Impact of nursing shortages on patient care



Do nursing shortages affectpatient care within an acute setting?

The nurse is one of the most important components of the health care hierarchy in that they see to the moment to moment care needs of patients after the doctor has performed his diagnosis and or services. Their responsibilities broach a wide spectrum of services with one of the most important being the administration of acute care. This type of care is one rung below critical care, however it is just as important in the recovery of a patient. ^[1] The decline in nursing graduates over the past ten years coupled with the aging of populations, both in the United Kingdom as well as globally, has created a crisis in the health services industry whereby the number of patients per nurse has increased to unmanageable proportions.

The United Kingdom's National Health Service has been importing skilled 'Registered Nurses' for decades to fill the shortfall in developing nursing professionals and along with Ireland they are the most dependent of developed countries in filling this void through importation. ^[2] This practice fails to address the problem in the United Kingdom of training and maintaining nurses to meet demands. The aging of the population, whereby the number of individuals entering the age categories require additional serious medical care has grown disproportionate to the number of nursing staff members entering the profession which further exacerbates the problem. The importance of qualified nurses in an acute care setting is a prime example of how this shortage is affecting hospitals in that many have or are scaling back in response to this problem due to the quality of care as well as legal liability issues.

Understanding acute care from a clinical perspective means that one is approaching the question in an objective and analytical manner. ^[3] This perspective dictates that an understanding of the historical contexts leading to the present state of the nursing shortages in the acute care setting need to be examined to provide a perspective on the problem as well as potential solutions. And while the United Kingdom is the focus for the examination of the question "Do nursing shortages affect patient care within an acute setting?" with the exception of the importation of nurses as a historical solution, the foundational issues are almost identical in Canada, France, the United States and other industrialized nations.

One common denominator that is at the root of the global nursing shortage is the growth in the percentage of people entering or at the age 60 years. As individuals age the onset of maladies as well as the need for health care increases dramatically. In 1900 the percentage of the world's population above the age of 60 stood at 6. 9% ^[4], by the year 2000 this had risen to 10% and is projected to climb to 22. 1% by 2050. ^[5] And while the preceding figure for the year 2000 on a global basis does not on the surface seem to be staggering, when one factors in that the number of people has increased from 2. 7 billion in 1950 to 6 billon by the year 2000 and is projected to rise to 9. 3 billion by 2050 ^[6] this point takes on more meaning. More telling is that by 1999 37% of Europe's population was 60 years of age or older, with this figure expected to reach 47% by 2050. ^[7]

The preceding increase in patients where acute care is more of a potential has put tremendous pressures on hospitals and nursing staffs as the

proportion of nurse to patient ratios have increased. Medical technologies and advances have seen a number of formerly fatal illnesses curtailed by surgical techniques. These breakthroughs have meant that there has been an increase in the number of patients thus requiring acute care, as well as an increase in the technical skill and expertise required by nurses in this health care segment to see to the demands of patients who have undergone such techniques and or treatment. And while the number of nurses qualified in acute care has actually risen by 21% (35, 541) during the period 1999 (165, 643) to 2003 (201, 184) [8], the rate of increase has not keep pace with the acute care increase required by patients as a result of expanded acute care instances as indicated by the aforementioned improvements in technology, surgical procedures and increased survivability.

Other factors are also acting upon the shortage of qualified nurses in acute care, aging. The specialized skills, experience and training it takes for an acute care nurse precludes this segment from receiving the immediate benefits of increased enrollments in the nursing field. The implications of the nursing shortage become clearer when the age of nurses is factored in.

There are 100, 000 nurses who are 55 or older as well as an additional 75, 000 between the ages of 50 to 54, these nurses on average do not work full time. [9] When these numbers are brought into perspective by the total headcount of nurses in the NHS (450, 000 as of 2003) [10] the shortages become more telling.

And while acute care represents a segment of health care for which a patient receives treatment for immediate and/or severe (termed acute) episodes of

illness as well as injuries or trauma such as surgery. ^[11] The importance and seriousness of this care means that it is usually performed at a hospital by specialized individuals who use sophisticated as well as complex equipment and materials. The difference between acute care and chronic care is that it is (acute care) usually required for only short periods of time, however this does not belie the quality, expertise and importance of such care. Acute care patients usually come from the Intensive Care Unit (ICU) after their condition has been upgraded thus permitting the move. Patients in acute care are still subject to relapses and other reversals after leaving ICU or critical care. Acute care is usually the final phase where the hospital watches the patient prior to either home release or observation in a general ward.

While the intensity of observation, in terms of the propensity for a relapse, is not as great as in ICU or critical care the likely of an occurrence and or other complications is potentially there thus the reason for the existence of this unit. Nurses as a rule usually oversee several patients at once and are distinctly familiar with their case histories as well as what conditions or symptoms to look for. There are instances where patients are admitted to acute care directly from surgery or after treatment in the emergency room. The doctor in charge of the patient entrusts the acute care nurse with the history of the patients and conditions to be mindful of in watching the patient's progress as well as providing parameters that will determine their readiness for release. Acute care program components can consist of or include specialized diet, liquids, exercise, therapy as well as visits from the immediate family and other activities as prescribed by the physician. [12] The existence of acute care helps to reduce the potential for liability on the part

of the hospital whereby releasing them too soon might open them to malpractice or other forms of litigation if a reversal of the patients condition can be tied to them being released too early or without proper follow up.

The monitoring of patients in the acute care setting permits nurses to record and observe their progress as well as reactions to the prescribed treatment and report these findings to the physician so that the program can either be continued or amended as required. In addition, the existing patient recovery plan for when they are released is either confirmed or amended within the hospital setting via observation and monitoring of the patient's progress. The acute care nurse can also familiarize the patient as well as family with the prescribed routine and medication, correct dosage, exercise, diet plan(s) which the patient needs to follow after their release thereby helping to ensure a higher level of permanent recovery and lessening of potential complications.

Changes in the health care industry as a result of improved treatment, surgery techniques, medication and other advances has modified the medical landscape. The shortage of acute care nurses, which is a specialized discipline, increases the potential for mistakes in observation and monitoring techniques brought about from having too many patients being assigned to the nursing staff in this department. The importance of the acute care nurse in assisting the physician in determining the extent of patient recovery as well as reaction to the prescribed after care medication, dosage, diet, exercise or other programs is extremely important in terms of the eventual patient release. Their importance as a critical component of the health care industry can not be overstated. Acute care can encompass the monitoring of

cardiac surgery and telemetry, ENT, neurology, oncology, neurosurgery, orthopedics, clinical trial study observation, trauma and other areas [13].

Chapter 2Literature Review

The contemporary nature of the question "Do nursing shortages affect patient care within an acute setting?" has resulted in a plethora of journal articles and reports that have and are examining the problem. The foundation of the shortage of acute care nurses is rooted in the their overall decline contrasted to the rise in the general population as well as the increase in the age group of individuals over the age of 60. As a result of these varied parameters direct articles and materials solely focusing upon the shortage of acute care nurses and the correlation of how this has or is affecting patient care in that setting is contained in varied literature rather than in singular sources. The reliance of the United Kingdom on the importation of nurses to resolve its problem in staffing shortages is a wide reaching problem which affects all levels of service throughout the country. As such, literature, materials and articles tend to look at and deal with the broader spectrum rather than singular concentration on one dimension, such as acute care. The following review of materials will focus upon this aspect however it shall also bring into focus other factors which impact upon this area as well.

1. RCN 2003 Staffing Snapshot Survey [14]

This report was utilized as the starting point as it provides general as well as specific data on the state of nursing and patient levels in the United Kingdom. More importantly the survey involved questionnaires sent to https://assignbuster.com/impact-of-nursing-shortages-on-patient-care/

stewards in 232 acute care departments throughout the United Kingdom.

Data was collected from both the general medical as well as general surgical wards and the corresponding data is based upon 76 responses. The study uncovered that:

- 1. 50% of the wards surveyed indicated that RN (Registered Nurse) staffing was inadequate to meet demand and that the "...skill mix..."

 [15] composition was incorrect. Skill mix refers to the expertise background of the nurses on duty thus providing for a cross section of differing disciplines whereby the experience and training background provides for nurse expertise to meet the demands of patient needs.
- 2. It also uncovered that approximately 10% of the staff consisted of bank and agency personnel covering for regular staff who were either out sick, on leave, or as a result of shortages.
- 3. The survey indicated that in one third of the wards the staffing levels did not meet the scheduled personnel number as a result of the inability to obtain either bank or agency coverage.
- 4. The short staffing and skill mix problems were reported as foundations that increased both stress and the workloads for the nurses on duty and that these factors compromised patient care as well as affected morale.

Item 4 addresses the core of the problem by stating that compromised patient care is a problem caused by nursing shortages and skill mix. The preceding is borne out by the following survey statistics:

Table 1 - Skill Mix Problem Survey Results [16]

Frequency % Cases

Stress 13 36

Low Moral 10 28

Compromised Care 8 22

Poor Management of Care 5 14

Issues in Supervision 5 14

Junior Staff Work Exceeded Roles 5 14

Unregistered Staff Performing RN Work 4 11

RN Performing Too Much HCA Work 4 11

Staff Retention 4 11

Limited Trained and Teaching 3 8

Not Enough E Grades 2 6

More RN's Needed for Acutely III Patients 2 6

Staff Shortages Affecting Discharge Planning 1 3

The findings point to the shortage of qualified nurses as having a detrimental effect on the quality of care rendered in the acute care unit. The following chart devolves further into the negative impact of staffing in this area.

Table 2 – Effect of Insufficient Registered Nurses on Staff [17]

Frequency % Cases

https://assignbuster.com/impact-of-nursing-shortages-on-patient-care/

Page 10

Stress 22 55

Not Meeting Patient Needs 19 48

Lower Morale 16 40

Workload too Heavy 12 30

Staff Retention 3 8

Poor Quality of Care Management 3 8

Ward Manager Case Load to High 3 8

Supervision 2 5

Unsafe 13

Increased Incidents of Sickness 1 3

Inadequate Time for Training / Teaching 1 3

The preceding survey responses point to staffing shortages as a serious problem. Low morale, retention, inadequate time for training and supervision as well as not enough RN's available for duty or shift coverage and the other points clearly indicate this, and this is compounded even more in a Unit, acute care, where patient monitoring and supervision can directly affect their recovery as well as stave off additional problems or relapse. The problem of RN shortages is illustrated by the following:

Table 3 - Average Number of Patients per Acute Care Staff Member on Duty

[18]

https://assignbuster.com/impact-of-nursing-shortages-on-patient-care/

All Wards Medical Surgical

Early Patients: RN's 7. 6 8. 3 7. 0

Patients: Staff 4. 6 4. 6 4. 5

Late Patients: RN's 10. 7 11 9. 2

Patients: Staff 6. 3 6. 6 6. 6

Further evidence of the problem of staffing shortage is shown by ward attendance figures.

Table 4 – Reasons Why The Number of Staff on Duty is Less Than Planned [19]

Frequency % Cases

Sickness 25 78

Bank and Agency Staff not available 9 28

Vacancies / Staff shortages 5 16

Study leave 3 9

Staff on escort 1 3

All of the preceding data indicates that regardless of how creative the management of staff is conducted, shortages are consistent due to there not being enough personnel to begin with. These figures reveal that:

- 1. Wards are consistently at approximately 4/5's of the optimum for registered nurses which means that there is a serious problem concerning the accurate diagnosis of problems which can occur at any time as a result of a patient relapse or the need for a critical decision on patient care to be made.
- 2. The ongoing deficit in full staff numbers creates pressures for the staff to address this problem with no relief thus adding to job stress and the corresponding propensity for potential error(s).
- 3. Staffing levels have remaining basically unchanged from 1999 levels which is behind the patient curve.

With an average bed occupancy rate of 98% ^[20] the indicated staffing shortages are problems that need to be addressed immediately. The increased number of the population in the United Kingdom over the age of 60, coupled with the percentages of nurses nearing retirement age, means that the problem of nursing shortages is actually critical given the fact that replacements need to be trained for the retiring experienced nurses, staffing levels also need to be increased to compensate for the rise in patient incidences.

2. NHS Statistical Studies [21]

The Department of Health maintains and conducts ongoing research and statistical studies concerning all facets of health care. Their studies provide detailed factual information on the shortages in the acute care units which support the information reported in the 'RCN Staffing Snapshot Survey". The following are statistics for Vacancy Rates in the Acute Care units for 1999 through 2002:

https://assignbuster.com/impact-of-nursing-shortages-on-patient-care/

Table 5 - Acute Care Vacancy Rates 1999 through 2002

England Trent N. West London S. East S. West

Acute, Elderly &

General Care

1999 3. 6% 1. 3% 2. 2% 6. 3% 5. 0% 1. 7%

2000 4. 6% 2. 4% 2. 0% 8. 2% 6. 1% 3. 1%

2001 3. 7% 2. 2% 3. 2% 5. 8% 4. 9% 2. 4%

2002 3. 2% 2. 2% 2. 6% 5. 8% 4. 0% 2. 1%

On the surface, the vacancy rates have remained relatively steady throughout the four-year period. The figures also show that management has decreased high vacancy rate figures that occurred in 2000. The numbers also reveal that while they are holding steady at a consistent rate of vacancy, the increase in the age of the population is the variable which renders a status quo policy as unworkable. The NHS, mindful of nurse shortage problems, temporarily rectified the situation in 2001 via a large influx of foreign nurses to temporarily plug this gap. ^[22] The policy resulted in a 7. 1% increase over a 12 month period for a total of 29, 119 nurses imported from locales such as the Philippines (13, 750), India (2, 459), Nigeria (2, 065 and South Africa (2, 056) as well as other countries. ^[23] The nurses underwent courses which lasted between six to nine months to prepare them for their assignments in British hospitals. The Department of

Health indicated that while the preceding measures did help to alleviate staff shortages, at the same time attempts at "...expanding the workforce ..." [24] through increased training was also part of the overall planning program.

The NHS plan to increase nurses by 20, 000 over a five-year period, as announced in March of 2001, is in response to the indicated problem as well as concerning those nurses who would be either retiring or quitting. Another area that the NHS addressed is the "...drop-out rates..." which registered 13% for 2001 ^[25] with some courses showing rates as high as 40%. The NHS Statistical Studies provided confirmation that the shortages in all areas, as well as acute care, are critical.

3. Conference Paper: Hospital staffing, organization, and quality of care: cross national findings ^[26]

This study examined acute care hospitals in the state of Pennsylvania in the United States, the provinces of Ontario and British Columbia in Canada, Scotland and the United Kingdom encompassed 10, 319 nurses in 303 facilities. The 'Paper' provided a circumspect review and update of modern hospital and medical procedures as well as technologies stating that because of these advances less invasive procedures in surgery and inpatient care has been significantly been reduced, but the ability to service people on a faster basis has created excess inpatient capacity. The new procedures and advances in medical as well as surgery have increased the requirement for more sophisticated staffing to deal with these areas. As a result the internal structures and management methodologies in hospital administration necessarily had to change as well.

It was found that a study of hospitals conducted in 1982 revealed that 41 had higher rates of retaining personnel as well as attracting qualified staffing when compared against other institutions with higher vacancy and turnover rates. The sample hospitals all had some common similarities which were deemed as contributing to their success:

- 1. a flat organizational structure,
- 2. decentralized decision structure by bedside caregivers,
- 3. chief nurse included in management decision process,
- 4. flexible scheduling of nurses,
- 5. self governance of units
- 6. continued education and training of nurses in new procedures and treatments
- 7. more nurse autonomy in bedside practice and better physician relationships,

The preceding broader considerations with respect to hospital management also have direct implications with respect to acute care units. The study found that when the organizational structure is conductive to staffing interaction as well as prompting ease of communication and new instructions, higher care levels are attained. The study also uncovered that when the nurse to patient ratios as well as skill mix are optimum, the organization structure determines how quickly changes and other informational feedback can be implemented. The preceding is particularly critical in units such as acute care as well as ICU. A study on this point was conducted at 20 hospitals in the United States to either confirm or disprove

the 1982 findings utilizing AIDS patients as the selection field. The study encompassed three differing organization formats:

- 1. dedicated AIDS units,
- 2. magnet institutions that did not utilize dedicated AIDS units, and
- 3. non-magnet hospitals with a conventional organizational structure whereby the AIDS patients were dispersed throughout the institution.

It was determined that the probability of patients dying from AIDS within a 30 day period after admission was significantly lower in magnet hospitals and institutions with dedicated AIDS units than non-magnet hospitals. The similarity between the two types included the following:

- nurses had more autonomy, as well as greater degrees of control and better relations with physicians,
- 2. increased nurse staffing reflecting a lower nurse to patient ratio,
- 3. organizational support by administrators resulted in a higher degree of patient satisfaction,
- 4. nurse burnout was significantly lower.

The core elements identified included staffing adequacy as well as strong management support in terms of decisions reached by nurses. The preceding clearly point to the institutions having a higher level of confidence in the abilities and decisions of their nurses as well as an environment which supported and contributed to the foregoing as evidenced by continued training and representation by a registered nurse in top management. Simply put, the nurses were held in higher regard, thus reducing their frustrations in having a contribution as well as voice within the system with a

communication structure that provides feedback and a faster turnaround time concerning their recommendations.

2. 4 More nurses, working differently? A review of the UK nursing labour market 2002 to 2003 ^[27]

As shown in prior materials, the question of the number of nurses relative to the number of patients in the acute care setting has more to do than simply ratios, it includes factors such as:

- 1. the organizational structure,
- 2. nurse representation in top management,
- 3. nurse autonomy and inclusion in decision making processes,
- 4. improved nurse physician relationships and interaction,
- 5. a flat organizational structure,
- 6. decentralized decision structure by bedside caregivers,
- 7. flexible scheduling of nurses,
- 8. self governance of units
- continued education and training of nurses in new procedures and treatments

The national crisis created by the shortage of nurses has prompted the NHS to examine the method via which the entire health structure operates with the understanding that simply increasing the number of nurses might not necessarily result in improved services or increased competency. The NHS also wanted to determine if " working differently" [28], when the "...right number and mix of staff ..." [29] are in place might yield increased results in

terms of patient recovery, satisfaction and services. The report did indicate that the United Kingdom has a lower ratio of physicians and nurses per population than a number of comparative countries and that the system might yield additional gains in service aspects through increased health care assistants (HCA's) as well as more nurses with advanced skills. It was also identified that the relative pay structure needed exanimation to provide a clearer career and goal attainment structure for personnel as another means to increasing the nurse and HCA numbers. The determining factors were that resources need to be utilized more effectively in addition to just increasing staffing numbers if long term gains are to be achieved through all unit disciplines (which includes acute care).

One positive factor noted in the report is that the United Kingdom is reaping higher rates of nurse staffing than either Scotland or Northern Ireland, but it also goes on to add that the shortage of staffing is still a critical problem due to the higher number of experienced nurses at or near retirement age (175, 000). [30]

Table 6 - Percentage of Change in NHS

Nursing and Midwife Staffing Between 1999 and 2002 [31]

1999 2002 % Change

1999 - 2002

United Kingdom250, 651 279, 287 11%

Scotland35, 494 37, 216 5%

Wales17, 397 18, 766 8%

N. Ireland11, 207 11, 934 6%

During this same period, the number of qualified nurses in acute care increased by 13%, the highest overall gain in the indicated categories for active care, however, the aforementioned total of nurses nearing retirement age (175, 000) belies these gains.

Table 7 - Numerical Change in Qualified Nurses by Specialty 1999 and 2002

1999 2002 Numerical Change % Change

1999 2002 1999 2002

Acute, Elderly & General 165, 643 187, 439 +21796 +13%

Paediatric 16, 689 18, 014 +1325 +8%

Maternity 29, 258 29, 524 266 -0. 9%

Psychiatry 38, 999 42, 654 +3655 +9%

Learning Disabilities 9, 923 9, 550 -373 -3%

Community Services 48, 972 53, 814 +4842 +10%

Education Staff 658 995 +337 +51%

TOTAL QUALIFIED310, 142 346, 537 +36395 +12%

Given the number of nurses nearing retirement age as well as increased staffing demands, the NHS has determined that the gains from improved operational efficiencies will not be significant enough to increase the nurse patient ratios in any appreciable numbers. The study concluded that the importation of nurses as a staffing methodology will have to be maintained until internal enrollments and retention rates have advanced to the point where importation numbers can be reduced.

2. 5 Fragile Future? A review of the UK nursing labour market in 2003 [33]

The Royal College of Nursing has undertaken a program of consistent research as well as statistical analysis of the state of the nursing workforce in the United Kingdom to evaluate how policies are affecting the known shortages as well as the delivery of services across the broad spectrum of care being provided. Government policy has been to improve staffing numbers through the expansion and improvement of NHS services utilizing increases in funding on a significant basis. The understanding of the broad implications of the long standing shortages of nurses in the United Kingdom has drawn the concern of the appropriate governmental departments and agencies resulting in efforts to define where the problems lie as well as solutions to provide immediate, intermediate and long term solutions rather than temporary patches.

This report confirmed that there is significant evidence "... between low staffing levels in nursing and a range of negative care outcomes." [34] The varied studies and reports have shown the correlation between the preceding and:

https://assignbuster.com/impact-of-nursing-shortages-on-patient-care/

- 1. higher mortality rates,
- 2. complications after surgery,
- 3. cases involving increased violence against hospital staff,
- 4. higher incidences of accidents and injuries to patients,
- 5. higher incidences of cross infection rates,
- 6. increased rates of pneumonia and other areas.

The preceding points to problems that are encountered in ICU, critical car and acute care units where these types of occurrences are most likely to take place. A report by the National Audit Office that focused on the potential correlation between increased instances of infection and other complications concluded that staff shortages along with the utilization of temporary personnel caused "...skill dilution..." [35] and the resultant negative impact on service quality due to the "...increased use of unqualified staff. [36] " A research study conducted by Aiken (2001) [37] found that errors on the part of the nursing staff increased dramatically when they worked shifts greater than 12 hours, worked significant overtime and when they consistently worked more than 40 hours per week on a regular basis. This finding is particularly disturbing for such important care units as ICU, critical care and acute care where nurses are frequently fatigued as a result of working too many hours and thus this can have dire patient consequences. While it is understood that the shortage in nurses has resulted in the use of bank and temporary staffing to fill in the shortages, it would seem that administrative policy would concentrate on providing for more permanent staffing to units such as ICU, critical care and acute care as a result of the more important

and potential dangerous onset of complications, thereby directing shortage fill in measures for other areas.

Table 8 - Bank Nurses as a Percentage of NHS Qualified Staff [38]

1999 2003 % Growth

1999 to 2002

Bank / Unknown Nurses 28, 033 38, 113 +36%

Total Qualified NHS Nurses 310, 142 364, 692 +18%

Total, Excluding Bank/Unknown 282, 109 326, 579 +16%

Bank/Unknown Nurses as % of Total 9% 10%

Bank/Unknown Nurses as %

of Total in London 17% 21%

Table 9 - Number and Change of Qualified