrated decreases in all causes of cardiac-related mortality in vegetarian and vegan participants when compared to their omnivorous counterparts, with the greatest protection in those who consume the highest amounts of green vegetables (high in flavonoids) and nuts (Mann, Appleby, Key, & Thorogood, 1997). These findings are consistent with earlier studies showing that a plant-based diet decreases CHD-related deaths (Esselstyn, 1999; Esselstyn et al., 1995), as well as with a large-population-based study comparing the risk of mortality between a population following a primarily plant-based diet and a population following the standard American diet (a largely meat-based diet, with three times less fiber and twice the amount of fat); findings showed that U.S. men on the standard American diet had a 16.7-fold greater risk of death from heart disease and women had a 5.6-fold greater risk (Campbell et al., 1998).

**Quality of Life**

**Angina**

A five-year RCT was able to demonstrate that when participants with moderate-to-severe CHD changed their diet to a primarily plant-based diet, in conjunction with lifestyle changes, angina decreased 91% over the course of a single year and maintained a 72% reduction over baseline by year five. By comparison, those in the control (care-as-usual) group experienced a 186% increase in angina at year one and only a 36% decrease over baseline by year five (Ornish et al., 1998). Not surprisingly, the aforementioned study was also able to demonstrate a significant reduction in cardiac events, with only 25 events occurring in the experimental group over five years, and nearly double that number occurring in the control group risk ratio (RR) 2.47 (95% CI, 1.48–4.20). Though the RCT had a relatively small sample size, several studies since have demonstrated similar findings. A large study (N=1152) found that after just 12 weeks of following a plant-based diet, 74% of patients who had angina at baseline became angina free. Furthermore, an additional 9% of men and women who suffered from severe angina were able to reduce their angina to mild, thus no longer experiencing significant activity limitations (p < 0.01) (Frattaroli, Weidner, Merritt-Worden, Frenza, & Ornish, 2008). These findings are consistent with those of the Lifestyle Heart Trial, which found that angina decreased in men and women considerably when they switched to a plant-based diet for one year. The number of men experiencing angina dropped from 42% to only 20%, and the number of women decreased from 53% to only 27% (Koertge et al., 2003).

**Exercise Capacity**

Angina significantly impacts quality of life, so as health care providers, one of our many patient-centered goals should be utilization of an evidence-based method to decrease this symptom of CHD. One could...
hypothesize that decreased pain will also increase the ability of patients to become compliant with recommendations to increase exercise, which is exactly what researchers found in one study (Koertge et al., 2003). In fact, in another large prospective study, Silberman et al. (2010) demonstrated a 153.7% increase in weekly exercise after 12 weeks. Even more significantly, participants continued to demonstrate a 118.8% increase over baseline after one year.

Addressing Common Concerns

There are many common concerns regarding vegetarian or vegan diets. Though the purpose of this article is to address the benefits of this diet and lifestyle for prevention and reversal of heart disease, it would be prudent to briefly address a few of these concerns, so that practitioners can feel confident in prescribing this diet to their patients. Of significance is the American Dietetic Association’s support of this dietary choice: “It is the position of the American Dietetic Association that appropriately planned vegetarian diets, including total vegetarian or vegan diets, are healthful, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases” (Craig & Mangels, 2009, p. 1266).

Homocysteine

Some researchers have raised concerns over greater homocysteine levels in vegetarians, which may contribute to increased morbidity and mortality (Ingenbleek & McCully, 2012). Some studies have demonstrated that hyperhomocysteinaemia is indeed higher in vegetarians (12.6 μmol/L ± 5.97 versus 10.8 μmol/L ± 3.72, p < 0.05). Researchers also found that serum B12 levels were a significant predictor of hyperhomocysteinaemia, thus concluding that if those who were supplementing with B12 were not included in this analysis, this risk factor might not exist (Karabudak et al., 2008). Moreover, there has been evidence to demonstrate that the vegan lifestyle actually decreases homocysteine levels. A study of 40 participants showed a decrease from 8.66 μmol/L to 7.53 μmol/L (SD 2.12; p < 0.0001) after one week on a vegan diet. Patients who had the highest homocysteine levels before this dietary change experienced a 19% reduction, and, most significantly, those with diagnosed CHD experienced a 20% reduction in homocysteine levels (DeRose et al., 2000). Homocysteine levels may be a factor to monitor when switching patients from their current diet to a plant-based diet, though there is currently not enough evidence to support the necessity of this.

Protein

Lack of protein is commonly voiced as a concern for those switching from a diet that included meat and dairy to one that is plant-based, since there is a common misconception that those are the only or main sources of protein. Research has shown either no differences in serum protein levels or minimal differences between vegetarians and omnivores (Bloomer et al., 2010; Karabudak et al., 2008). Furthermore, the American Dietetic Association agrees that a plant-based diet can meet all protein needs when a variety of plants is consumed, confirming that the older recommendation of eating complementary protein sources to obtain all essential amino acids is no longer supported by research (Craig & Mangels, 2009).

B12

B12 levels are lower in individuals following a plant-based diet (200.5 ± 137.28 compared to 269.1 ± 235.24). This is because B12 is not found in any sufficient amount in plant-based foods, though it can be obtained by consuming fortified foods (e.g., plant-based milks, cereal, or Red Star Vegetarian Support nutritional yeast) or by taking a regular B12 vitamin (Craig & Mangels, 2009; Karabudak et al., 2008).

Calcium

It is commonly thought that calcium is best obtained from dairy products in order to reduce the risk of osteoporosis; however, studies have shown that the highest rates of osteoporosis are in countries that consume the highest amounts of dairy. This is thought to be related to metabolic acidosis, which occurs when consuming dairy, thus leaching calcium from the bones in order to neutralize its effect (Campbell & Campbell, 2006). Bloomer et al. (2010) were able to demonstrate no difference in calcium levels in participants who adopted a plant-based diet (9.4 mg/dL ± 0.1 versus 9.5 mg/dL ± 0.1). Excellent plant-based sources of calcium include broccoli, collard greens, and kale, which have a 40% to 60% bioavailability, whereas milk only has a 30% to 35% bioavailability; other sources include fortified juices, tofu, and certain nuts, seeds, and beans (Craig & Mangels, 2009).

Conclusion

Cardiovascular disease affects 600,000 individuals each year in the United States and is responsible for health care expenditures of $108.9 billion each year; when including the cost of both heart disease and stroke, direct and indirect costs for 2008 were nearly $300 billion. Inasmuch as research has consistently shown that following a plant-based diet has a greater benefit than pharmaceutical intervention, resulting in dramatically lower costs, prescribing the plant-based solution to patients should become one of the gold standards of care.

Although the norm in the United States is to prescribe multiple pharmaceutical agents for patients who are either at risk for, or already have, coronary heart disease (CHD), this article has proposed that health care providers should discuss the benefits of following a plant-based diet as an alternative or supplementary approach. As discussed, some research studies have shown that plant-based diets can prevent CHD through mitigation of risk factors (i.e., hyperlipidemia, hypertension, obesity, and inflammatory biomarkers), as well as reverse stenosis that has already occurred, and improve flow-mediated dilatation, resulting in improved quality of life.

Though exercise, meditation, and cessation of smoking are understated in this article, they are not meant to be ignored and should become part of the patient’s lifestyle changes.
Improving Cardiac Outcomes and Decreasing Health Care Costs

REFERENCES


The Effects of Stigma on Health Service Utilization and Health Outcomes Among Adults With Chronic Depression

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Abstract

Background: The effects of stigma on mental illness have long been studied and researched; however, little research has focused on the effects of stigma on service use among people with depression. Stigma leads to negative attitudes about mental health treatment and discourages individuals who need treatment from seeking treatment. The conceptual underpinnings of this research study drew on an established framework by Parker and Aggleton that recognizes the role of stigma as a factor for altering service utilization. The purpose of the study was to explore the lived experiences of individuals with chronic depression regarding the effects of stigma on health service use. The main research question addressed the recall and articulation of the different effects of stigma on service use and responses to the experiences.

Methods: A phenomenological qualitative method was used to understand and explore the participants’ lived experiences of the phenomenon. Telephone screening was used to recruit volunteer participants. A sample of 27 was obtained. Of the 27 projected participants, a purposeful sample of 12 was selected for the study using an eight-question face-to-face interview. A thematic approach to content analysis was used to analyze participants’ qualitative responses or comments.

Results: Individuals with depression suffer a great deal of stigma while seeking mental health services. Several themes emerged from the participants’ responses: feelings of shame, fear, lack of trust and support, distrust within the treatment system, lack of confidence, lack of relationships and intimacy, and lack of communication. Feelings of shame were the most prominent from the analysis.

Conclusion: Increase in awareness, increase in understanding of stigma effects on service use, easier access to health insurance, and the integration of both medical and mental health services under one common entity will not only help save money and lives, but will also improve help-seeking behaviors of individuals with mental illnesses such as depression, contributing to positive social change. Suggestions for this change included comprehensive professional collaboration between medical services and mental health services.

Keywords: stigma, mental illness, depression, service utilization, health outcome, New York City

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Background

The effects of stigma on mental illness have long been studied and researched; however, little research has focused on the effects of stigma on service use among people with depression. Stigma theory posits that psychiatric labels activate negative images about mental illness that are applied to the individual bearing that label by others or by him or herself (Link, Cullen, Struening, Shrot, & Dohrenwend, 1989). The resulting stigmatization has been identified as one of the most significant barriers to mental health treatment (Connor & Colleagues, 2010) and contributes to poor-quality care.

A full one quarter, that is, 25%, of Americans suffer from mental illness in any given year (Gluck, 2013). With an age of onset of about 14 years old, this is a significant portion of the population, but some experts put the estimate closer to one third, explained Gluck. She added that these experts claim that the stigma of mental illness prevents many people from seeking help, making their estimate of 33% more accurate assessment. According to the National Institute of Mental Illness (NIMH), in 2012 there were an estimated 9.6 million adults age 18 or older in the United States with severe mental illness (SMI) in the past year.

Stigma is a major impediment to young people seeking help for mental disorders (Yap, Reavley, Mackinnon, & Jorm, 2013). Understanding the diverse effects of stigma or labeling on mental illness and services utilization is an important first step to developing service processes that are sensitive to individuals with mental illness (U.S. Department of Health and Human Services, 2001). The development of services that meet these criteria will lead to improved health outcomes, but the stigma surrounding mental illness keeps many of those afflicted from ever receiving treatment (Walker, 2010). Yap et al. (2013) suggested that to reduce stigma and improve help-seeking, a better understanding of the influences on different components of stigma for different disorders is required.

About 30 million Americans are both indigent and uninsured, and of that number, 7.6 million will require some kind of mental health care in the course of any given year, according to the National Council for Community Behavioral Healthcare (Walker, 2010). State mental health agencies serve 6.3 million people a year on a combined budget of $34 billion. States such as New York and Pennsylvania have no provision in their budgets for mental health care for the indigent, according to a state-by-state evaluation of services by the National Alliance on Mental Illness (Walker, 2010).

The concepts of stigma and/or discrimination have occupied an important niche in the American conceptualization of what it means to be living with a mental illness. Stigma, defined as a label that sets a person apart from others, links him or her with undesirable characteristics and leads to rejection or avoidance by the society, is common toward the mentally ill (Mojtabai, 2009). According to labeling theorists, in defining the self, it is viewed as a social process subject to the reactions of others (Becker, 1963; Cooley, 1962; Down, Robertson, & Harrison, 1997; Mead, 1934). Formal labeling of individuals with mental illness is a result of assessment and diagnosis by professional clinicians or health practitioners. Informal labeling includes categorization by nonprofessionals, such as friends, family members, acquaintances, neighbors, or complete strangers. Over time, stigma or labeling can become self-fulfilling.

Goffman’s classic work of 1963 suggested that stigma can lead to isolation and diminished access to health care, according to Sandelowski, Lambe, and Barroso (2004), and much of Goffman’s (1963) work is still highly relevant today (Byrne, 2001). His study of stigma re-conceptualized the term with reference to social interactions, deviance, and exclusion. Goffman asserted that certain individual traits could spoil one’s identity, both in the eyes of the person who possesses that trait as well as in the eyes of other individuals in society. These multiple applications of stigma provide useful opportunities to view the relationship between stigma and mental illness. Stigma has been largely attributed to underutilization of mental health services and early termination of mental health treatment (Pinto-Foltz & Logsdon, 2009). The intent of this study was to understand and explore how stigma impacts health services utilization patterns and health outcomes among adult individuals with mental illness, with a focus on chronic depression.

Method

A qualitative phenomenological approach was chosen because it gives more precise descriptions of content in collaborative challenges experienced by the selected participants. Telephone screenings were used to recruit projected participants. There were 27 projected participants. Phenomenological qualitative data were collected from a purposeful sample of 12 participants selected from the 27 using an eight-question, face-to-face, unstructured interview. The phenomenological research method is an explanatory approach that warrants a personable description of the situation through the individual participants’ lenses. The exploration of these participants’ lives and experiences brought to life the pure phenomena of experiences as reflected, described, and realized through the voices of these informants (Williams, 2014) with chronic depression. This approach allows the researcher to explore the individual’s personal description of the central phenomenon through examination. As a result, participants were able to describe their lived experiences with stigma on service use while seeking mental health treatment. The strength of qualitative research lies in its validity or closeness to the truth.

Description of Study Setting and Participants

The catchment area of East Harlem Pathways Assertive Community Treatment Program in New York City, where the study was conducted, serves citizens with severe mental illness and who have co-existing problems like homelessness, substance abuse, tobacco and alcohol abuse, and/or involvement with the judicial system. The focus of the study consisted of selecting 12 individuals who had carried a clinical diagnosis of depression for at least 2 years, so that their condition could be classified as chronic; had experienced stigma while seeking mental health; and had a score of 50 or higher on the Global Assessment of Functioning (GAF) scale. This preliminary study was based on an initial pilot (Table 1).
TABLE 1 Demographic Data

<table>
<thead>
<tr>
<th>Participants</th>
<th>Gender</th>
<th>Age</th>
<th>GAF</th>
<th>Ethnicity</th>
<th>Chronic Depression</th>
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<td>62</td>
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<td>Yes</td>
</tr>
</tbody>
</table>

Pseudos:
- AA – African American
- H – Hispanic
- F – Female
- M – Male

Purpose of the Study

The purpose of the pilot study was to test the feasibility, tools, clarity of procedures, understandability of the questions, and easiness in answering them. Participation in the study was strictly voluntary. While each participant received a New York City round-trip MetroCard ($4.50) and a snack was served, there was no monetary compensation involved to participate. The unstructured, face-to-face interview lasted between 60 and 90 minutes for each individual participant, and was audio-tape recorded and transcribed for further analysis.

Research Questions

The goal of this phenomenological research study was to develop a deep understanding of the complex realities experienced by the informants. The main research question was: How does stigma interfere with service use, thus affecting the everyday lives of those living with chronic depression? To address the main research question, the eight interview questions were as follows:

1. What were your thoughts when you first learned you had (or were diagnosed with) major depression?
2. How did you feel about telling anyone that you had depression?
3. What is stigma to you?
4. How did people around you react when they found out you were diagnosed with depression?
5. How has stigma affected you since you found out that you had depression?
6. How would you describe your depression and mental health treatment?
7. Were there situations in which you felt excluded or misunderstood because of your depression? If so, please tell me about those memories. If the memories are unpleasant, how do you cope with the distress?
8. Have you had a negative experience in treatment or in your attempting to seek treatment that you believe is due to your depression? If so, please tell me about the experience.

Instruments and Data Collection

Systematic text condensation is a process where a fully transcribed text is read as a whole and condensed into meaningful themes, through categorization and coding. The researcher worked through the answers looking for patterns to emerge, reducing the volume of raw information, sifting trivia for significance, and identifying significant patterns to communicate the essence of what the data reveal. All data were subjected to phenomenological analysis using a methodology presented by Berg (2001). The themes of meaning were sorted into categories to describe the participants’ experiences in regard to the phenomena being studied. These themes were as follows: feeling of shame, feeling of fear, lack of trust, lack of confidence, lack of support, lack of relationships and intimacy, distrust of the treatment system, and lack of communication. A feeling of shame was the most prominent from the analysis.

The Walden University Committee for Research Ethics and the Walden University Internal Review Board (IRB) approved this research study, and every participant signed an informed consent form. The IRB approval number is 10.13.11.0130311.

Results

The participants shared their experiences about being stigmatized while seeking mental health care. Meaningful statements were parceled out from their interview responses. From the analysis, several thematic clusters emerged (Table 2). All the participants reported experiencing feelings of shame upon being diagnosed and during the course of their depression.

Three of the 12 participants reported that they felt ashamed but relieved by the news: two stated that they felt validated; two reported expressing shame and anger; one reported feeling pure shame and embarrassment; one reported feeling hurt; and the remaining three reported feeling inadequate and thought that was the end of living for them. Participants were asked about their reaction when they were first diagnosed with depression. They were shocked by the news because they did not fully understand the reasons they were feeling down most of the time; had little pleasure in doing things; were sleeping for longer hours; and did not want to get out of bed. Participants who reported those experiences also reported sleep disturbances and changes in energy. Below are two of the responses denoting participants’ reactions when they were first diagnosed with depression:

“...When I learned I have depression, I disappeared from my family and the public view; kept quiet about the reason for at least six months because my focus was mostly on the shame that often accompanies mental illness. Everybody thought I took a long vacation. At work, they thought I was on a sort of leave of absence, but all of this time, I was just hiding for the fear of being labeled.”

“My first reaction was relief because the way I felt had a name; it wasn’t just a figment of my imagination or due to me being...
The Effects of Stigma on Health Service Utilization and Health Outcomes Among Adults With Chronic Depression

I don’t feel like it’s put me in a box, perhaps because I don’t confess my condition to too many people. Diagnosis has allowed me to have higher rate detection when I am slipping. I would say good luck to other fighters of this condition.”

Fear of exposure and fear of what others would say and think about them after being diagnosed with depression was prevalent for all participants from their responses. One participant said:

“I have a natural fear of abandonment. I was reluctant to tell anyone, family, friends, or co-workers about my depression due to fear of rejection. I am afraid of ridicule: I found that...even though you be may be close to someone at work, you can’t really tell them real personal stuff, because you are scared they are going to take the mickey or go and tell someone else about it. I was mostly afraid of being stigmatized or labeled as having mental illness.”

Some participants expressed lack of trust but said they have faith in God. One participant said:

“I have become very good at hiding my depression because I don’t trust anyone. In fact, I am sure that people don’t realize what’s going on. I did not say anything to my family ‘cause I thought they would be appalled, actually. They are very, very moralistic—my mother in particular. The whole idea of not working, not earning a living, being on benefits like social security or anything is appalling as far as she is concerned.

“It’s no good to let too many people know about your depression because they may write it down somewhere and somebody could find out or use it against you later....”

Lack of support, lack of confidence, lack of relationship and intimacy were also very significant in this research study. Below are some excerpts from participants:

“I learn that being honest about my feelings and needs can be dangerous. And because of that, I find out it’s better to remain quiet or just lie.”

“There are a lot of misconceptions and prejudice about depression out there.... My own family accused me of being lazy and not depressed.”

“I am 49 years old and have struggled with depression since my teens. I’ve never had an intimate relationship and at this stage of my life, I don’t expect I ever will. Nothing is as good as it could be. Even the sweetest emotion is polluted with sadness.”

Another concern of participants rests on the distrust they have in the health care system regarding treatment. Some patients report recollections of unpleasant memories in which they felt excluded or misunderstood due to their depression and their coping mechanisms with the distress. Here are what some patients had to say:

“I was in the hospital and the people just make me feel like I am a thing in the computer. They don’t even look at me in the eyes. They only look at the computer, like I am nobody to them. The machine is more important. They pay more attention to the computer than to me.”

“Going to doctors to me is a waste of good insurance money and waste of my time that I would rather spend with my grandchildren. I don’t think there was anything any doctor could do to help me.”

“My doctor once recommended that I consider electroconvulsive therapy treatment. He did not communicate the risks of the treatment with me. I end up with memory loss. I also believe I have memory loss when I am depressed as I don’t seem to form memories.... I have re-read some of my journals and don’t recall much of what I wrote while depressed. I don’t know if the memory issues are short-term or if there is a brain damage issue.”

**TABLE 2 Thematic Matrices for Each Participant Interview**

<table>
<thead>
<tr>
<th>Participants</th>
<th>Shame</th>
<th>Fear</th>
<th>Lack of Trust</th>
<th>Lack of Support</th>
<th>Lack of Confidence</th>
<th>Lack of Intimacy &amp; Relationship</th>
<th>Distrust of the System</th>
<th>Lack of Communication</th>
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</thead>
<tbody>
<tr>
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<td>--</td>
<td>+</td>
<td>+</td>
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<tr>
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<td>+</td>
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<td>+</td>
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<td>++</td>
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<td>++</td>
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</tr>
<tr>
<td>P112</td>
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<td>+</td>
<td>+</td>
<td>++</td>
<td>--</td>
<td>++</td>
</tr>
</tbody>
</table>

+: Indicates a positive response to themes

++: Indicates a positive reaction to themes and subthemes

--: Indicates a negative response to themes
The Effects of Stigma on Health Service Utilization and Health Outcomes Among Adults With Chronic Depression

Discussion

The extent of each individual’s response(s) with regard to their experience with help-seeking was examined in detail. The participants were suffering not only from depression, but also from mistreatment at the hands of health professionals who were perceived as shutting them down from seeking the help that they so desperately needed.

The results of this study revealed that being stigmatized or the fear of being labeled as mentally ill are associated with feelings of discouragement from people with depression when seeking mental health treatment. The results of this study denoted a wide range of emotions expressed by participants while seeking help for their depression. Stigma continues to be a burden for people with mental illness, especially those who suffer from depression. Consistent with past research and the stigma theory (Benbow, 2009; Corrigan et al., 2013; Dinos et al., 2004; Pedersen et al., 2010; Rao et al., 2013), participants in this study reported various emotions interfering with help-seeking, such as shame, fear, secrecy, lack of trust and confidence, lack of socialization leading to lack of relationships and intimacy (Table 2). The fundamental claim of the stigma theory is that stigma is the consequence of a constant, undesirable feeling, and it is described as a subjective experience (Goffman, 1963) and a challenge to one’s humanity (Dovidio et al., 2000).

One participant said:

"Once you are stigmatized, you cannot put stigma aside. It’s one of the key things, I think, that I have to deal with. And there is a heightened stigma regarding depression and mental illness in African American communities, as there is in most minority communities.”

Another participant explained:

"Stigma has softened from what it was decades ago. However, it still exists and affects millions of people with depression, like myself, and stigma will follow you wherever you go. I am 54 years old; I have cycled in and out of depression since my late teens.”

The psychiatric label strips people of their identity, activates negative images about their mental illness, and traps them into a deviant role which ends up producing more harm than good (Scheff, 1966). Below, the response of an African American male participant coincided with the claim of the labeling theory:

"I had one episode being loud with a neighbor, but I didn’t touch him. He beat me up then called the police. Although I was the one who got beat up, I was also the one who was locked up because of my rap sheet with the law. I have been in jail a few times for petty larceny, misdemeanor not felony, but that’s all it takes to get me locked up for anything, whether I am guilty or innocent. When people see me now, they automatically think that I am a troublemaker.”

Beyond any definition, stigma or labeling has become a marker for adverse experiences. Based on the literature, stigma is not just a word but a toxic concoction of ignorance and fear, of prejudice and power play, that continues to have a real and substantial impact on the daily experiences of thousands of people: in relationships with friends and family, in attempts at finding and keeping employment, in having relationships and intimacy, in attempts at finding proper housing, in obtaining insurance, and even in accessing health care. The participants expressed such courage and bravery as they responded openly to eight thought-provoking questions about this connection by sharing details of their very personal situations and experiences.

Limitations

This research study had limitations in its use of a semi-structured interview with single questions for assessment of different factors of burden and of psychological distress, but it also had the strength of exploring themes not previously approached. Another limitation included the small sample size compared to the general population (Rudestam & Newton, 2001). Other limitations included: including only English-speaking individuals living in New York City, including only outpatient individuals with a diagnosis of chronic depression or a duration of two years with depression, and including only members of a community-based mental health program. Finally, the truthfulness of the selected participants and influence from non-related events were viewed as limitations to this study as well. Therefore, the generalizability of this study is limited and comparative link with other study results may be limited as well.

Conclusion

The results of this study can inform mental health leaders regarding the need to create a platform that acknowledges the prevalence and raises awareness of stigma in the mental health care system. These practitioners need to set policies, regulations, and directives that would prevent and/or reduce stigma under their leadership. One possible approach could be to emphasize and focus on the need to address people’s reservations about help-seeking for depression, both from informal and professional sources, and modify the beliefs and responses of potential help sources. The implications for further research in the area of stigma on service use for individuals with mental illness, especially depression, would advance our knowledge in the area and serve as a platform to reduce these negative feelings toward seeking mental health treatment. Theories often suggest what needs to be changed in order to generate behavior modification and do not focus on how this can be induced. The desired social change objective to report the effects of stigma on service use would create a forum to promote appropriate behavior in help-seeking, especially among individuals with mental illness, regardless of the diagnosis.

Closing the knowledge gap is only part of the answer, however. Those who stigmatize are unlikely to attend educational events. Even assuming the message reaches all targets, education alone cannot change centuries of folklore and prejudice. It is not easy to live with a mental illness, especially depression. This research study clearly presents consciousness-raising points upon which measures can be taken to really determine which strategies or interventions would help reduce stigma on service use for individuals with depression. Stigma is a serious problem and is a barrier for achieving life goals in those with mental illness, including those with depression. Although it is difficult to think of an array of social policies that could be designed to eliminate stigma, through continued effort and advancements in research, progress can be made in reducing stigma that will not only relieve the millions of people and families that suffer from depression, but also lead to healthier communities.
REFERENCES


Opinion Article:

Unionized Nurse Leaders Assert a Greater Influence Over Working Conditions and Quality of Patient Care

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Nancy D’Leema, RN
Cathy Narcavage-Bradley, MSN, RN
Lucille Sollazzo, BSN, RN
Carol Lynn Esposito, EdD, JD, MS, RN

Abstract

Nurses who attend leadership training have the opportunity to become effective advocates and make a positive impact on the nursing profession and patient outcomes. Nurse leaders possess and share a passion and vision of nursing, creating excitement in their work that is often contagious to others. Nurse leaders in unionized environments have the knowledge and skills needed to exercise their united voice, and the power to preserve and secure nursing’s influential contribution to the delivery of health care. Nurse leaders who can mobilize other nurses to build a positive organization by re-energizing and empowering the workforce can restore nurses’ confidence in themselves and inspire them to embrace and initiate the adjustments needed in our ever-changing, chaotic health care system.

Introduction

Recent health care system reforms have begun a paradigm shift for the nursing profession with promises of changing the practice of nurses, expanding current nursing roles, creating new ones, and providing many opportunities for nurses to proactively participate in shaping the future of the delivery of health care within the workplace and the health care system.

Every nurse has the power and, now, the opportunity to impact the nursing profession like never before through day-to-day advocacy for patients, nurses, and the nursing profession (Tomajan, 2012). Today’s rising health care costs continue to fuel discussions and debates at the unit and systems levels about health care disparities and health care reform. As nurses, we believe a compassionate, just, and benevolent society must provide health care for all of its citizens.

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Nursing’s values and ethics obligate its nurses to take responsibility to serve and protect the public’s health interests. Two major ways nurses can protect, promote, and optimize the health of individuals, families, communities, and populations is through health care advocacy and by facilitating communication between health care providers and health care recipients (American Nurses Association, n.d.; Nursing Social Policy Statement, 2010). Thus, all nurses should be actively engaged on some level in the health care reform conversation.

The current-day conversations and debate involve two important pieces of federal legislation, the Patient Protection and Affordable Care Act (ACA) of 2010 and the 2009 Expanded and Improved Medicare for All Act (H.R. 676), commonly referred to as the U.S. Single Payer Bill, along with one New York State initiative: the Delivery System Reform Incentive Payment (DSRIP) program. DSRIP’s purpose is to fundamentally restructure the health care delivery system by reinvesting $8 billion over a five-year period in the Medicaid program, with the primary goal of reducing avoidable hospital use in New York State by 25% over the five years.

The ACA is one of a long line of federal initiatives enacted to address the rising costs of health care. The legislation seeks to obtain value for health care expenditures by increasing health insurance coverage to many more U.S. citizens, by controlling costs and by promoting disease prevention through financial incentives (Kinney, 2011; Sorrell, 2012). The main premise behind the ACA is that if more people obtain health insurance, it will spark competition and stimulate quality care at lower costs. The key problem with that premise, however, is the assumption that health insurance companies, who ultimately want to make money, will reduce costs if more people buy insurance policies. Yet, due to the law’s structure, there is no uniform standard, so individuals will not necessarily have the same insurance options available to them (Roby, Watson, Jacobs, Graham-Squire, Kinane, Gans, Neddleman, & Kominski, 2013). Additionally, the process of choosing is complicated and evidence shows that consumers lack the skill and patience necessary to choose high quality health care products at low prices, and health care insurance firms lack motivation to develop and market higher quality products at lower prices (Sigy, Lee & Yu, 2011). Evidence also shows that a health care system based on competition tends to increase rather than decrease disparity between individuals with money and those without (Fein & Phillips, 2008). Therefore, while the ACA may provide more access to care to some individuals, it can fall far short of supplying access to care for every American.

A U.S. single-payer health care plan essentially would remove profit-seeking insurance companies from the health care decision-making process and provide health care coverage for everyone, regardless of economic status. A single-payer plan establishes a universal, single-tiered, public insurance system with limited or no cost sharing (Gied, 2009). The “New York Health” bill sponsored by Assemblyman Richard N. Gottfried (A.5389-A) and Congressman Bill Perkins (S.2078-A) would provide comprehensive universal health coverage to all New Yorkers. The plan would combine existing payers, including employer-based insurance coverage, into a one-payer framework. This type of plan would eliminate the disparity between individuals with money and those without, thus supplying access to care for every New Yorker.

The DSRIP program, as an outcome of Medicaid Redesign, is premised on the idea that the only way to really control costs is to improve the health of program participants. The DSRIP program calls for a series of innovative solutions designed to better manage care and reward health care providers that help keep people healthy. The New York approach differs from other states, which have relied on taking away benefits from low-income people or by cutting provider payment rates as ways to cut Medicaid costs. The overarching goals of DSRIP are not just about cost control: the overall quality of care and chronic disease management must also be improved.

Leading Change: A Bedside Nurses’ Call to Action

The 2010 Institute of Medicine (IOM) report The Future of Nursing: Leading Change and Advancing Health is a nurses’ call to action. Among the key messages of the report is a demand for nurses to practice to the full extent of their education and training and for nurses to be full partners, with physicians and other health professionals, in redesigning health care in the United States (Buerhaus, DesRoches, Applebaum, Hess, Norman, & Donelan, 2012).

Nevertheless, a large group of non-unionized nurses believe there is a plethora of reasons that are likely to impede nurses’ capacity to assure quality patient care and a safe practice environment. Some of these reasons include oppressed group behaviors, especially workplace violence, a hierarchical system that devalues nursing knowledge and expertise, and a generalized feeling that nurses are powerless to affect change (Clark & Clark, 2009a; Patton, 2013).

The IOM and other professional organizations have proposed that one solution to the problem is leadership training for bedside nurses. Traditionally, bedside nurses have had little educational preparation in leadership, with few opportunities in the workplace to garner these skills (Patton, 2013). Nursing today is, in every sense of the word, a profession. The responsibilities nurses accept on the job every day exceed those of many other science-based professions. Yet nurses have not been perceived by their employers as full partners in health care decision-making. “Nurses today are often still relegated to a narrow and limited role in the healthcare [sic] system that is not commensurate with the vital and critical patient care duties they perform” (Clark & Clark, 2009a, p. 6).

Given the increased pressures by the Centers for Medicare and Medicaid Services for hospitals to improve patient outcomes and patient satisfaction, health care organizations are increasingly in need of effective leadership from not only frontline nursing managers, but also bedside nurses to achieve these industry-wide goals. That being said, and in spite of a plethora of literature linking effective leadership with improved patient outcomes and satisfaction (Dube, Kaplan & Thompson, 2014),
Unionized Nurse Leaders Assert a Greater Influence Over Working Conditions and Quality of Patient Care

research shows that there is a general neglect of leadership development of bedside nurses and that many health care organizations are not investing in the leadership development of either their current or future workers (Balogh-Robinson, 2012).

With the goal of developing an evidence-based program to increase leadership skills in bedside nurses, the New York State Nurses Association (NYSNA) has developed leadership training programs that are dedicated to and designed for nurses to acquire the knowledge and skills needed to exercise their united voice and power to preserve and secure nursing’s influential contribution to the delivery of health care.

The Importance of Effective Leadership

Bedside nurses willingly assume the roles of leader and patient advocate and take these responsibilities very seriously. While there are many challenges confronting bedside nurse leaders today, it must be emphasized that leadership should not be viewed as an optional role for these nurses. Leadership must exist in every health care facility and at every level (Curtis, de Vries & Sheerin, 2011).

Effective leadership in today’s health care environment requires emotional intelligence. Newer nursing models emphasize the importance of relationships, open communication, and mutual understanding. Most complaints about health care practitioners relate to poor communication, not clinical competence, and improving communication in health care is a current area of interest in nursing policy and practice (Ezzatabad, Bahrami, Hadizadeh, Arab, Nasiri, Amiresmali & Tehrani, 2012).

As unionized nurses, we can increase our emotional intelligence and improve our ability to recognize, interpret, and respond constructively to emotions in ourselves and our patients. Our patients and coworkers are social beings and emotional competency is an essential social skill. Emotional intelligence has been shown to positively contribute to the nurse-patient relationship, increased empathy, teamwork, communication, stress management, organizational commitment, nurse career satisfaction, and effective leadership. These are important skills for lifelong learning and professional development. These are essential skills when advocating for a workplace environment within which learning can take place (McQueen, 2004).

Developing Leadership in Bedside Nurses

When you think of a “perfect leader” what comes to mind? You might be picturing someone who is powerful, influential, trustworthy, warm, kind, is easy to talk with, and who always makes careful, informed decisions. Leadership conjures up a variety of thoughts, reflections, and images. A common theme that seems to run through the literature on leadership involves the ability to influence the attitudes, beliefs, behaviors, and feelings of other people (Curtis, de Vries & Sheerin, 2011).

An essential characteristic of nurse leadership is the ability to mentor, promote, and encourage the development of other nurses through role modeling, positive communication, professional behavior, and a commitment to professional excellence. Nurse leaders possess and share a passion and vision of nursing, creating excitement in their work that is often contagious to others.

It is also important for nurse leaders to not be afraid of change, to look outside the box for answers to problems, take risks, challenge existing assumptions, and ask “why not?” Nurse leaders need a fair and strong sense of self that is not easily influenced by the negative opinions, criticisms, and comments of others (Kansas Center for Nursing, 2013).

These concepts are the essential themes for each of the programs developed by the New York State Nurses Association in its leadership programs.

“You don’t have to have a specific title to be a leader, anyone can be a leader. You just have to believe in what you are doing and lead by example,” maintains Gwendolyn Lancaster (personal communication, June 1, 2014).

“NYSNA’s leadership program has helped me to become an influential person in my workplace. I have learned to listen to my colleagues and communicate effectively and boldly with my superiors,” expresses Nancy D’Leema (personal communication, June 1, 2014).

Factors Contributing to Creating Bedside Nurse Leaders

The literature is replete with studies of the behaviors, practices, traits, and characteristics of nursing leaders. The overall conclusions of the studies suggest that leadership in nurses can be developed through educational activities, modeling, and mirroring. Particular traits and characteristics that tend to foster leadership are commitment, openness, responsibility, honesty, compassion, collaboration, influence, courageousness, confidence, good listening skills, good communication skills, and a motivation to manage a situation (Curtis, de Vries & Sheerin, 2011; Tomajan, 2012).

“Nurses who take the opportunity to observe, learn, practice, and model leadership skills can gain greater self-efficacy in nurses’ leadership behaviors,” affirms Cathy Narcavage-Bradley (personal communication, June 1, 2014).

As leaders in health care, bedside nurses can and should educate the public about their rights and what they can do to defend, and in many cases, gain their right to safe, affordable, and quality health care.
“Leadership training programs not only can bring about short-term change in the individual, but also long-term change within the workplace,” reveals Lisa Ma (personal communication, June 1, 2014). She adds, “The sense of empowerment that I have gained through NYSNA’s leadership training has promoted my confidence in the workplace. I am now seen as an influential leader on my unit.”

The Role of the Professional Nurses Union in Advocating for Nursing’s Values

In its Provision 9, the Nursing Code of Ethics speaks specifically to a Professional Nurses Association and its members having responsibility in articulating nursing values (American Nurses Association, 2001). These values include shaping social policy, which translates, in today’s social and economic environment, to a patient’s right to access and receive health care (Matthews, 2012).

The vision of the New York State Nurses Association, a nurses’ union, is that all people have a fundamental right to safe, affordable, and quality health care. As leaders in health care, bedside nurses can and should educate the public about their rights and what they can do to defend, and in many cases, gain their right to safe, affordable, and quality health care. Not only should nurses be educating the public about their rights, but nurses and nurses’ associations should be leading the movement to ensure safe, affordable, and quality health care for all. NYSNA’s leadership program fellows are proud to say that they are helping to lead the movement to keep hospitals open for care in communities that need these hospitals.

Leadership is instrumental to achieving social change. When it comes to shaping social policy or mobilizing the masses, unionized nurse leaders must be involved in the political and social movement in order to truly make an impact. Throughout history, whether it has been about abolishing social norms, overcoming social evils, or modernizing history, social change has been impossible to achieve without the right kind of leadership.

Overcoming Barriers

Leadership training can provide contemporary, unionized nurses with the expertise, the skill, and the knowledge to play a bigger role within the workplace and the larger health care system. Evidence suggests that many nurses desire to make a bigger contribution.

“When nurses join together and approach management with one unified voice, we can influence the decisions involving patient care twofold,” proclaims Lucille Sollazzo (personal communication, June 1, 2014).

From the union perspective, delivering the union message is based on the belief that RNs, as primary health care professionals who deliver direct, around-the-clock patient care, are in the unique and irreplaceable position to contribute to decisions about how to maintain, improve, and enhance the quality of care, as well as to provide significant contributions on how to minimize the cost of care (Clark & Clark, 2009b).

More importantly, there is evidence to suggest that nurse leaders who communicate regularly with management through their union have improved communications and have eased the process of implementing new hospital practices in response to changing market demands in a positive way, and in a manner that protects the quality and safety of patient care (Clark & Clark, 2009b; Preuss, 1999).

Nurses’ Unions Create Workplace Environments that Support Nursing’s Values

Influencing social and health care policy can be daunting goals for nurses as corporations use their wealth to influence these policies. Nevertheless, unionized nurses have the power in strength of numbers and the knowledge of what is in the best interests of patients. They also have the faith of the larger health care community as the public continues to rate nursing as the most trusted profession, according to the 2013 Gallup survey that ranks professions based on their honesty and ethical standards (Swift, 2013).

Over the last 10 to 20 years, nurses’ unions have become the most effective vehicle for giving RNs a greater voice in their workplace and in the national health care system. Nurses have used that voice to harness their power to influence state legislatures to pass laws, to win improvements in their working conditions and their economic situation, and to increase their influence within the interdisciplinary health care team (Clark & Clark, 2009b).

A unionized workplace creates a supportive environment. It is the type of work environment that is conducive to the IOM report Keeping Patients Safe: Transforming the Work Environment of Nurses, which recommends transforming the work environment of nurses to include an environment of trust, active management in the process of change, engaged workers in non-hierarchical decision-making activities, and providing effective leadership to oversee the environmental transformation (IOM, 2004). In this regard, the IOM specifically recognizes the need for strong and capable leadership at every level of the organization if the vision for nursing is ever to be realized.

The IOM report challenges all nurses to take responsibility for individual and professional growth in developing appropriate leadership competencies. Indeed, the report articulates that neither the profession, nor patient care, can advance without developing a renewed focus on the leadership capacities of nurses at every level of practice (Porter-O’Grady, 2011).

Unionized Nurse Leaders and the Challenges of Public Advocacy

While nurses can use their basic leadership skills to inspire and guide health care recipients toward making optimum health decisions, the New York State Nurses Association’s leadership programs train nurses to go beyond the basic leadership skills inherent to nursing practice. The programs are designed to advance and preserve nursing practice by developing leaders that can take on current and future health care challenges. The programs also encourage nurses to move out of their professional comfort zones, seek new experiences and connections, and believe they can make a difference in the world in which they live and practice.

Nurses and nurse leaders can and should become involved in the health care discussion in many ways. NYSNA has developed many
successful programs to mentor and guide nurse leaders in these endeavors.
For example, nurses can join NYSNA’s lobbying efforts. NYSNA provides
travel and training so nurses will have the support they need to effectively
speak with legislators. Telling their patient care stories can add a human
factor to the discussion, since nurses personally witness the effects of
health care disparities. Nurses can also mount letter campaigns to their
local legislators, either individually or as part of a group. Nurses can
also help inform the communities they serve by speaking at faith-based
organizations, schools, and health fairs, and encouraging their colleagues
to do the same. Nurses can help spread the word that universal health
care is essential and attainable.

Preparing Nurse Leaders for 2020

NYSNA’s leadership programs have proactively begun the preparation,
planning, and training of contemporary nurses to become effective leaders
by 2020. “Proactive mobilization and training of nurses will be essential to
having nurse leaders who can respond effectively to the new challenges
and opportunities that will be presented to them in 2020,” pronounces
Carol Lynn Esposito (personal communication, June 1, 2014).

“The leadership program at NYSNA has prepared me with the
essential competencies to positively influence the future of nursing,”
declares Gwendolyn Lancaster (personal communication, June 1, 2014).
These competencies have been articulated by Huston (2008) to include:
1. A global perspective regarding health care and professional nursing
   issues.
2. Expert decision-making skills rooted in empirical science.
3. The ability to influence organizational cultures that permeate
   quality health care and patient/worker safety.
4. The ability to understand and appropriately intervene in the
   political process.
5. Highly developed collaborative and team-building skills.
6. The ability to balance performance expectations with personal
   ethics.
7. The ability to proactively adapt to a health care system characterized
   by rapid change and chaos.

Conclusion

Nurse leaders who can mobilize other nurses to build a positive
organization by re-energizing and empowering the workforce can restore
nurses’ confidence in themselves and inspire them to embrace and initiate
the adjustments needed in our ever-changing, chaotic health care system.

If you want to learn more about NYSNA’s leadership
programs and how you can apply to attend the programs, contact
us at education@nysna.org.
REFERENCES


Early passive mobilization


Muscle loss begins within 24 hours of inactivity in critically ill patients. Mobilization leads to decreased length of stay in intensive care units and improved functional behaviors. Limited research exists on passive range of motion in physiologically unstable patients. The purpose of this quasi-experimental study was to investigate the use of passive-exercise and its effects on pain, cytokine levels, and physiological state of critically ill patients.

A convenient sample of 32 adult patients with a mean age of 56.5 years in 3 critical care units at Orlando Regional Medical Center participated between October 2011 and February 2012. Subjects were more than 18 years-old, intubated for less than 48 hours, expected to remain intubated at least 72 hours, walked before admission, and had capability to monitor blood and vital signs.

When intervention began, 83 percent of patients were sedated with fentanyl, midazolam, or propofol and the mean length of intubation was 38 hours. Participants started with 20 minutes of rest followed by obtaining cytokine levels, mean blood pressure, heart rate, behavioral pain scale, and oxygen saturation. Patients participated in 20 minutes of continuous passive motion (CPM) with measurements taken at 5, 10, and 20 minutes. Measurements were taken again after resting an hour. The CPM involved 20 flexion-extensions of bilateral legs every minute. Data analyzed by repeated measures analysis of variance.

Patient’s physiological responses insignificantly changed. Pain significantly decreased after 5 and 10 minutes of CPM and remained less after 60 minutes of resting (P=.02). A proinflammatory cytokine called Interleukin 6 decreased throughout the exercise (P=.03) while an anti-inflammatory cytokine called interleukin 10 did not significantly change. The ratio of interleukin 6:interleukin 10 significantly decreased after resting an hour post CPM (P=.05) showing passive range of motion does not increase inflammation.

Early passive mobilization with CPM can be safe and result in stable vital signs, and decreased pain without increasing inflammation in critically ill patients. Refer to the *Early Progressive Mobility Protocol* for activity guidelines (American Association of Critical-Care Nurses, 2013).

References


Carly Jesset, Dartmouth Hitchcock Medical Center, Lebanon NH

Peggy Jenkins, Bassett Healthcare, Cooperstown NY
Interprofessional collaboration simulations


Interprofessional collaboration (IPC) has been recognized by the American Association of College Nursing as one of the essentials to baccalaureate nursing education (AACN, 2008). Few studies have investigated repetitive collaborative simulations effect on teambuilding skills. The purpose of this study was to evaluate how well health-care students learned and retained team-based qualities and skills over the course of four interprofessional simulations.

The study was conducted at a Southeastern United States Health Sciences Center and included students in nursing, respiratory, nurse anesthetist, and medical programs. Fifty-two students participated in the fall while 40 remained in the spring. Groups of 1-2 students from each profession participated in high-fidelity code simulations with emergency department patients. Using a quasi-experimental design, trained personnel observed and rated students on team-based qualities using the Communication and Teamwork Skills Assessment (CATS) and Teamwork Assessment Scale (TAS). Students rated their teamwork using the TAS and Mayo High Performance Teamwork Scale (MHPTS).

Results showed that scores increased between the two scenarios in the fall (p<0.05), but between the last simulation in the fall and the first simulation in the spring, the CATS scores increased in coordination and cooperation and decreased in situational awareness and communication. However, between the first and the last scenario, students improved in team-based behavior, shared mental model, adaptive communication and response, and MHPTS scores (p<0.05), as well as in coordination, cooperation, situational awareness, and communication.

Findings indicate that students lost skills in situational awareness and communication when they spent time away from IPC. With repetition, students regained those skills. Incorporating repetitive use of interprofessional simulations for health-care students can teach students about each other’s professions and solidify the skills necessary to productively collaborate. Repetitive simulations can also help students to retain and build upon skills to increase their ability to deliver safe, quality care. The National League of Nursing provides free downloads of simulations for public use (http://sirc.nln.org/).

References


Molly Snelling, Hartwick College, Oneonta, NY
Peggy Jenkins, Bassett Medical Center, Cooperstown, NY
CE Activity: Improving Cardiac Outcomes and Decreasing Health Care Costs

Thank you for your participation in Improving Cardiac Outcomes and Decreasing Health Care Costs, a new 0.5 contact hour CE activity offered by NYSNA. NYSNA members and non-members are invited to take part in this activity, and you do not need to be a resident of New York State.

INSTRUCTIONS:
In order to receive contact hours for this educational activity, participants are to read the article presented in this issue of The Journal, complete and return the post-test, evaluation form, and earn 80% or better on the post-test.

This activity is free to NYSNA members and $10 for non-members. Participants can pay by check (made out to NYSNA & please include CE code RPJTSK on your check) or credit card. The completed answer sheet and evaluation form may be mailed or faxed back to NYSNA; see the evaluation form for more information.

The New York State Nurses Association is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation.

NYSNA wishes to disclose that no commercial support was received for this educational activity.

All planners/authors involved with the development of this independent study have declared that they have no vested interest.

GOAL:
To shift health-care provider awareness towards a more holistic approach in improving cardiac outcomes and decreasing the cost of health care delivery.

OBJECTIVES:
By completion of the article, the reader should be able to:
1. Understand the role of plant-based diets in modifying coronary heart disease risk factors.
2. Apply knowledge to daily practice of counseling patients on coronary heart disease prevention and treatment.

Please answer the questions below. Remember to complete the answer sheet by putting the letter of your corresponding answer next to the question number. Each question has only one correct answer.

The 0.5 contact hours for this program will be offered until January 31, 2019.

1) In the U.S. coronary heart disease (CHD) is responsible for the deaths of how many individuals annually?
   a. 13,000
   b. 25,000
   c. 300,000
   d. 600,000

2) Health-care expenditures related to CHD annually are approximately?
   a. $175,000
   b. $14.8 billion
   c. $109 billion
   d. $167 billion

3) In a large prospective study participants from 24 socioeconomically diverse sites demonstrated 88% adherence to the strict lifestyle/diet modification at 12 weeks. How many of these participants remained in the program at 1 year?
   a. 30%
   b. 45%
   c. 78%
   d. 92%

4) True or False: Individuals with hypertension are four times more likely to die from CVA and three times more likely to die from an MI.
   a. True
   b. False

5) In studying a group of 7th day Adventists, compared to individuals following a plant-based diet, those following a non-vegetarian diet (yet living a generally healthy lifestyle) were:
   a. ~3x more likely to be taking anti-HTN meds
   b. ~2x more likely to be overweight
   c. Less likely to suffer from a protein deficiency
   d. Generally healthier

6) True or False: Statin use has been shown in some studies to increase the risk of falls.
   a. True
   b. False

7) Plant-based diets have been shown to:
   a. Increase intima media thickness and decrease flow mediated dilatation
   b. Decrease mean arterial stenosis by 7%
   c. Decrease angina by 91% at 1 year and 72% at 5 years
   d. B and C only
   e. All of the above

8) When counseling a patient on the benefit of adopting a plant-based diet, the patient asks the nurse what nutrients will need to be supplemented once meat (including fish and chicken), eggs, and dairy are excluded from the diet. The nurse advises the patient:
   a. B12 is not found in sufficient amounts in plant-based foods unless they have been fortified
   b. Certain plant-based sources actually have greater bioavailability of calcium than milk
   c. Serum protein levels have not been found to be significantly different in those consuming plant-based diets and the American Dietetic Association agrees that protein needs can be met following a plant-based diet
   d. The idea of needing to consume “complementary” proteins to obtain all of the essential amino acids is no longer supported in the literature
   e. All of the above
The contact hours for this program will be offered until January 31, 2019.
Please print your answers in the spaces provided below. There is only one answer for each question.

Improving Cardiac Outcomes and Decreasing Health Care Costs

1. ________  5. ________
2. ________  6. ________
3. ________  7. ________
4. ________  8. ________

Please complete the answer sheet above and course evaluation form on reverse.
Submit both the answer sheet and course evaluation form along with the activity fee for processing.

Mail to:
NYSNA, attn. Nursing Education and Practice Dept.
131 West 33rd Street, 4th Floor, NY, NY 10001

Or fax to:
212-785-0429
Learning Activity Evaluation
Improving Cardiac Outcomes and Decreasing Health Care Costs

Please use the following scale to rate statements 1-7 below:

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8. Time to complete the entire CE Activity and the test? _____ Hours (enter 0-99) _____ Minutes (enter 0-59)

9. Was this course fair, balanced, and free of commercial bias? Yes / No (Circle One)

10. Comments:


11. Do you have any suggestions about how we can improve this CE Activity?
Call for Papers

*The Journal of the New York State Nurses Association* is currently seeking papers.

Authors are invited to submit scholarly papers, research studies, brief reports on clinical or educational innovations, and articles of opinion on subjects important to registered nurses. Of particular interest are papers addressing direct care issues. New Authors and student authors are encouraged to submit manuscripts for publication.

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