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ISSUES AND TRENDS IN NURSING ADMINISTRATION: NURSING STAFF SHORTAGE

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ABSTRACT
Nursing shortage is an internationally recognized crisis and the biggest challenge in achieving the health system effectiveness. This paper sought to review literature on issues and trends in nursing administrations. Conceptual Framework for Nurse Shortage; Nursing Role Effective model, community-based model and Moos and Schaefer (1993) integrative conceptual framework and Donabedian (1980) were used to guide the study. The findings revealed that nurse staffing is associated with both nurse and patient negative outcomes. It was recommended that an improvement to nurse's work environments and an increase in incentives may retain nurses in the profession and also attract young people into the profession.

Key words: Nursing administration, nursing staff, health system, nursing shortage.

INTRODUCTION

Nursing shortage is an internationally recognized crisis and the biggest challenge in achieving the health system effectiveness (Buchan& Aikein, 2008). Hence, the worldwide attention on the association between nurse staffing and patient outcomes (Shuldham, Parkin, Firouzi, Roughton, & Lau-Walker, 2009). Furthermore, nurse staffing is also linked to negative staff outcomes (Tervo-Heikkinen, Partanen, Aalto, & Vehvila"inem-Julkunen, 2008; Kane, 2009).

Nurse staffing reflects the ratio of nurses to patients on a hospital ward. The number of nurses is quantified in terms of hours of care given and skill mix; whereas, patent nursing care needs are classified according to patient acuity (Sullivan & Decker, 2009). A shortfall of the required number of staffs indicates staff shortage.

The main cause of nurse shortage is poor recruitment, and retention polices (Buchan & Aikein, 2008). Whereas, the most effective strategy to solve the problem is to institute efficient and effective recruitment and retention measures (McHung, 2010). This remains the sole responsibility of the nurse administrator together with other stake holders.

BACKGROUND AND SIGNIFICANCE

It is estimated that 7 million in patients annually acquire infections while being treated for other conditions and nurse staffing has been implicated (Cimiotti,

Aiken, Sloane, &Wu, 2012). Among this infected patient 1 in every 17 patients die (Klevens, Edwards, Richards, et al. 2007).

The 1990's witnessed the worldwide hospital restructuring and reengineering to achieve higher levels of labor productivity and efficiency in an attempt to, enable hospitals to deliver care at lower cost without decreasing quality of care (Aiken, Clarke and Sloane, 2000). This action worsened the already prevailing problem of nursing shortage. By 2020 it is predicted that the hospital nursing vacancies will reach 29% or 800,000 (American Hospital Association, Commission on Workforce for Hospitals and Health Systems , 2002).Whereas, the nursing workforce is expected to increase by 6% while the nursing care demand is expected to grow by 40% Health Research and Resources Administration, Bureau of Health Professions, National Centre for Health Workforce (2000-2020). Projection indicate a mismatch between the supply and demand of RNs and its demand in many hospitals (Buerhaus, 2008; Buerhaus et al, 2009). Africa and south East Asia have the lowest average ratio of nurse (Buchan & Aikein, 2008).

The main cause of nurse shortage is inadequate workforce planning, allocation mechanism, resource constraints, undersupply of new staff, poor recruitment, retention and retention polices ineffective use of available nursing resources through inappropriate skill mix and utilization, poor incentives, structure and inadequate career support (Buchan & Aikein, 2008). Whereas, the most effective strategy to solve the problem is to institute efficient and effective recruitment and retention measures (McHung, 2010).

Younger nurses are leaving the career for other higher paying professions with better working conditions. In addition, there is a delay in recruitment of new nurses (Steinbrook, 2002) as the baby boomers prepare to retire (Beurhaus, 2000). Nursing workload has increased with decreased length of hospital stay and increased acuities of patients who need highly skilled care. Conversely, the demand of nurses is high whereas the supply lags behind (Cauvorous, 2002).

Hospital restructuring and reengineering of the 1990s resulted in reduction of staff in middle management positions which were replaced with licensed assistive personnel. The consequence of the reengineering was a decline of nurse to patient ratio which has a potential to affect patient outcomes (Heinz, 2004).

Low staffing levels impact on outcomes such as patient mortality, length of stay and enormous patient complications which include pneumonia, shock, upper gastro intestinal bleeding and failure to rescue (Aiken, 2002; Needleman, 2002). Inadequate nurse staffing has been associated with medication errors (Blegen & Vaughn 1998), patient falls (Krauss *et al.* 2005), the spread of infection (Cimiotti, Aiken, Sloane, & Wu, 2012), increased mortality Kane, Shamliyan, Mueller, Dural, & Wilt 2007; and failure-to-rescue (Needleman *et al.* 2002). Hence, patients adverse outcomes are related to higher cost for both the hospital and the patient (Myny at el;2011).

Lankshear, Sheldon, & Maynard (2005) reviewed 22 multisite studies conducted in acute hospitals that adjusted for case mix and they concluded that higher nurse staffing with richer skill mix of registered nurses was correlated with improved patient outcomes. Conversely, Kane, Shamliyan, Mueller, Dural, & Wilt (2007) conducted a study in USA and Canada and found a reduction of length of stay, failure to rescue and mortality rate when patient and hospital characteristics

were adjusted with higher nurse ratio. There was reduced mortality and adverse events where a nurse cared for two or one patient and the nurse care hours per patient per day exceeded eleven. Greater improvement was seen in intensive care units and surgical units. Risk for mortality per registered nurse day was 16% in surgical and 9% in intensive care unit patients. Each additional patient assigned to a nurse was related to an overall risk of 17% for medical complications, 7% hospital acquired pneumonia, 53% respiratory failure. Mortality decreased with approximately 2% for every additional nurse.

It is important to explore the issue of shortage further since it has serious implications to the nursing staff too. Numerous research studies have implicated nurse staffing actions in patient safety (Kane et al., 2007). Therefore, an improvement of nurse staffing levels would improve nurse work environment resulting better patient outcomes and nurse work life (Cohen, Holzemer, & Goerrnberg, 2000). Many research studies have shown evidence of the relationship between poor staffing and poor work environments, nurse burnout, turnover and professional attrition (Aiken, Clarke, Sloane, Lake, & Chang, 2008; Stone et al 2007). Therefore, adequate staffing results to better nurse retention and job satisfaction (Lake & Frizer, 2006; Ulrich, Buerhaus, Donelan, Norman, & Dittus, 2007). Nurses develop stress when they are unable to cope with the excessive workloads. Staff shortage resulting to heavy work load has been cited as the main stressors in the nursing profession. Recent studies revealed that 50-60% of all lost working days is due to occupational stress (cox et al.2000). The intensive care nurses reported shortage of staff as the most stressful stressor (49.6%) Anita, Cuaderes, & Debra (2006).

Staff shortage has been linked with stress as a result of excessive work load which affects the nurse's wellbeing. Kane, (2009) conducted a study to establish the existence and extend of work stress among 106 hospital nurses. The stressors identified were work related, work interactions, job satisfaction and home stress. The causes of stress were job not finishing on time due to staff shortage, conflict with relatives, overtime, and insufficient pay. Common psychosomatic illness identified were acidity, back pain, stiffness of neck and shoulders, forgetfulness, anger and worry in nurse with stress.

In addition, Wu, Chi., Chen, & Jin (2010) found a correlation between occupational stress and chronic disease while Liu at el (2010) reviewed literature which revealed a strong relationship between stress and undesired health outcomes among medical professionals such as coronary disease, hypertension, headache asthma, peptic ulcers lower back pain and mental health. These results to lower work productivity, job morale, higher absenteeism, job dissatisfaction and higher turnover. Consequently, leading to higher operational costs, lower job efficiency and worse quality of patient care service. Sick nurses take sick offs hence reducing the patient care hours.

THE CONCEPT OF NURSE STAFFING

Nurse staffing reflects the ratio of nurses to patients on a hospital ward. Higher ratios are preferable because they indicate better outcomes for patients. Low ratios mean fewer nurses are taking care of more patients. The number of nurses is quantified in terms of hours of care given and skill mix; whereas, patent nursing care needs are classified according to patient acuity (Sullivan and Decker, 2009). A

shortfall of the required number of staffs indicates staff shortage.

Staffing entails providing nurses to provide care to patients. There are two basic types of staffing measures. The first is dividing the number of nurses or nursing services by the quantity of nursing care patient needs. Common examples include patient-to-nurse ratios, hours of nursing care delivered by various subtypes of personnel per patient day (HPPD), and full-time equivalent (FTE) positions worked in relation to average patient census (ADC) over a particular time period (Clarke & Donaldson, 2008). To determine NHPPD hospital ward characteristics are classified as follows; patient complexity, intervention levels, the presence of high dependency beds, the emergency/ elective patient mix and patient turnover (Twigg & Duffield, 2009).

The second measure examines the qualifications of those staff members and expresses them as a proportion of staff with more versus less training (or vice-versa). Staff qualification puts into account the staff mix. These staffs include unlicensed personnel, practical nurses, and registered nurses (RNs). The specific types of educational attained by RNs such as baccalaureate degrees versus associate degrees and diplomas are also considered together years of experience (Clarke & Donaldson, 2008). A high Registered Nurses (RNs) skill mix is required for greater staff flexibility. For example, Licensed Practitioner Nurses (LPNs) and Unlicensed Assistive Personnel (UPAs) can do procedures such as general hygiene, feeding, turning and transferring patients while the RNs can do frequent patient assessment, education and discharge planning (Sullivan and Decker, 2009).

Many researchers have used nurse-reported perception of staffing adequacy and nurse- reported patient workloads to measure nurse staffing levels (Kalish, Friese, Choi, & Rochman, 2011). Although, administrative data raise concerns for data completeness, reliability, and validity (Mark, 2006). However, the results of the findings have been used to make recommendations that have yielded positive results.

CONCEPTUAL FRAMEWORK FOR NURSE SHORTAGE

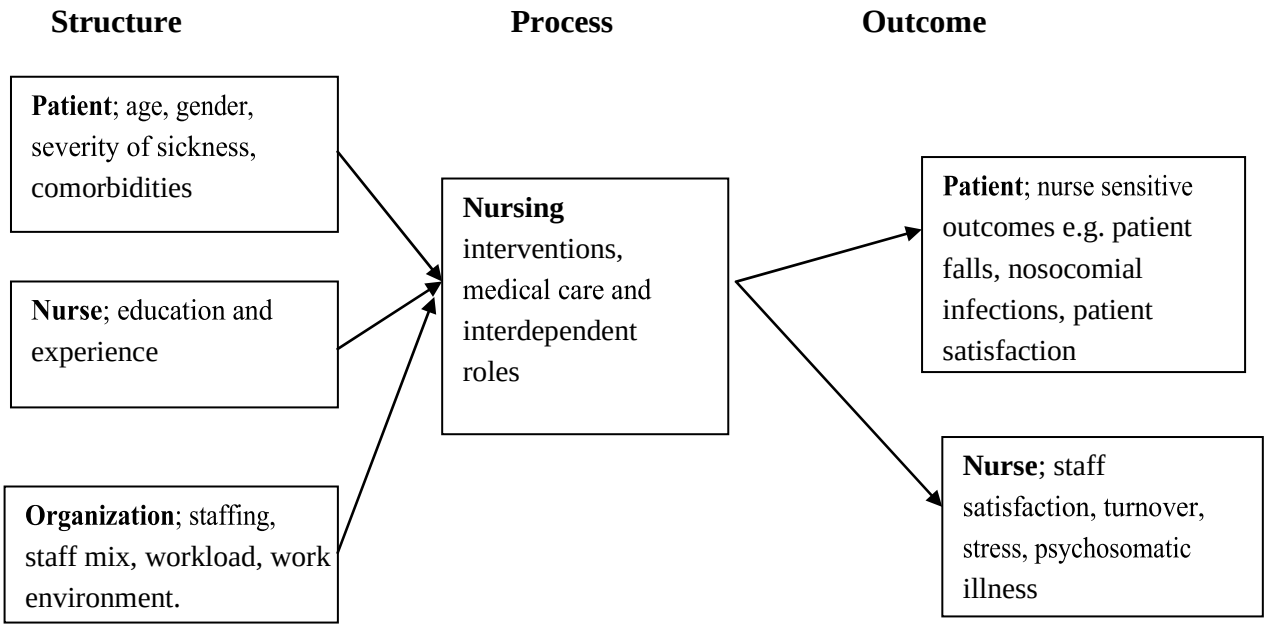
This essay will be guided by three models; firstly, The Nursing Role Effective model which was developed by Irvine et al. (1998). The model identifies the contributions of nurse's roles towards patients' outcomes of care. The Nursing Role Effective model is based on the work of Donabedian (1980) whose framework is composed of structure-process and outcome of quality care (Doran & Pringle, 2011). Indeed, the structure influence the process and the process influences the outcomes of care. Structural variables include the patient (age, gender, education, type of illness and comorbidities), nurse (experience, knowledge and skill level) and organizational (staffing, staff mix, workload and work environment). The process of care entails the nurse's roles; independent role (nursing interventions), medical care-related role (medically directed care and expanded scope of nursing practice) and interdependent role (team communication, coordination of care and case management). The outcomes focus on nurse sensitive patient outcomes; function status, self-care, and symptom control. Safety/adverse occurrences and patient satisfaction (Doran & Pringle, 2011). Although, the model describes the role of the nurse other members involved

with the care will influence the patient outcomes.

Secondly, Outcomes model of community-based setting describes the three components; inputs (structure) - process and outcome. The outcomes are divided into two for both the provider and the user of the service. For instance, job satisfaction, patient satisfaction; staff work life and patient functional status are accorded at the same level. This model lays emphasis on work climate as an important outcome for the nurse since it affects how the nurse performs her duty especially with staff short fall (Cohen, Holzemer, & Goerrnberg, 2000).

Thirdly, Moos and Schaefer (1993) integrative conceptual framework combines environmental and personal variables in an attempt to describe coping, health and illness status. This model will be used to bring out the relationship between poor work environments (staff shortage) and its impacts on the nurse's health. In addition, the model puts into account personal factors and life crises and transitions as they would affect an individual's ability to cope with workloads resulting to ill health. The staff will get sick off or leave aggravating the already desperate ratio of qualified nurses.

Conceptual Framework for Nurse Shortage; Nursing Role Effective model, community-based model and Moos and Schaefer (1993) integrative conceptual framework.



A Conceptual framework of the three models brings out a clear understanding of the impacts of staff shortage in the health organization. For it looks at the multiple effects brought about the organizational structure, process of care and both staff and patient outcomes.

IMPACT OF NURSE STAFF SHORTAGE

Nursing staff shortage impacts directly on both the staff and the patients. Staff shortage will result to heavy workload for the nurse to manage. The consequence will be inadequate care to the patients, the nurse will get burnout resulting to ill health and others may leave the profession. In adequate staffing has been linked to missed necessary nursing care whilst adequate staffing would be an effective strategy to improve patient outcomes (Xiao-wen, 2012). Patients who do not receive the necessary nursing care may have increased length of stays, resulting in financial losses for hospitals (Lucero, Lake, & Aiken, 2009).

Needleman (2002) revealed a strong and consistent association between nurse staffing variables and five patient outcomes including urinary tract infections, pneumonia, length of stay

, upper gastro intestinal bleeding and shock in medical patients, in surgical patients' failure to rescue was the only variable with a strong consistent relationship.

Glance at el (2012) performed a cross-sectional study of 70,142 patients admitted to 77 Level I and Level II centers using Healthcare Cost and Utilization Project Nationwide Inpatient Sample. Logistic regression models were used to examine the relationship between nurse staffing measures and mortality, healthcare associated infections and failure-to-rescue. Patient risk factors controlled were injury severity, mechanism of injury, co morbidities, age and gender; whereas,

hospital structural characteristics such as geographic region technology level, teaching status, teaching status, hospital size and trauma center status - Level I versus Level II. The results revealed that a 1% increase in the ratio of licensed practical nurse (LPN) to total nursing time was associated with a 4% increase in mortality and a 6% increase in sepsis .Three excess deaths were prevalent in hospitals with the highest quartile of LPN and 5 more episodes of sepsis per 1000 patients compared to hospitals in the lower quartile of LPN staffing. Thus, they concluded that an independent association between higher hospital LPN staffing levels with slightly higher mortality rates and sepsis in trauma patients admitted to Level I or Level II trauma centers. This study implicates need of RN rather than LPN for severely ill patients. In addition, Sovie (2001) suggested that an increase of registered nurse. Hours per patient per day was related to lower fall rates and higher patient satisfaction and lower urinary tract infections rates.

Bond, et al (1999) found out that other healthcare providers, such as medical residents, registered pharmacists and medical technologists influenced mortality rates. Thus, an increase of certified health professionals including registered nurses decreased mortality rates. In addition to skill mix, the number of years of nursing experience in a particular area was directly associated with mortality rates (Tourangeau, 2002).

Other researchers have studied to show the association between staffing levels and patient complications. For instance, A survey was done with data obtained from the Pennsylvania Health Care Cost Containment Council report on hospital infections and the American Hospital Association Annual Survey to examined urinary tract and surgical site infection. Linear regression was used to estimate the effect of nurse and hospital characteristics on health care– associated infections. The results revealed a significant correlation between patient-to-nurse ratio and urinary tract infection (0.86; P = .02) and surgical site infection (0.93; P = .04) (Cimiotti, Aiken, Sloane, &Wu, 2012).

A prospective, observational, single-centre cohort study was conducted in the medical intensive care unit (ICU) of the University of Geneva Hospitals. The study was conducted between January 1999 and December 2002 and it included all patients who were at risk for ICU- acquired infection admitted during that period. They were followed from admission to discharge. By multivariate Cox regression analysis, they found that a high nurse-to-patient ratio was associated with a decreased risk for VAP (hazard ratio 0.42, 95% confidence interval 0.18 to 0.99) (Hugonnet, Uckay, & Pittet, 2007). Thus, an association of Lower nurse-to-patient ratio with increased risk for late-onset VAP. This may be attributed to increased workloads and time constrains resulting in noncompliance of standard infection control precautions. Ultimately increasing the length of hospital stay and cost too. Besides, the negative impact of staff shortage on the patients, research evidence revealed effects on the nurse too. Tervo- Heikkinen, Partanen, Aalto & Vehvila”inem-Julkunen (2008) Conducted a survey on 664 registered nurses from 34 acute care inpatient hospital wards in order to assess the interrelationship between nurses work environment and nursing outcomes. It was revealed that staffing adequacy, respect and relationships were the most important factors of work environment that had influence on job related stress, job satisfaction, patient satisfaction and adverse events to patients and nurses. 77% registered nurses reported adverse events. 96% reported patient’s

adverse events during the three monthlies of retrospective period. The economic changes affecting the whole healthcare staffing in the 1990s (recessionary period and health care staffing reduction) pressures for hospital recon structuring and the decrease of working age population have an impact on the health care system and work environment of registered nurses. Poor organizational climate and high workloads are associated with increased levels of needle stick injuries.

Burgess, Irvine, & Wallymahmed (2010) cited that some nurses become severely distressed resulting to high sickness, absence, poor staff retention and ill health due to work overload. Furthermore, Adriaenssens, De Gucht, Van der Doef, & Maes (2011) found that work environment and job characteristics of nurses were important predictors of stress – health outcomes. Emergency nurses reported more pressure, physical demands, lower decision authority, less adequate work procedures and less reward than a general hospital nursing population. Work opportunity for skill discretion and better social support by colleagues. Work time demand appears to be an important determinant of psychosomatic complaints and fatigue in emergency nurses. Personal characteristics, decision authority, skill discretion, adequate work procedure, supervisors are strong determinants of job satisfaction, work engagements and lower intentions in emergency nurses. Occupational stress can lead to a variety of health-related problems that consequently impact on the organization. Stress related physical illness such as migraine headache, hypertension, coronary heart disease syndrome and psychological problems including anxiety, depression, and insomnia and feeling inadequacy. These symptoms are related to decreased work performance, work home conflicts, absenteeism, and burnout and turnover intension to leave.

Job dissatisfaction is a major consequence of staff shortage. Turnover of nurses is expensive because, it's costly to recruit, orientate and train new nurses. Therefore, creating cultures of retention in organizations, bolstering the nurse education infrastructure, establishing financial incentives for investing in nursing, rewarding hospitals with magnet hospital characteristics and implementing. effective nursing systems according to staff number and mix (Tomey, 2009).

ROLE OF NURSE ADMINISTRATOR IN NURSE STAFFING

One of the priority responsibilities of nurse leaders is staffing by determining the most appropriate number and mix of nurse staffing to ensure patient safety whereas also maintaining a cost-effective and efficient nursing workforce (Kane et al., 2007).

Nursing shortage is critical; therefore, the health care system needs to quickly expand the available services beyond the normal to meet the increased demand for care (AHRQ, 2004). The health system's surge capacity needs to be addressed. The surge capacity elements are strained personnel, equipment and supplies, structure, policies and procedures (Barbisch & Koening, 2006). The elements are interrelated for with better equipment's and supplies less staff will be needed. At the same time proper policies and procedures in place will enhance better scheduling and allocation of the available staff. In addition, policies and procedures can facilitate in recruitment and retention measures.

Managers need to establish conditions to support recruitment and retention of adequate staff. Due to the insufficient staffing practices and its potential impact, hospitals need to shift their view and way

of managing nursing resources (McHung, 2010). For example, institution new ways to provide adequate staff during peaks in daily occupancy (Lituak et al 2005). Enhancing recruitment and experience of nurses is paramount to attaining required staffing levels (Heinz, 2004). Involving men in the higher position like those of nursing deans would change the image of nursing resulting to more male nurses enrolling in the nursing profession hence, solving the nurse shortage issues, (Roth and Coleman, 2008).

Recruitment should include both RN and others such LPNs and UAP. However, the number of RNs should be larger since they are accountable for evidence-based care. Whereas, LPNs and UAP can assist in non-nursing duties. The Registered nurse is based on knowledge. Their education program and work experience provide them with knowledge and guides them indecision making to give appropriate care to patients. Adequate staff provides them an opportunity to utilize their knowledge efficiently and effectively. Unlicensed Assistive Personnel are trained individuals to assist registered nurse in providing patient care (ANA, 1999).

The nurse administrator should ensure ongoing recruitment of nursing workforce by advocating for the profession and encouraging the new generation to join the profession. The local, state and government offices should depict a positive image of nursing profession to enhance recruitment of nurses. Other methods include, hiring nurses overseas, providing flexible schedules, more regular work hours, encourage greater working hours from part-time employees and provide government loan payback incentives for students seeking degree in nursing (Heinz, 2004).

Attributes as those demonstrated by magnet hospitals which include increased autonomy regarding clinical bedside care, primary nursing care, better relationships between nurses and physicians, nurse's preference for interdisciplinary care and patient involvement in care (Aiken, 2002) may be considered in attempt to retain nurses in the profession. Years of nurse experience in a specific unit is related with lower 30-day mortality rate (Torangeau, 2002). Therefore, encouraging specialization of nurses in certain areas would enhance their expertise and competence. This would act has an intrinsic motivator for them to remain in the profession.

Thus, incentives are required to enhance retention of nurses within the profession (Heinz, 2004). Belgian, Vaughn and Goode (2001) found that good mentors' colleagues were the main reason nurses remained with the employer. Thus, enhancing mentorship training and establishment of worker friendly environment is inevitable (Heinz, 2004). Motivation of the staff towards job achievement is the duty of the nurse manager. It is important for the nurse leader to have strong purposeful leadership and management skills to be effective in the daily operations, (Donnell, Livingstone, & Bartam, 2012).

Nurses should be offered opportunity for participation in, decision making and input into the work environment as in magnet hospitals. In order for nurses to balance family, work and social demands self-scheduling (flexible scheduling) may be adopted. Offering educational opportunities in continuing educational programs and sponsorship for advanced nursing education. In addition, promotions of health work environment, support promotion ladders and offering more salary for more experienced nurse (Heinz, 2004). For hospitals to efficiently maximize nurse staffing investing in nursing education and

workforce infrastructure, and an inclusion of incentives would do (McHugh, 2010).

Kalish, Friese, Choi and Rochman (2011) conducted a cross-sectional correlational study of 92 medical-surgical, rehabilitation, and intermediate in 11 acute care hospitals. The findings were a corerlation (r=−.276, p=.008) between Hours of Care Per Patient Per Day (HPPD) and the nurse-reported patient workload on last shift. A correlation (r=−.384, p=.000) between perceptions of the adequacy of staffing and nurse-reported patient workload on last shift.

Multivariable analyses revealed a significant association between inadequate numbers of assistive personnel and both perceived staffing adequacy and nurse-reported patient loads. Unit- level Case mix Index (CMI) had a significant relationship with both HPPD and nurse-reported patient loads. Thus, an additional number of assistive personnel will relive the nurse off extra nursing care hours and workloads.

Heavy workloads were associated with negative impacts on the nurses. In a multivariate model, patient severity and nurse and hospital characteristics were controlled, nurse burnout was the only variable with a significant relationship with urinary tract infection (0.82; P = .03) and surgical site infection (1.56; P < .01) infection. Hospitals 30% burnout reduction had a total of 6,239 fewer infections, $68 million annually (Cimiotti, Aiken, Sloane, &Wu, 2012). Thus, level of staffing was linked to burnout. Therefore, the nurse administrator should put measures in place to reduce burnout among nurses to enhance patient safety.

There is need for federal funded programs to invest in the nursing profession by expanding nursing faculty and schools, increase incentives in hospitals with acceptable nursing practice environment, clinical training sites and adequate nursing capacity. Competitive faculty salaries may encourage more nurses into the education career (Aiken, Cheung, & Olds, 2009). An increment of faculty members will result in more trained nurses to curb the severe shortage.

View research on staffing and outcomes identify safe staffing levels, unrelation to patient acuity level and variability with staff experience and expertise put into consideration organizations resources policies and procedures and support available to patient care unit and issues related to patient care unit and issues related to work environment. Evaluation of staff systems should include nurses work life, outcomes and patient outcomes. Quality of work life was found to be related to quality of care. Therefore, work related staff illness and injurie states, over time rates , flexible human resource polices and benefits package, compliance and applicable federal state and local regulations Staffing the analysis and identification of health care organization human resource requirements, recruitment of personnel to meet those requirements and initial placement of those persons to ensure adequate numbers, knowledge and skills to perform the organizations work(ANA ,1999).

Electronic medical records can streamline documentation (Staggers, Weir and Phansalkar,2008) for it saves nurses time resulting in reduced staff requirements and overtime (Turisio & Rhoads, 2008). This may also improve nurse working condition resulting to higher job satisfaction and lower turnover (Bolton, Gassert, & Cipriano, 2008). Staffing principles include assessment of management, nursing and patient needs, and final decisions should not rely on the type of pay or only the number of patients. Nurse staffing requires a multi-dimensional approach to assessment and

evaluation of staffing needs (Kalish, Friese, Choi, & Rochman, 2011).

The administrator can develop a plan through benchmarking. Benchmarking is the continues measuring of process product or service compared with those considered industry leaders in order to find and implement ways to improve the product, process or service.

Benchmark own NHPPD against other organization with similar patient population to form part of evidence-based decision marking. Consider skill mix, the percentage of RN Compared to LPN. For instance, in critical care unit require more RN skill mix than in the nursing homes. No of staff support if less the nursing hours needed will be more (Kelly.2012).

Provision of practical and written philosophy to guide staffing and scheduling activities. Conduct staffing studies to determine staffing needs related to skill mix, number, time and workload requirement (Roussel, 2013). Although, many studies have been done in different context, each institution need to research on their organization due to variations in different environments.

Nurses are the main source of care to patients. Factors contributing to nurse shortage are restructuring for economic reasons, budgets and staff in cuts, mandatory overtime, heavy workloads, poorly prepared managers, nurse to nurse hostility, poor nurse to doctor relations, changing legislation, negative media stereotyping. Helpful strategies to deal with staff shortage is improve scheduling, safer staffing, nurse voices to be heard in the workplace, collaboration with nurse and doctor, diversity training, management and development involve nurse in public communication (Tomey, 2009).

CONCLUSION

The issue of nursing shortage has been of concern to many researchers for many decades; yet, the solution is far from being achieved. The recent investigations of its impacts not only to the patient but also considering the nurse outcomes may solve the problem. This is because the nurses are leaving the profession as a result of the negative experience they encounter in the profession. In my opinion, improving the work environments of nurses and increasing the incentives may retain nurses in the profession and also attract young people into the profession.

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