Renal Health Advocacy for Nurses in La Union:  
A Prototype

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Abstract

This study aimed to determine the renal health practices of nurses in La Union. It was conducted in the calendar year 2009-2010. One hundred seventeen (117) regular staff nurses in five (5) tertiary hospitals were selected using stratified random sampling.

Descriptive survey method and a questionnaire were used in gathering data which were treated using Weighted Mean, Average Weighted Mean, t-test and Analysis of Variance.

Results show that most nurses are young adults, females, employed in private hospitals with incidence of UTI. Hygiene is always implemented while the rest are often implemented. The extent of implementation of renal health practices differs as to gender. All the renal health practices are strengths of the respondents and a renal health advocacy for nurses in La Union is proposed.

Keywords: Continuing Education Activities, Nurse Educators

Introduction

The heart of nursing is in the promotion of health and prevention of diseases. And with the advancement of the profession nowadays, nurses continuously face a lot of demands. Nurses may spend considerable time walking and standing. They need emotional stability to cope with human suffering, emergencies, and other stresses. Because patients in hospitals require 24-hour care, nurses in these institutions may work nights, weekends, and holidays. They may also be on-call; available to work on short notice. Most nurses now work 12-hour days at the bedside, two on and two off, and on weekends, Friday, Saturday and Sunday, with Friday being an eight-hour day. And even though hospitals post staffing plans that state that each nurse will be responsible for only so many patients of a particular type, many hospitals regularly violate their own plans by forcing nurses to work overtime and care for extra charges during a shift (Guerra, 2008).

Nurses are at a particularly high risk for illness, emotional exhaustion and musculoskeletal injuries. In 2005, 16,500 publicly employed nurse supervisors and registered nurses were absent each week due to illness and injury. While this is slightly less than in 2002 (17,100 per week), it is significantly greater than the 9,400 absences per week in 1987. (Greensdale, 2007) In 1991, A.L Bendtsen, MD, coined the terms, "nurses bladder" when his research revealed that seventy
(70) percent of nurses in a Danish study suppressed the desire to void during working hours. Ignoring the bladder's need to empty can lead to overdistension, urinary incontinence and urinary tract infections. Since most nurses, regardless of work setting, experience high patient loads, heavy demands, and long workdays that may interfere with regular bathroom breaks, new behaviors focusing on bladder health must occur. With this study, main reasons for suppression of desire to void were busy work, poor toilet facilities and indolence. The frequency of micturition was higher during evening and night shifts than in the day shift.

Moreover, a study was also conducted by LIAO Yuan-Mei, et al which was published in 2009 in the International journal of nursing studies. Three medical centers and five regional hospitals in Taipei were selected where 1065 female nurses were chosen randomly. Based on 907 usable surveys, 590 (65.0%) experienced at least one type of lower urinary tract symptom (LUTS). The prevalence for different LUTS ranged from 8.0% to 46.5%. It was also found out that most nurses’ bladder habits were poor or very poor.

With these situations, nurses’ renal health practices must be assessed in order for them not only to promote health to others but also to themselves and also decrease the incidence of renal health problems. And despite the nurses working conditions, nurses must still be good examples and be the advocates and promoters of health.

With this study, it would determine the renal health practices of nurses in La Union and the results of the study would be a great basis on how to prevent such and to promote their health. This would then eventually enhance the Renal Disease Prevention Program in the region and consequently decrease the incidence of UTI and its complications more so that renal disease management is costly.

Statement of the Problem

This study aimed to determine the renal health practices of nurses in La Union as a basis in the formulation of a Renal Health Advocacy for nurses in La Union. Specifically, it tried to answer the following problems:
1. What is the profile of the respondents as to
   a. age
   b. gender
   c. classification of hospital where nurses are employed
   d. incidence of Urinary Tract Infection?
2. What is the extent of implementation of renal health practices of nurses in La Union in terms of
   a. hygiene
   b. fluid intake
   c. elimination habits
   d. lifestyle?
3. Is there a significant difference in the extent of implementation of renal health practices of nurses in La Union when grouped according to
   a. age
   b. gender
c. classification of hospital where nurses are employed

d. incidence of Urinary Tract Infection?

4. What are the strengths and weaknesses of renal health practices of nurses in La Union?

Materials and Methods

The descriptive survey method of research was used in the study. The respondents of this study are composed of regular staff nurses working either in public or private tertiary hospitals in La Union. Stratified random sampling was utilized to get the respondents. To ensure that the respondents are well represented, the strata used are the five tertiary hospitals in La Union and the different areas in the hospital where the respondents are assigned.

The questionnaire is the main tool that was used in gathering relevant data from the respondents. The tool is composed of three parts: the cover letter, demographic characteristics, and the questionnaire proper. The demographic characteristics are age, gender, classification hospitals where nurses are employed and incidence of Urinary Tract Infection. A review of the respondents’ medical records particularly the urinalysis result was also done except those employed at Lorma Medical Center since the chief nurse refused the request of the researcher. However, the chief nurse claimed that before the nurses were hired and annually, they conduct physical exam and urinalysis and the nurses were informed about the results.

In the questionnaire proper, it is made up of topics pertaining to the four areas of renal health practices namely hygiene, fluid intake, elimination habits and lifestyle. The validity of the tool used in the study was determined and it was evaluated by three experts in the field of Research and Medical Surgical Nursing. Furthermore, the reliability of the tool was also established wherein thirty contractual staff nurses were chosen to be the respondents. They are working at Ilocos Training and Regional Medical Center, which is a tertiary hospital. They were chosen randomly and were asked to answer the questionnaire honestly. The cronbach’s alpha formula was used to measure the internal consistency reliability of the instrument.

Before the actual floating of the questionnaire, the researcher sent letters to the medical center chiefs and chief nurses of the five tertiary hospitals in La Union. The total number of nurses working in these hospitals was determined in order to know the sample population. After determining the sample size for each hospital, the respondents were selected from the different areas in the hospital using stratified random sampling.

The respondents were asked for their consent and they were also informed about the confidentiality of the data gathered. Subsequently, copies of the questionnaire were distributed, instruction was explained and they were retrieved immediately after they had answered the entire questionnaire. Each retrieved questionnaire was checked that all items were answered.

A documentary analysis of the respondents’ medical records, specifically the urinalysis result, was also done to validate their history of Urinary Tract Infection. Furthermore, a follow-up interview was done to verify some of the respondents’ answers.

The data gathered was tabulated and converted into frequencies. Weighted Mean and Average
Weighted Mean were used to treat the data regarding the extent of implementation of renal health practices of the respondents. To determine if there is a significant difference in extent of implementation of renal health practices of nurses in La Union when grouped according to age, the Analysis of Variance (ANOVA) was used

Results and Discussion

Distribution of the Respondents as to Profile
The respondents are regular staff nurses and they were grouped according to profile which are age, gender, classification of hospitals where nurses are employed and incidence of UTI.

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>Classification of Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-35 y/o</td>
<td>M 41</td>
<td>Pu 33</td>
</tr>
<tr>
<td>36-55 y/o</td>
<td>F 7</td>
<td>Pri 35</td>
</tr>
<tr>
<td>56 y/o and above</td>
<td>M 49</td>
<td>Pu 49</td>
</tr>
<tr>
<td>56 y/o and above</td>
<td>F 7</td>
<td>Pri 49</td>
</tr>
</tbody>
</table>

As to age, the largest number of respondents belonged to 21-35 age group and the least number belonged to 56 and above age group. It is also evident in the table that the number of respondents with incidence of UTI under the 21-35 age group is less than 25% of the their total population while those belonging to the 36-55 age group is around 80% of their total population and lastly only one (1) out of three (3) respondents from the 56 y/o and above age group had incidence of UTI. According to Smeltzer and Bare (2004), people between the ages of twenty (20) and fifty (50), urinary tract infections (UTI) are about fifty (50) times more common in women than in men. On the other hand, the incidence of bacteriuria in elderly adults differs from those in younger adults.

Furthermore, the number of female respondents is more than four (4) times the number of males. This is due to the fact that women are more interested to pursue nursing rather than men. Traditionally, the nursing profession was viewed as a calling mainly for women. However, as the profession advances, gradually, men are already considered and accepted to become nurses. It is also evident in the table that there are more females with incidence of UTI than men. And
the number of females with incidence of UTI is more than half of the population of females as compared with males where only a few of the male population had incidence of UTI. This implies that females are more prone to develop renal diseases.

Urinary tract infections may be caused by bacteria, viruses, fungi or a variety of parasites. More than 85 percent of urinary tract infections are caused by bacteria from a person's own intestines especially the large intestines, or vagina. The more common pathogens are Escherichia coli, Staph saprophyticus, Proteus vulgaris and mirabilis, Klebsiella. The organisms that cause infection usually enter the urinary tract by one of the two routes. The most common route by far is through the lower end of the urinary tract - the opening at the tip of the man's penis or the opening of a woman's vagina - resulting to an ascending type of infection that spreads up the urethra. The other possible route is through the bloodstream, usually directly to the kidneys. (Dumaguing, 2005)

From the five (5) tertiary hospitals in La Union, more respondents are employed in private hospitals than public hospitals mainly because three (3) out of the five (5) tertiary hospitals are private namely La Union Medical Diagnostic Center, Bethany Hospital and Lorma Medical Center. It is also presented in the table that the number of respondents with incidence of UTI in private hospitals is nearly the same that of the respondents employed in public hospitals.

It is also evident in the table that more than half of the respondents had incidence of UTI when they were employed in the hospital where they are working; where sixty eight (68) had incidence of UTI and only forty nine (49) has no incidence of UTI. This implies that nurses in general are at risk of developing renal diseases.

Summary of the Extent of Implementation of Renal Health Practices of Nurses in La Union

In order for nurses to have good renal health, the four aspects of renal health practices must be well implemented and these are hygiene, fluid intake, elimination habits and lifestyle. The following table presents the summary of the extent of implementation of these four aspects.

It is illustrated in the table that hygiene gained the highest mean and the only renal health practice which is always implemented while fluid intake had the least mean of all the renal health practices. This shows that nurses who are trained to be promoters of good hygiene as advocated by the mother of nursing became what they really are trained and educated of. The result displays that Filipino nurses are not just excellent thinkers but also doers.
Table 2. Summary Table of the Extent of Implementation of Renal Health Practices of Nurses in La Union

<table>
<thead>
<tr>
<th>Renal Health Practices</th>
<th>AWx</th>
<th>DER</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Hygiene</td>
<td>4.60</td>
<td>AI</td>
</tr>
<tr>
<td>B. Fluid Intake</td>
<td>3.63</td>
<td>OI</td>
</tr>
<tr>
<td>C. Elimination Habits</td>
<td>4.14</td>
<td>OI</td>
</tr>
<tr>
<td>D. Lifestyle</td>
<td>3.67</td>
<td>OI</td>
</tr>
</tbody>
</table>

According to Joseph Bereger of the New York Times (2008) Filipino nurses are highly prized here (US) because they speak English, are trained in American-caliber medicine and enjoy a reputation for tender care — the legacy of a society in which families tend to their own sick and aging relatives.

On the other hand, fluid intake had the least mean mainly because of the nurses’ habits on coffee, tea and cola drinking and the lack of cranberry juice consumption. Fluid intake, elimination habits and lifestyle renal health practices need to be improved further in order to uplift the health of the nurses and eventually the clients whom they are caring. As evident in the table, the renal health practices which are hygiene, fluid intake, elimination habits and lifestyle are well implemented. It is therefore necessary to sustain their implementation to further promote renal health among nurses in La Union.

Differences in the Extent of Implementation of Renal Health Practices of Nurses in La Union When Grouped According to Profile

There may be many factors that can affect the extent of implementation of renal health practices of nurses in La Union and one of which is their profile. The succeeding table presents the differences in the extent of implementation of renal health practices of nurses in La Union when grouped according to profile which are age, gender, classification of hospital where the nurses are employed and their incidence of Urinary Tract Infection. It is presented in table 8 that according to age, the computed value of lifestyle (5.99) is greater than the tabular value (3.07). Therefore, the result is significant and the rest of the renal health practices are not significant.

The values under age versus lifestyle was treated with t-test to determine the pair which has the significant result (see appendices) and it was revealed that the respondents belonging to the 21-35 age group versus the 36-55 age group has the significant result, meaning there is a significant difference in the extent of implementation of the renal health practices. Specifically, it was found...
out that those belonging to the 36-55 age group has a higher extent of implementation of the lifestyle renal health practices than the other age group.

Table 3. Differences in the Extent of Implementation of Renal Health Practices of Nurses in La Union When Grouped According to Profile

<table>
<thead>
<tr>
<th>A. Hygiene</th>
<th>Gender</th>
<th>Classification of Hospital Where Nurses are Employed</th>
<th>Incidence of Urinary Tract Infection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fc</td>
<td>Ft</td>
<td>Tc</td>
<td>tt</td>
</tr>
<tr>
<td>A. Hygiene</td>
<td>.002</td>
<td>3.07</td>
<td>28.2*</td>
</tr>
<tr>
<td>B.Fluid Intake</td>
<td>1.95</td>
<td>3.07</td>
<td>-9.2*</td>
</tr>
<tr>
<td>C.Elimination Habits</td>
<td>.719</td>
<td>3.07</td>
<td>4.4*</td>
</tr>
<tr>
<td>D. Lifestyle</td>
<td>5.99*</td>
<td>3.07</td>
<td>-3.4*</td>
</tr>
</tbody>
</table>

Legend:

fc= anova computed value  
ft= anova tabulated value  
tc= t-computed value  
tt= t-tabulated value  
* = Significant

According to Erik Erickson, middle adulthood, those aging 36-55 years old, is the time when people can take on greater responsibilities and control. Strength comes through care of others and production of something that contributes to the betterment of society, which Erikson calls generativity. This is one of the reasons to why those belonging to the middle age have higher extent of implementation of the lifestyle renal health practices as compared to the young adults. This means that the developmental stage of an individual can affect to how he will manage his activities like implementing the renal health practices most especially lifestyle.

To determine more the difference between the age groups, a study was conducted to Chinese adults. This study examined stereotype traits of Chinese young adults generated by sixty (60) young, sixty (60) middle aged and sixty (60) older Chinese adults. Results indicated that Chinese participants had multiple stereotypes and mixed perceptions of the young. While considerable overlap was observed between stereotype traits generated by these Chinese participants and those from earlier studies with Western participants (e.g. energetic, ambitious, lazy, and reckless), unique Chinese traits (e.g. open-minded, filial, hedonistic, and individualistic) associated with young adults were also identified. Whereas the middle-aged and older participants listed an equal number of positive and negative traits, the young participants generated significantly more negative traits than positive ones about their own age group. The traits or attitudes of the young adults could affect to how they would carry out healthy behaviors.

It is also evident in the table that the computed values under gender are all higher than the tabulated value therefore the result is significant and the research hypothesis is accepted.
Therefore there is a significant difference in the extent of implementation of renal health practices when grouped according to gender. Specifically under hygiene and elimination, the males have higher extent of implementation than the females. This is due to the results which are both positive (28.2 and 4.4). On the other hand, under fluid intake and lifestyle, the females have a higher extent of implementation as compared to the males since the values are negative (-9.2 and -3.4).

The biological difference between a man and a woman greatly influenced the result of the study. Specifically, the males have a higher extent of implementation on hygiene and elimination due to anatomical factors of women. In women, the vulva has many major and minor anatomical structures, including the labia majora, mons pubis, labia minora, clitoris, bulb of the vestibule, vestibule of the vagina, greater and lesser vestibular glands, and vaginal orifice. The vulva is, however, more susceptible to infections than the penis and testicles and it needs more cleaning than the penis. The female needs more hygienic practices also especially during pregnancy and menstruation which the males aren’t experiencing.

Furthermore, women tend to get UTI more often because their urethra is shorter and closer to the anus than in men. Because of this, women are more likely to get an infection after sexual activity or when using a diaphragm for birth control. Menopause also increases the risk of a UTI. In addition, with the circumcision of the males, this is already a hygienic practice which can prevent them from developing UTI. In a cohort study conducted by To, et al, it presents that a decrease in risk of urinary-tract infection is one of the most commonly given reasons for circumcision of newborn boys.

**Strengths and Weaknesses of Renal Health Practices of Nurses in La Union**

The Urinary system works with the other systems of the body to help maintain homeostasis. In order for an individual to become well, he or she must execute regular healthy renal practices. Renal health practices are habits or routines that an individual observes and exercises in order to protect the urinary system which includes two kidneys, two ureters, the bladder and the urethra. The Urinary System is a group of organs in the body concerned with filtering out excess fluid and other substances from the bloodstream. The substances are filtered out from the body in the form of urine.

The following table presents the strengths and weaknesses of renal health practices of nurses in La Union which are hygiene, fluid intake, elimination habits and lifestyle.

<table>
<thead>
<tr>
<th></th>
<th>AWx (Average Weighted Mean)</th>
<th>DER (Descriptive Equivalent Rating)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Hygiene</strong></td>
<td>4.60</td>
<td>AI</td>
<td>Strength</td>
</tr>
<tr>
<td><strong>B. Fluid Intake</strong></td>
<td>3.63</td>
<td>OI</td>
<td>Strength</td>
</tr>
<tr>
<td><strong>C. Elimination</strong></td>
<td>4.14</td>
<td>OI</td>
<td>Strength</td>
</tr>
<tr>
<td><strong>Habits</strong></td>
<td>3.67</td>
<td>OI</td>
<td>Strength</td>
</tr>
<tr>
<td><strong>D. Lifestyle</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It is shown in the table that all the renal health practices which are hygiene, fluid intake, elimination habits and lifestyle are the strengths of the respondents. This shows that nurses are educated and trained to be promoters of health and the renal health practices were included in the course of their study. In addition, these renal health practices are included in the respondents’ health teachings to their clients most especially those having renal problems such as End Stage Renal Disease, Urinary Tract Infection, Nephritis, etc.

Hygiene garnered the highest mean and the only renal health practice which is always implemented. This shows a positive implication that nurses perform good personal hygiene most especially hand hygiene which is the most important practice to prevent infections.

This positive finding is supported by a study conducted by Flores, et al in 2007 which took place in a large acute hospital trust serving South-West London and Surrey in United Kingdom. The study found out that the overall hand-hygiene compliance rate of nurses was 64% which was higher than the average baseline rates for hand-hygiene compliance of 40%. This proves that compliance to performing hand hygiene is improving.

**Summary, Conclusions, and Recommendations**

**Summary**
This study aimed to determine the renal health practices of nurses in La Union as a basis in the formulation of a Renal Health Advocacy for nurses in La Union. The study was conducted in the calendar year 2009-2010. The respondents are regular staff nurses in 5 tertiary hospitals in La Union.

Descriptive survey method was used and a questionnaire is the main tool in gathering data. A review of the respondents’ medical records particularly the urinalysis result was also done except those employed at Lorma Medical Center. The data gathered were treated using Weighted Mean and Average Weighted Mean and t-test and Analysis of Variance through SPSS.

The following are the salient findings of the study:
1. Most of the respondents are 21-35 years old, female, employed in private hospitals and with incidence of UTI.
2. The extent of implementation of renal health practices as to hygiene is always implemented while fluid intake, elimination habits, and lifestyle are often implemented.
3. The extent of implementation of renal health practices differs as to gender. Moreover, the extent of implementation of hygiene differs as to classification of hospital where nurses are employed and lifestyle differs as to the age.
4. All of the renal health practices are the strengths of the respondents.
5. A Renal Health Advocacy for nurses in La Union is proposed.

**Conclusion**

Based from the analysis and interpretation of the research findings, the following conclusions were derived:
1. Nurses in La Union are dominated by female, actively and privately employed young adults who had an experience of Urinary Tract Infection during their employment.
2. Nurses in La Union are knowledgeable about sound renal health practices.
3. Gender affects the implementation of renal health practices.
4. Nurses in La Union efficiently apply their knowledge on sound renal health practices.
5. The renal health advocacy for nurses in La Union is beneficial in the sustenance of renal health among nurses and the public.

**Recommendation**

With the results established by this study, the following are recommended:

1. The Renal Health Advocacy for Nurses in La Union should be instituted in the tertiary hospitals in La Union and other institutions where nurses are working like those employed in primary and secondary hospitals and other agencies advocating renal health such as Local Government Units (LGU’s), Department of Health and others by disseminating the IEC materials.
2. Administrators in hospitals should monitor the incidence of renal problems among nurses by annually recording the morbidity cases among nurses.
3. Administrators in hospitals must provide an environment conducive to renal health.
4. Nurses should sustain the implementation of renal health practices to be good examples for renal health promotion and prevention of renal problems by always implementing the Renal Health Advocacy.
5. Student nurses, other health care providers and clients can use the advocacy to sustain good renal health.
6. Researchers can further study the renal health practices of nurses considering respondents who are also working in secondary and primary level of hospitals and clinics in La Union. Researchers may also include other variables such as the number of years that the nurses are employed and area of assignment of the respondents.

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REDCOP, NKTI, PSN, PIA, PSTS Training Module on the prevention of Kidney Disease


WEBSITES


