LETTER TO EDITOR

Response to the topic
“Nursing Shortage: A Comparative Analysis”

Sharma DW

Dear editor:

I am writing this letter in response to article “Nursing Shortage: A Comparative Analysis” which made me think about the similar situation of my country. I am from Nepal, a developing country which is facing the nursing shortage as you have mentioned in the article. If you ask a nursing student in my country, what are you going to do after graduating? Most of those answers would be going abroad for bachelor or masters. Here, doing bachelor or masters means they want to get blended with the students of the respective country for licensure and degree equivalence so that they could easily get a permanent visa of that country. As you have mentioned in your article about Philippines that they are educating more nurses than they need, we have a same situation in my country too.

The number of nursing college is increasing so is the number of nurses. There is less demand and more supply of nurses to the health care system. Another major problem we are facing is due to political instability, the governing bodies are malfunctioning which affects the quality of education provided to our nurses, resulting in quality of care they provide to their patients.

The real problem actually starts after graduation. Nurses are not able to find jobs. They are asked about their experience, which new nurses would not have. Nowadays there is a trend of volunteering by nurses, which are forced by hospital administrations so that the nurses could get a job in that hospital. Poor Nurses could only see their option of moving abroad and have a better life.

The most important reason of moving to develop countries is the money. Nepalese nurses hardly make $250 a month, which makes you difficult to survive in the country. Even if you have a bachelor or masters degree you would be making about $300 comparing the USA nurse making $60,000 a year. This situation makes the nurses in my country very motivated and they want to try everything possible to go to developed countries and have a fascinated lifestyle.

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Relationship between sub-health and occupational stress among operating theatre nurses in China: A questionnaire survey

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ABSTRACT

Background: Studies on sub-health status in general community populations are common, but there is a dearth of research on sub-health of operating theatre nurses in China. This study is to explore the relationship between sub-health and occupational stress among operating theatre nurses.

Methods: A cross-sectional questionnaire study was conducted in an operating centre in China in December 2007 among 70 operating theatre nurses. Measures: Nurse occupational stressor scale and the diagnostic criteria of sub-health were used. Percentile, t-test and regression were employed for statistical analysis.

Results: Nurses reported high stress levels in workload and time pressure subscale, followed by professional and career issues, patient care and interaction, interpersonal relationships and management issues, resource and environmental problems. Fifty subjects (76.9%) suffered from one or more sub-health symptoms. Fatigue was the most common symptom. Occupational stress was positively correlated with age, duration of work in OT, designation, and attending continuing education. Female nurses experienced more stress in workload and time pressure. The occupational stress experienced by sub-health nurses was higher than healthy ones.

Conclusion: The operating theatre nurses in our study experienced higher occupational stress and most of them were suffering from sub-health. Occupational stress was related to sub-health status.

Keywords: Occupational health; Stress; Operating Theatre Nurse; Sub-health.

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Background and Research Questions:

‘Sub-health condition’, also known as the ‘Third State’, is a grey area between health and disease. It refers to the health condition of a person who has no clinical symptoms but has a tendency to suffer from potential diseases, or has symptoms but without evidences of clinical examination. Sub-health condition is an urban disease of low quality and imbalanced psychological status where the body structure becomes reduced and the physiological function is declined (Hu et al., 2012).

In recent years, sub-health has been topical in health care. Some people often experience malaise and have symptoms of dizziness, headache, chest tightness, palpitation, shortness of breath, depression, etc. According to a global survey conducted by World Health Organization (WHO), about 75% of the world population was in sub-health condition (cited in Yan et al., 2005). According to Shanghai International Medicine Communication Center’s 1998 survey, 72.8% of the Chinese population was in sub-health status (Zhou et al., 2002).

Occupational stress is ‘the harmful physical and emotional responses that occur when the requirements of a job do not match the capabilities, resources, or needs of the workers’ (cited in Hall, 2004). It is a result of combined exposure to several factors in the work environment and employment conditions, such as noise, extremes of temperature, polluted air and ergonomic factors (Gray-Toft & Anderson, 1985; Lewis & Robinson, 1992; Li & Liu, 2000; Li & Lambert, 2008). Sub-health is one of the possible consequences of chronic occupational stress (Freudenberger, 1974).

Nurses are considered to be particularly susceptible to sub-health. According to a few studies conducted in mainland China, the prevalence of sub-health ranged from 51.6% of all nurses (Huang & Tan, 2005) to 62.2% of ICU nurses (Liu & Guo, 2006) and 87.9% of emergency department nurses (Fu, 2007). The reason may be that nursing is considered to be inherently stressful (Schaefer & Moos, 1993; Decker, 1997). Work-related stressors associated with nursing include working under great pressure due to heavy workload, poor staffing, exposure to death and dying, and inter-staff conflict (Xianyu & Lambert, 2006), frustrated ideals in this area of care, noise pollution, lack of knowledge, insufficient social support, lack of resources, little training, excessive paperwork, and limited decision-making (Kelly & Cross, 1985; Topf & Dillon, 1988; Lewis & Robinson, 1992; Welker-Hood, 2006). The work of operating theater (OT) nurses is unique, as they provide continuity of care throughout the peri-operative period, using scientific and behavioural practices with the eventual goal of meeting the individual needs of patients undergoing operation. OT nurses face special noise, such as ventilation systems continued to function, metal instruments that produce loud noises if dropped, electric tools that produce very loud in bursts, frequent alarms on anaesthetic machines and so on (Stringer et al., 2008) and anaesthetic pollution (Oliveira, 2009). A study found that physical problems and miscarriage were quite common among female OT staff (Rosenberg & Kirves, 1973).

However, many of the current studies on occupational stress have been done in Western countries, and there are cultural differences between Western and Chinese countries that may influence occupational stress. As our literature search did not generate any studies examining the relationship between occupational stress and sub-health among OT nurses in China, therefore, we conducted this study.

Research Questions:

What is the sub-health condition among operating theatre nurses?

What is the occupational stress of operating theatre nurses in China?

What is the relationship between sub-health and occupational stress and the factors influencing occupational stress and sub-health?

Methods:

Design:

A cross-sectional questionnaire survey design was adopted and data were collected in December 2007.

Sample

We chose one of Beijing’s acute-care teaching hospitals, which has 1300 beds, as the study site. The organizational structure and range of services of the study hospital are typical of other hospitals of similar
discipline and size in China. The study hospital has one operating center comprising 14 operating rooms (OR), with 12 OR for scheduled surgeries, 1 OR for emergency surgeries, and 1 OR for preparation and anesthesia recovery. On average, 100–130 operations are performed every weekday. All of the 70 OT nurses in this operating center were surveyed, and 65 of them returned completed questionnaires, yielding a response rate of 92.9%.

**Measures**

*Nurse Occupational Stressor Scale*

Occupational stress was assessed using the Nurse Occupational Stressor Scale developed by nursing experts from America, Thailand and China in 2000 (Li & Liu, 2000), and the scale was being used frequently in China at the time of this study. The scale consists of 35 items in 5 subscales: professional and career issues (PC) (7 items, e.g. “need to do shifts frequently”); workload and time pressure (WTP) (5 items, e.g. “workload is too heavy”); resource and environmental problems (REP) (3 items, e.g. “bad working environment”); patient care and interaction (PCIA) (11 items, e.g. “patient is not cooperative”); and interpersonal relationships and management issues (IPRM) (9 items, e.g. “conflict with physician”). All items are scored on a Likert scale ranging from 0 to 4 (0 = strongly disagree, 4 = strongly agree). Higher scores on the scale indicate higher levels of occupational stress. In the original scale, the Cronbach’s alpha coefficients of internal consistency of the scale was .95 for PC, .83 for WTP, .92 for REP, .94 for PCIA, .90 for IPRM, and for all items .98.

*Diagnostic Criterion of Sub-health with Delphi Method*

The diagnostic criterion of sub-health was developed by Chen et al. (2003) according to research guidelines for the Delphi survey technique (Hasson et al., 2000), and was being used commonly in China at the time of study. The criterion consists of 18 items and 6 domains: physical symptoms (5 items, e.g. ‘fatigue’), psychological symptoms (6 items, e.g. ‘anxiety’), vigour (3 items, e.g. ‘lack of energy’), social adaptability (2 items, e.g. ‘difficulty in doing work’), immunity (1 item, ‘catch a cold or other diseases easily’), and serious sickness requiring treatment in the hospital (1 item, ‘need to see doctor’). According to the diagnostic criterion, the harmonious coefficients were statistically significant (P < .05). The weight coefficients were .27 (physical symptoms) .25 (psychological symptoms) .17 (vigour) .11 (social adaptability), .14 (immunity), and .10 (serious sickness requiring treatment in the hospital). Participants who had any one of these 18 symptoms lasting longer than 1 month in the year before the survey would be diagnosed as having a sub-health status.

**Data Collection**

The principle investigator (PI) briefed all nurses-in-charge about the purpose of the research. A locked collection box in the operating theater was provided for nurses to return their completed questionnaires with considering confidentiality and anonymous. One of the nurses-in-charge distributed questionnaires to all the nurses who were on duty, and she was also responsible for collecting the completed questionnaires and returning them to the PI.

**Ethical Considerations**

The study was approved by Peking University Health Science Center, Beijing, China. Permission to distribute the questionnaires was obtained from the hospital’s ethics committee.

**Analytic Strategy**

Data analyses were performed using SPSS (version 20.0). Continuous variables were presented as means and standard deviations (SD). Multiple linear regression analysis was used for the 5 subscales of occupational stress and demographic variables. The scores of the 5 subscales of occupational stress were designated as dependent variables and the demographic variables as independent variables. A two-tailed t-test was used to describe the difference of occupational stress between sub-healthy and healthy groups, and P < 0.05 was considered to be statistically significant.

**Results**

**Validity and reliability of the instruments**

The two instruments were considered to have content validity as they were developed following an extensive review of the literature and were designed to examine nurse occupational stress and sub-health status. And both of these two questionnaires were used frequently in China in the study time. The internal consistency coefficient Cronbach’s Alpha was used to test the reliability of these two instruments. For nurse occupational stressor scale, the Cronbach’s Alpha coefficient for professional and career issues was .76, workload and
time pressure .72, resource and environmental problems .75, patient care and interaction .88, interpersonal relationships and management issues .89, and entire questionnaire .95. For diagnostic criterion of sub-health criterion, the Cronbach's Alpha coefficient for physical symptoms was .76, psychological symptoms .87, vigour .80, social adaptability .78, and complete questionnaire .93. All Alpha coefficients are reaching the acceptable level of questionnaires (Kline, 1999; George & Mallery, 2003).

Demographic characteristics

The study participants ranged in age from 21 to 50 years, (mean 29.5 and SD 7.4). The median duration of employment in OT nursing was 9 years (range: 1–30), almost half of them worked in OT longer than 10 years (Table 1).

Sub-health symptoms of OT nurses

Fifty nurses (76.9%) reported that they had one or more symptoms lasting longer than one month in previous year. Among all the symptoms, fatigue was the most common, followed by numbness of shoulder(s) or leg(s), lack of energy, headache or dizziness, dreaminess or poor rest, and distracted or upset (Table 2).

### Table 1. The demographic characteristics of the sample (n=65)

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>06</td>
<td>09.2</td>
</tr>
<tr>
<td>Female</td>
<td>59</td>
<td>90.8</td>
</tr>
<tr>
<td><strong>Duration working as OT Nurse</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 years or shorter</td>
<td>35</td>
<td>53.8</td>
</tr>
<tr>
<td>10 years or longer</td>
<td>30</td>
<td>46.2</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>35</td>
<td>53.8</td>
</tr>
<tr>
<td>Married</td>
<td>30</td>
<td>46.2</td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced diploma or below</td>
<td>59</td>
<td>90.8</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>06</td>
<td>09.2</td>
</tr>
<tr>
<td><strong>Designation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN# or EN$</td>
<td>34</td>
<td>52.3</td>
</tr>
<tr>
<td>SSN† or above</td>
<td>31</td>
<td>47.7</td>
</tr>
<tr>
<td><strong>Children in the family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>55.4</td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
<td>44.6</td>
</tr>
<tr>
<td><strong>Working hours per week</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49 hours or less</td>
<td>16</td>
<td>24.6</td>
</tr>
<tr>
<td>50 hours or longer</td>
<td>49</td>
<td>75.4</td>
</tr>
<tr>
<td><strong>OT sets per day</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 sets or less</td>
<td>36</td>
<td>55.4</td>
</tr>
<tr>
<td>5 sets or more</td>
<td>29</td>
<td>44.6</td>
</tr>
<tr>
<td><strong>Is attending continuing education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>22</td>
<td>33.8</td>
</tr>
<tr>
<td>Yes</td>
<td>43</td>
<td>66.2</td>
</tr>
<tr>
<td><strong>Night shifts per month</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>27.3</td>
</tr>
<tr>
<td>Yes</td>
<td>47</td>
<td>72.3</td>
</tr>
</tbody>
</table>

*SN = Staff Nurse, *EN = enrolled Nurse; *SN = Senior Staff Nurse

### Table 2. Symptoms of Sub-Health (n = 50)

<table>
<thead>
<tr>
<th>Items</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical symptoms (5 items)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fatigue</td>
<td>44</td>
<td>88.0</td>
</tr>
<tr>
<td>Numbness of shoulder(s) or leg(s)</td>
<td>26</td>
<td>52.0</td>
</tr>
<tr>
<td>Headache or dizziness</td>
<td>21</td>
<td>42.0</td>
</tr>
<tr>
<td>Pharyngeal foreign body sensation</td>
<td>15</td>
<td>30.0</td>
</tr>
<tr>
<td>Tinnitus</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td><strong>Psychological symptoms (6 items)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dreaminess or poor rest</td>
<td>21</td>
<td>42.0</td>
</tr>
<tr>
<td>Distracted or be upset</td>
<td>20</td>
<td>40.0</td>
</tr>
<tr>
<td>Poor memory</td>
<td>19</td>
<td>38.0</td>
</tr>
<tr>
<td>Anxiety</td>
<td>15</td>
<td>30.0</td>
</tr>
<tr>
<td>Loneliness</td>
<td>11</td>
<td>22.0</td>
</tr>
<tr>
<td>Difficulty concentrating</td>
<td>11</td>
<td>22.0</td>
</tr>
<tr>
<td><strong>Vigour (3 items)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of energy</td>
<td>22</td>
<td>44.0</td>
</tr>
<tr>
<td>Bad mood</td>
<td>15</td>
<td>30.0</td>
</tr>
<tr>
<td>Not interested in things around</td>
<td>13</td>
<td>26.0</td>
</tr>
<tr>
<td><strong>Social adaptability (2 items)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty in doing work</td>
<td>13</td>
<td>26.0</td>
</tr>
<tr>
<td>Bad relationship with colleagues</td>
<td>7</td>
<td>14.0</td>
</tr>
<tr>
<td><strong>Immunity (1 item)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catch a cold or other diseases easily</td>
<td>18</td>
<td>36.0</td>
</tr>
<tr>
<td><strong>Serious sickness requiring treatment in the hospital (1 item)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need to see doctor</td>
<td>14</td>
<td>28.0</td>
</tr>
</tbody>
</table>

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Age was the only factor that contributed to stress related to resource and environmental problems ($\beta = .396, t = 3.076, P = .003$). Older female nurses without bachelor degrees reported higher stress levels related to resource and environmental issues.

Female nurses who had children reported higher stress levels than those who had no children ($\beta = .450, t = 4.251, P = .000$). Nurses who were working on 4 or less operation sets per day reported higher stress levels than those who were working on 5 or more operation sets daily ($\beta = −.326, t = −3.021, P = .004$). Continuing education was positively correlated to occupational stress ($\beta = .265, t = 2.469, P = .017$).

**Discussion**

OT nurses practice in a multitude of settings with varying degrees in scope of practice, roles and responsibilities. Nurses perform nursing activities in the pre-operative, intra-operative and post-operative phases of the patients’ surgical experience. They provide continuity of care throughout the peri-operative period using scientific and behavioral practices, with the eventual goal of meeting patients’ individual needs.
The mean scores of all items (i.e. total subscale score divided by the number of items) were higher than 2.00, indicating that the nurses were indeed experiencing occupational stress. The 5 items with the highest scores were, in descending order, “workload is too heavy” (mean=3.69, SD=.61), “worrying about working errors” (mean=3.55, SD=.59), “low salary and benefits” (mean=3.51, SD=.53), “low social status” (mean=3.34, SD=.69), and “little chance of promotion and further study” (mean=3.20, SD=.73). The 5 items with the lowest scores were “lack of friendly cooperation between colleagues” (mean=2.09, SD=.74), “worried about patients’ sudden death” (mean=2.09, SD=2.91), “lack of understanding and support among colleagues” (mean=2.09, SD=.74), “conflicts with nurse managers” (mean=2.22, SD=.80), and “patients ignore instructions” (mean=2.23, SD=.72). Among the 5 subscales, the subscale in which OT nurses reported the highest level of stress was WTP (mean= 3.10, SD=.55), followed by PC (mean=2.87, SD=.47), PCIA (mean=2.48, SD=.53), IPRM (mean=2.51, SD=.58), and REP (mean=2.48, SD=.70) (Table 3).

### Table 3. Comparison of score of occupational stressor domains of OT nurses

<table>
<thead>
<tr>
<th>Domains</th>
<th>All OT nurses (n = 65)</th>
<th>Sub-Healthy nurses (n = 50)</th>
<th>Healthy Nurses (n = 15)</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional and career issues</td>
<td>2.87 (.47)</td>
<td>2.96 (.45)</td>
<td>2.60 (.45)</td>
<td>2.72</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Workload and time pressure</td>
<td>3.10 (.55)</td>
<td>3.19 (.53)</td>
<td>2.79 (.55)</td>
<td>2.54</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Resource and environmental problems</td>
<td>2.48 (.70)</td>
<td>2.58 (.72)</td>
<td>2.16 (.55)</td>
<td>2.08</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Patient care and interaction</td>
<td>2.60 (.53)</td>
<td>2.69 (.53)</td>
<td>2.32 (.42)</td>
<td>2.48</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Interpersonal relationships and management issues</td>
<td>2.51 (.58)</td>
<td>2.60 (.58)</td>
<td>2.24 (.53)</td>
<td>2.15</td>
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*SD = standard deviation

The mean scores of all items (i.e. total subscale score divided by the number of items) were higher than 2.00, indicating that the nurses were indeed experiencing occupational stress. The 5 items with the highest scores were, in descending order, “workload is too heavy” (mean=3.69, SD=.61), “worrying about working errors” (mean=3.55, SD=.59), “low salary and benefits” (mean=3.51, SD=.53), “low social status” (mean=3.34, SD=.69), and “little chance of promotion and further study” (mean=3.20, SD=.73). The 5 items with the lowest scores were “lack of friendly cooperation between colleagues” (mean=2.09, SD=.74), “worried about patients’ sudden death” (mean=2.12, SD=.91), “lack of understanding and support among colleagues” (mean=2.09, SD=.74), “conflicts with nurse managers” (mean=2.22, SD=.80), and “patients ignore instructions” (mean=2.23, SD=.72). Among the 5 subscales, the subscale in which OT nurses reported the highest level of stress was WTP (mean= 3.10, SD=.55), followed by PC (mean=2.87, SD=.47), PCIA (mean=2.48, SD=.53), IPRM (mean=2.51, SD=.58), and REP (mean=2.48, SD=.70) (Table 3).

#### Relationship of occupational stress and sub-health status

The scores of the five domains of occupational stress of sub-health OT nurses were higher than those of healthy OT nurses (P <.05 or P <.01) (Table 3).

#### Relationship of occupational stress and demographic status

The results of multiple linear regression analysis showed that the five subscales and the entire questionnaire on occupational stress, with independent variables of demographic status, were based on the data of female nurses who did not hold a bachelor degree (n = 53), as there were only 6 male nurses and 6 bachelor degree holders in the sample (Table 4).

The results from the PC and PCIA subscales show that nurses who had children reported experiencing greater stress at work than nurses who had no children (β=.436, t = 3.996, P =.000 for PC; β=.449, t = 4.034, P =.000 for PCIA). Nurses who were working on 4 or more operation sets per day reported lower stress levels than those who were working on 5 or fewer sets per day (β =−.292, t = −2.677, P =.010 for PC; β =−.294, t = −2.645, P =.011 for PCIA). Nurses who were on day-shifts reported higher stress levels at work than those who were on night-shifts (β =−.281, t = −2.572, P =.013 for PC; β =−.228, t = −2.050, P =.046 for PCIA). Age, years of employment in the nursing profession, designation, working hours per week and continuing education were not significantly related to respondents’ stress level in the PC and PCIA subscales.

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</tr>
</tbody>
</table>

*SD = standard deviation

The mean scores of all items (i.e. total subscale score divided by the number of items) were higher than 2.00, indicating that the nurses were indeed experiencing occupational stress. The 5 items with the highest scores were, in descending order, “workload is too heavy” (mean=3.69, SD=.61), “worrying about working errors” (mean=3.55, SD=.59), “low salary and benefits” (mean=3.51, SD=.53), “low social status” (mean=3.34, SD=.69), and “little chance of promotion and further study” (mean=3.20, SD=.73). The 5 items with the lowest scores were “lack of friendly cooperation between colleagues” (mean=2.09, SD=.74), “worried about patients’ sudden death” (mean=2.09, SD=.91), “lack of understanding and support among colleagues” (mean=2.09, SD=.74), “conflicts with nurse managers” (mean=2.22, SD=.80), and “patients ignore instructions” (mean=2.23, SD=.72). Among the 5 subscales, the subscale in which OT nurses reported the highest level of stress was WTP (mean= 3.10, SD=.55), followed by PC (mean=2.87, SD=.47), PCIA (mean=2.48, SD=.53), IPRM (mean=2.51, SD=.58), and REP (mean=2.48, SD=.70) (Table 3).

#### Relationship of occupational stress and sub-health status

The scores of the five domains of occupational stress of sub-health OT nurses were higher than those of healthy OT nurses (P <.05 or P <.01) (Table 3).

#### Relationship of occupational stress and demographic status

The results of multiple linear regression analysis showed that the five subscales and the entire questionnaire on occupational stress, with independent variables of demographic status, were based on the data of female nurses who did not hold a bachelor degree (n = 53), as there were only 6 male nurses and 6 bachelor degree holders in the sample (Table 4).

The results from the PC and PCIA subscales show that nurses who had children reported experiencing greater stress at work than nurses who had no children (β=.436, t = 3.996, P =.000 for PC; β=.449, t = 4.034, P =.000 for PCIA). Nurses who were working on 5 or more operation sets per day reported lower stress levels than those who were working on 4 or fewer sets per day (β =−.292, t = −2.677, P =.010 for PC; β =−.294, t = −2.645, P =.011 for PCIA). Nurses who were on day-shifts reported higher stress levels at work than those who were on night-shifts (β =−.281, t = −2.572, P =.013 for PC; β =−.228, t = −2.050, P =.046 for PCIA). Age, years of employment in the nursing profession, designation, working hours per week and continuing education were not significantly related to respondents’ stress level in the PC and PCIA subscales.

Female nurses who did not hold bachelor degrees and were employed in higher designations at work perceived greater stress in the area of work and time pressure (β=.532, t = 5.258, P =.000). Higher designation was also positively related to stress in the area of interpersonal relationships and management issues (β =.460, t = 3.698, P =.001).

The number of operation sets the nurses were working on per day (β =−.298, t = −2.921, P =.005) and working night shifts (β =−.243, t = −2.443, P =.018) were negatively related to stress levels arising from work and time pressure. Nurses who were attending continuing education while engaging in full-time employment concurrently reported higher stress levels arising from work and time pressure than those who were not doing so (β =.220, t = 2.200, P =.033).
Our results showed that workload and time pressure posed the most serious occupational stress to OT nurses. This finding is supported by a few studies done in mainland China (Li & Liu, 2000; Hong et al., 2003; Xianyu & Lambert, 2006; Yau et al., 2012), which also found workload to be the major source of stress reported by nurses. This finding is also consistent with McGrath et al.’s reports of western nurses (2003). This can be explained by the nature of nursing practice in operating theaters. Nursing practice in OTs is different from nursing practice in the wards. Operating theater nurses provide continuous service throughout the surgical intervention, especially the scrub nurse. Their work hours are dependent on the type and duration of operations. During operations, the scrub nurse works non-stop, thus explaining why heavy workload constituted the vital source of stress among OT nurses.

Besides the above reasons, staff shortage could be another important reason leading to over workload. In China, the ratio of nurses and midwives was 1.4:1000 of the population in year 2009 (World Health Organization, 2009), whereas UK has a ratio of 10.1:1000—more than 7 times that of China (World Health Organization, 2009). Expectedly, the shortage of nurses resulted in workload and time pressure being the most common stressor reported by OT nurses in this study. Moreover, nurses also complained about having to do too much useless paperwork or non-nursing work, for a lot of documents and records were still being changed from time to time due to nursing being a relatively new and underdeveloped profession in China.

The second most common source of occupational stress comes from the domain of professional and career issues. Our findings are supported by some studies on nurses in mainland China (Lambert et al., 2007; Li & Lambert, 2008; Yau et al., 2012). Compared with the experience of nurses in Western countries where the nursing profession is more developed, Chinese nurses reported a lack of autonomy and dependence on physicians’ direction in practice (Lambert et al., 2007; Li & Lambert, 2008; Yau et al., 2012). OT nurses’ work tends to be more passive than ward nursing. Nurses in OTs have to cater to the different personalities of surgeons and anesthesiologists with whom they work closely, rather than structuring their work by themselves. Having to do so, coupled with lower salaries and benefits than that of physicians, often makes nurses feel that their profession and social status are lower. Furthermore, higher education in the nursing profession is still relatively undeveloped, even though the health care and education systems in mainland China have undergone much reform in the past 30 years. In 2010, there were only 65 master programs and 22 PhD programs offered in the whole of mainland China (Nurseworld.cn, 2011).

The domain of patient care and interaction constitutes the third most common source of occupational stress. With the adoption of the Regulation on the Handling of Medical Accidents in 2002 in China and greater public attention on quality of life and health in the country, awareness of legal rights among patients and their families is growing. Nurses now have to pay more attention to the needs and concerns of patients and their family members. OT nurses are often required to provide detailed answers to a plethora of questions posed by patients and family members, including questions that may be beyond nurses’ scope of training and knowledge, and which only physicians are able to answer. All this put nurses frequently on the hot seat. In addition, nurses often feel unappreciated, for many patients and family members think that it is solely the surgeon’s scalpel that cures the patient, often forgetting that nursing care is equally important to patients’ post-operation recovery. As such, nurses often worry about making errors in nursing, while struggling with the daily demands of a thankless job. Although the current minimum educational qualification for entering the nursing profession in China is at least an advanced diploma degree, it is a common phenomenon that schools of nursing in China are still run by and within the medical faculty, rather than a faculty in its own right. This attests to the lack of recognition of nursing as a profession and undervaluation of the contribution of nursing and nurses in health care.

The domain of interpersonal relationships and management issues was the fourth most common source of occupational stress to OT nurse. This is consistent with a few studies, too (Kluger et al., 2003; Lambert et al., 2007; Kluger & Bryant, 2008). Due to the underdevelopment of the nursing profession in China OT nurses often feel a lack of understanding and respect from other health care personnel, inadequate understanding and support from nursing managers, and that they frequently receive criticisms from surgeons and nursing managers.

The domain of resource and environment problem constitutes the least common source of occupational stress to OT nurses in our study. This finding is in contrary to that of Yau et al.’s (2012) study, whose sample comprised nurse managers rather than nurses in direct nursing care. This is understandable, because the job...
environment of nurse managers and OT nurses differ vastly. Nursing managers are situated in wards where they manage a variety of both nursing and non-nursing (i.e. management) issues, with frequent interruptions and distractions to attend to patients, family members, subordinate nurses and management. OT nurses, on the other hand, work behind the closed doors of operating theaters, away from major interruptions and distractions during operations.

The results from this present study show that nurses who had children reported higher stress levels than those without children in terms of professional and career issues, and patient care and interaction. In China, the influence of Confucianism sees women living up to strong sociocultural expectations to take the major responsibility for housework and educating children. These expectations still persist in spite of the recent opening of China, major reforms in the country, and more women joining the workforce (Xu et al., 2004). The triple load of housework, childcare and employment is putting tremendous pressure on Chinese women. Operating theater nurses employed in higher designations are the hardest hit. Thus, it is not surprising that our study has found that employment in higher designations was positively related to stress arising from workload and time pressure.

In addition, employment in higher designations was found be positively related to stress arising from interpersonal relationships and management issues. We present a number of explanations for this phenomenon: First, nurses in higher designations are more likely to take on more roles at work, coupled with higher expectations placed on them. For instance, a senior staff nurse is usually required to arrive at the office at least half an hour earlier and leave the office half an hour later than a junior staff nurse. Second, nurses in higher designations are often given the responsibility to instruct and supervise nurses in lower designations, and help nurses-in-charge manage the ward, so it is no wonder that nurses in higher designations in our study reported that their workload was too heavy, that they had no time to implement psychological care to patients, that their nursing managers criticized them too much, and that the amount of understanding and support they had received from nurse managers were not enough.

The numbers of operation sets the nurses were working on per day and working night-shifts were negatively related to stress in professional and care issues, work and time pressure, and patient care and interaction. These findings are contrary to the findings of a study on hospital nurses by Wu et al. (2010). The differences may be due to the nature of work in the OT. Working night-shifts in the OT requires nurses to be on call for emergency operations. Should there be no calls; nurses are able to obtain sufficient, proper rest. Further, participating in 5 or more operations a day is the norm for OT nurses in China. Between each operation, nurses have time to remove and clean the surgical equipment used in the previous operation, prepare for the next, and get some rest during breaks.

Occupational stress is the ‘harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker’ (Welker- Hood, 2006). Thus, it is not surprising that 76.9% of OT nurses in our study reported sub-health symptoms. This figure is higher than WHO’s global survey data (75%) (as cited in Yan et al. 2005), and also higher than Kluger & Bryant’s (2008) report on anesthetic technicians in New Zealand, where 24% of respondents described severe physical impairment, and 35% had moderate to severe mental impairment. The nature of nursing in OT—long hours, frequent overtime, being on constant alert to changes in patients’ health condition—results in irregular mealtimes and interrupted rest, which, in turn, lead to high nervous state. The high strain placed on OT nurses may lead to the complete breakdown of their health. If the symptoms of sub-health are not treated timely, serious disease may occur, or even more nurses will choose to leave nursing in pursuit of jobs that exert lower occupational stress on their physical, emotional and mental health. It is hoped that the findings of our study will allow policy makers to confront the challenges of reducing occupational stress among nurses.

**Study limitations**

Although this study has provided useful information on nurses’ occupational stress, sub-health, and the relationship between stress and sub-health, it is limited by the nature of quantitative data collection, whereby insights into respondents’ personal thoughts and attitudes cannot be solicited. In addition, although the hospital where this study was conducted is typical of acute-care teaching hospitals in China, the sampling frame and sample size limit the generalizability of the results to the nursing population in other cities that are at different levels of development. Thus, studies using randomized and larger samples, combined with focus-group interviews, are recommended for future studies.
References:


Understanding the Experience of stress on initiation of Haemodialysis: A Phenomenological Study

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Background: Research evidence on stress among chronic kidney disease/end stage renal disease patients in India is sparse. Experience of stress is a subjective phenomenon. Hence qualitative research methodology helps to gain real insight about factors that cause stress among haemodialysis patients. The objective of this study was to understand the stressors experienced by patients on initiation of haemodialysis treatment.

Methods: A phenomenological approach was used to gain insight into the lived experience of stressors experienced by patients’ on haemodialysis treatment. The study was conducted in outpatient haemodialysis units of two private hospitals in Bangalore, India. Participants of the study consisted of six males and four females who were on haemodialysis for between 2 months to 36 months. Individual semi-structured interviews were conducted with all participants. All interviews were audio-taped and transcribed verbatim.

Results: Content analysis was used to analyze the data. Three main themes emerged namely ‘Physical stressors’, ‘psychological stressors’ and ‘Socioeconomic stressors’. Pain, tiredness and loss of appetite were the predominant physical stressors reported by participants. Shock and depression on diagnosis and initiation of dialysis, difficulty adhering to prescribed therapeutic regimen, feeling of being burden on family, fear of complications and uncertainty about life were the psychological stressors reported by participants. A range of socioeconomic stressors were reported by the participants which included; Loss of employment, financial problems, loss of ability to perform activities of daily living and limited social life.

Conclusion: Findings of this study can be utilized to design a pre-haemodialysis preparatory program which can be implemented for stage-4 chronic kidney disease patients to prepare them for haemodialysis.

Keywords: Stressors; Haemodialysis; lived in experience.

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Introduction

An Indian population-based study determined the crude and age-adjusted end stage renal disease (ESRD) incidence rates at 151 and 232 per million population, respectively (Modi & Jha, 2011). If validated in other parts of this region, it would mean that about 220,000–275,000 new patients need renal replacement therapy (RRT) every year in this part of the world. It is estimated that there are about 55,000 patients on dialysis in India, and the dialysis population is growing at the rate of 10–20% annually. Management of renal failure, despite medical advances, places an extreme psychosocial burden upon patients and their families (Cukor et al., 2007; Gil-landers, Wild, Deighan, & Gillanders, 2008). Patients experience reduced quality of life compared to the healthy population, with vitality, physical and social functioning being of particular concern (Klang & Clyne, 1997; Cleary & Drennan, 2005). Prevalence of depression and anxiety amongst all patients with end-stage renal failure are between 20% and 30%, rising to over 40% in haemodialysis patients (Cukor et al., 2007; Cukor et al., 2008). Financial burden due to high cost of haemodialysis treatment is a major concern for Indian patients in absence of medical insurance facility (Ballal HS, 2009). Difficulties are especially likely to occur during the transition onto haemodialysis (Harwood, Sontrop, Wilson, Spittal, & Locking-Cusolito, 2009).

Studies done in other countries report several stressors identified in haemodialysis patients (Harwood et al., 2009; Burnett & Kickett, 2009; Ekelund & An-dersson, 2007; Gurklis & Menke, 1995). Research evidence on stress among chronic kidney disease/end stage renal disease patients in India is sparse. A study by Udaykumar TR reported that haemodialysis patients’ experience more stress as compared to patients’ on peritoneal dialysis, (Udaykumar TR, 2003). Experience of stress is a subjective phenomenon. Hence qualitative research methodology may help to gain real insight in understanding stressors experienced by haemodialysis patients. Thus qualitative approach (phenomenology) was adopted to understand stressors experienced by patients on haemodialysis.

Aim of the study

The aim of this study was to address the question ‘What are the stressors experienced by chronic kidney disease patients on initiation of haemodialysis?

Methodology

Research approach: A phenomenological approach was used to gain insight into the lived experience of stressors experienced by patients’ on haemodialysis treatment.

Setting: The study was conducted in outpatient hemodialysis units of two private hospitals in Bangalore. Both the hospitals provided concessions in dialysis charges or free treatment to selected few patients who were too poor to bear the cost of dialysis treatment.

Participants: A purposive sampling was used to identify and recruit patients aged over 18 years who had started haemodialysis within the previous three years. Selection criteria ensured that the sample reflected the diverse characteristics of the wider haemodialysis patient population with respect to age, gender, marital status, employment status and acute or gradual transition to haemodialysis. Potential participants were excluded if they were judged to be too ill to take part, or if they had significant comorbidity such that their predominant treatment was for another illness. Potential participants were identified and given an information sheet and the opportunity to ask further questions. Written consent was obtained from patients who agreed to participate in the study. Mutually convenient time for an interview was selected. An approval from Hospital Research Ethics Committee for conducting the study was obtained.

Participants of the study consisted of six males and four females who were on haemodialysis for between 2 months to 36 months. The background characteristics of participants are presented in the table 1.

Data collection method

Interviews with participants were conducted using an interview guide. An attempt was made to make interviews informal and conversational. As requested by all patients, interviews were carried out during their dialysis. The interviews covered participants’ experiences of daily activities, thoughts, feelings, management of medical regimen and social life. The participants dictated the order and pace of inter-
views, which lasted between 30 and 60 minutes. All interviews were audio-taped and transcribed verbatim. After interviewing 10 participants it was observed that no new information was gained and the data saturation had reached.

Data analysis

The interpretive content analysis of the text was undertaken for the purpose of analysing qualitative data. After reading and rereading through the transcribed interviews initial identification of major themes appearing in the data was done. Data analysis continued until no further themes emerged and all relevant text was coded.

Findings and discussion

Analysis of the data resulted in the emergence of three main themes—‘Physical stressors, ‘psychological stressors’ and ‘socioeconomic stressors’ These themes are presented in the table no.2

Patients who had an acute transition onto haemodialysis reported more psychological stress compared to those whose transition to haemodialysis was gradual. It was also observed that psychological and socioeconomic stressors were more predominantly reported by younger patients.

a) PHYSICAL STRESSORS: Pain, tiredness and loss of appetite were the predominant physical stressors reported by participants. All the participants reported pain as their major concern. Being pricked with large needles and repeated arterio-venous fistula operations were expressed to be perceived as painful. For example one participant said “I had never seen such big needles! Initially I was very much afraid of needles. (Male, 32yrs). Another explained, “I had to come for operation theatre(for fistula creation) for three times. That was very painful for me...physically...mentally...in every way”(Male,36yrs).

Tiredness and loss of appetite were among the other most commonly reported stressors. Feeling tired was attributed to dialysis treatment, high creatinine levels and lack of appetite. Many participants reported loss of appetite which was present at the time of diagnosis of chronic kidney disease and which became worst with time. One participant explained, “I can’t walk for long distance. I feel tired. Sometimes I even had a fall...that’s why I am afraid”(Female,62yrs).Another said, “Then even with high creatinine....you don’t feel like eating sometimes. Just to take medicines forcibly eating...and I have done that forcibly eating thing also” (Female, 31yrs).

Dry and scaly skin is common problem in CKD patients. Itching and swelling were reported as troublesome by a few participants. “See we have the thing like...I used to get itching in the legs...not in hands...in legs...Doctor suggested me to change the soap which has got glycerin. So now it’s not

<table>
<thead>
<tr>
<th>Sr no</th>
<th>Gender</th>
<th>Age</th>
<th>Time on Haemodialysis</th>
<th>Marital status</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M</td>
<td>32</td>
<td>2 months</td>
<td>Married</td>
<td>Unemployed</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>62</td>
<td>11 months</td>
<td>Married</td>
<td>Unemployed</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>31</td>
<td>3 years</td>
<td>Single</td>
<td>Unemployed</td>
</tr>
<tr>
<td>4</td>
<td>M</td>
<td>32</td>
<td>3 years</td>
<td>Single</td>
<td>Unemployed</td>
</tr>
<tr>
<td>5</td>
<td>M</td>
<td>57</td>
<td>11 months</td>
<td>Married</td>
<td>Unemployed</td>
</tr>
<tr>
<td>6</td>
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<td>36</td>
<td>11 months</td>
<td>married</td>
<td>Unemployed</td>
</tr>
<tr>
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<td>11 months</td>
<td>Married</td>
<td>Unemployed</td>
</tr>
<tr>
<td>8</td>
<td>F</td>
<td>36</td>
<td>3 years</td>
<td>Married</td>
<td>Unemployed</td>
</tr>
<tr>
<td>9</td>
<td>F</td>
<td>24</td>
<td>12 months</td>
<td>Single</td>
<td>Employed</td>
</tr>
<tr>
<td>10</td>
<td>M</td>
<td>55</td>
<td>11 months</td>
<td>Married</td>
<td>Unemployed</td>
</tr>
</tbody>
</table>
Table 2. Themes (n=10)

<table>
<thead>
<tr>
<th>Definition</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical stressors</strong></td>
<td>Pain, Tiredness, Loss of appetite, Itching, Swelling, Muscle cramps.</td>
</tr>
<tr>
<td><strong>Psychological stressors</strong></td>
<td>Shock, Depression, Uncertainty about life, Fear of complications, Compliance to therapeutic regimen, Feeling of being burden on family.</td>
</tr>
<tr>
<td><strong>c) Socioeconomic stressors</strong></td>
<td>Loss of employment, financial problems, Limited social life, Loss of normalcy in life.</td>
</tr>
</tbody>
</table>

When asked about their first experience of undergoing dialysis majority of the patients whose transition to dialysis was acute reported that they felt very helpless and were shocked to undergo the treatment which they had never heard or seen before. One participant stated, “That was terrible for me...I was...I had not seen any dialysis machine. Dialysis was a new word for me. Then I came to know about this...very painful...Once I landed up onto the bed....next to the dialysis machine...I was really feeling bad and I was looking...what exactly they do”(Male, 32yrs).

Contrary to the experience of younger participants who had acute transition to haemodialysis treatment older patients whose transition to dialysis was gradual were mentally more prepared to accept diagnosis of ESRD and transition to haemodialysis treatment. For example one participant responded, “Because I was already having a problem for past three years...it was known that it will fail one day...because I had already three four problem related to my health, it did not much affect me. I had heart problem, I have BP, I am sugar patient from past 20 years...so these all made my mind matured”(Male, 59yrs).

Uncertainty about outcome of treatment and progression of disease instilled fear of death in minds of most patients on diagnosis of ESRD and initiation of dialysis treatment. One participant stated, “I felt my life may end within that period. Thoughts came like that...fear was very high...fifteen days I did not sleep” (Male, 36yrs). Most participants expressed feelings of uncertainty about their life. Majority were aware that dialysis treatment is not cure for their disease. They
felt helpless to be on dialysis to continue their life. One participant explained, “As a dialysis patient we don’t know what is going to happen tomorrow...where is the end but you need to stick on to this...there is no other alternative” (Male, 32yrs). Another stated, “Once you come to this stage...everything will not be in our hands. Whatever the way life goes we have to go like that. We are just trying things...that’s all” (Male, 36yrs).

Majority of the participants reported feeling depressed on initiation of dialysis treatment. Loss of employment, long-term nature of treatment with no hope for permanent cure made most of them feel depressed. One participant said “All that time I was quiet busy...so once for all I stopped no...that made me very tensed and depressed” (Male, 55yrs). Physical changes related to disease and treatment were also attributed to cause depression. “When I wake up in the morning, when I breathe out, it smells very awkward...at that time I feel very...I will be depressed”. (Male, 36yrs) One participant even reported suicidal ideation she had during the first few months of her dialysis treatment. “Sometimes I thought of even suicidal attempt...I thought of committing suicide” (Female, 31yrs).

Most participants were found to be concerned about complications that would occur due to various reasons. Many were concerned about dialysis and fistula related complications. One stated, “During dialysis anytime suddenly BP will go high and I am diabetic no...even suddenly sometimes it happens...suddenly sugar will go low. Then too much of sweating...some giddiness...immediately they will give treatment...that way we have to worry” (Male, 55yrs); Another said “It was very frustrating(dialysis treatment)...it will completely remove our energy...something like that I felt” (Male, 32yrs).

Some were found to be constantly concerned about their diet. They wanted to be more careful about their diet to avoid any sort of complications. One participant stated “Now a days also I am very scared to take any- thing...the food. If they allowed me to take a particular food...like nuchal...bitterguard...they told me I can eat...but that also I am taking very limited amount. One small banana they have allowed me to take but if I take it I feel scared that my potassium will increase” (Female, 36yrs).

Some also expressed concern about repeated blood transfusions they had to undergo due to anemia. They feared that blood transfusions would lead to various infections. One participant expressed, “But if we take direct blood it will affect us a lot! Like we get...what to say...pimples...pus...pus formation will occur in all parts of the body. When I take blood of others even though it is tested also it will show its reaction a lot” (Female, 24yrs).

Adhering to therapeutic prescription of diet, limited fluid intake and medications was found very stressful by most participants. All the participants reported that adhering to limited fluid intake was the most difficult task for them. One participant stated “In this dialysis main thing is food only! Food in the sense water...even in the food or whatever it is, I can control totally but fluid is main. They have given restriction...you should not drink much water...that is really bad!” (Female, 24yrs). For some taking too many oral medications made it more difficult to adhere to limit their fluid intake. Majority exceeded their prescribed fluid limit as they needed more water to swallow the medicines. One participant explained, “It’s very difficult! We have to take tablets three times. Tablets will be around 10 tablets...7-8 tab-lets...that alone will consume I litter water. Rest of the things...it’s very difficult to handle within that limit. In my case I drink more water. Most of the times I cross the limit” (Male, 36yrs). Others found it difficult to adhere to prescribed diet and fluid intake when they had to attend family functions and social gatherings. One participant explained “When I go out with friends or cousins will come to my house, going for parties or functions...we can’t control ourselves. Like especially when I am with my friends, I can’t tell them right...see I can’t have this...I can’t have that...only for me. That I can’t do. So I will be like normal...like them only...that time I will never be on diet” (Female, 24yrs). Some also reported physical problems they had to face due to limited fluid intake. One participant stated, “Without water so many problems I am facing...like no sleep in the night...second thing motion is very difficult”. (Male, 57yrs)

After fluid intake dietary restriction was reported as the most difficult to follow by many participants. Salt restriction especially was found to be more stressful by majority participants. Participants expressed, “Eating less salt is miserable...adjusting for this type of diet is hard and bit difficult...even now I feel hard for diet...Sometimes I have to quarrel with my wife” (Male, 59yrs); “I can’t have food without salt. Only that is the problem, till now I am unable to come out of it” (Female, 24yrs). Giving up favorite food items was also stressful for some participants “The main thing is potato...I love potato...potato...tomato...it all hurts...my favorite dish is non-veg. But that also should be avoided. It hurts like anything...you can’t imagine and explain the thing......it is beyond explanation. It brings tears in my eyes” (Male, 36yrs).
A few participants found it stressful to take too many medicines for a long duration. One participant was concerned about chemicals used in medicines and thought that these would probably further cause more damage to the kidney. “Very difficult!!! Swallowing everyday so many tablets I am very much...very difficult...For last 4-5 years I am taking so many tablets. I am fed up of taking tablets now...very much fed up” (Male, 57yrs).

All the participants reported the feelings of being burden on their family members. Majority had to give up their employment due to time demands of dialysis treatment. Financial dependency on family due to unemployed status was reported as a stressor by these participants. Participants expressed this as: “Because like...I was not dependent on my family for anytime. After I completed my graduation I started working. But suddenly when it happened like this...I used to feel like...now I have become very much dependent on my family” (Female, 24yrs); “I do not want to give any trouble...further problems to my family also...simply unnecessarily...Simply whatever the doctors are telling...medicines and all restrictions I will follow......If I don’t follow then automatically the problem will come. I will have to get admitted in hospital...people will have to come...because of me they should not be put in trouble. Already they suffered too much” (Male, 55yrs); “My mother my father when I was in St. Johns (hospital) in the beginning like when I used to go for dialysis, never they were able to attend parties functions...many things they were unable to do because of me” (Female, 24yrs).

Some others perceived themselves as obstacle in life of their family members who took care of them. They felt guilty for the sacrifices family members had to make to take care of them. One participant expressed, “Second thing is she (sister) is not getting married...because of me...A sister at home with dialysis who will take care...if she gets married and goes away. That is a bit difficult thing...so its directly or indirectly its upon me! I have been just like a curse” (Female, 31yrs).

C) SOCIOECONOMIC STRESSORS: A range of socioeconomic stressors were reported by the participants which included; Loss of employment, financial problems, loss of ability to perform activities of daily living and limited social life.

All participants highlighted financial problem as the most stressful factor. Cost of dialysis treatment, medications and transportation charges was perceived to be huge financial burden by participants. Loss of employment further complicated the financial problems. Participants expressed their difficulties as, “Before I was doing business, by the time everything adjusted then there were no expenses. Now I have stopped working and expenses have increased. Hospital expenses are more...medicines...that insulin costs 500 Rs it comes for a week only...plus the tablets also...plus the dialysis cost...it’s difficult!” (Male, 55yrs); “Per dialysis we used to pay 900 Rs. weekly thrice it was and in a month...it is very costly. A middle class family...really they can’t spend so much money. Nobody will have so much of savings also” (Female, 24yrs).

Younger patients were more concerned about loss of employment and financial dependency on others. One participant stated, “When I quit the company I was having this disease. Now I am not able to take that much stress...the work pressure was too much that you need to be physically available every time and the dialysis is one obstacle where every time you need to stick onto the machine...right next to it” (Male, 32yrs). Some constantly worried to meet the expenses of their treatment. Some others did not want to start with treatment due to lack of finances. Some participants expressed this as “But I do not go by auto. Auto fare will come up to 70-80Rs. If I save that money it can be used to buy my tablets...so I go by bus only” (Female, 36yrs); “The doctor told to start dialysis...then I started. What to do like that I was...I didn’t want to start it...because it takes money also n owe don’t have so much money!” (Female, 62yrs).

Most participants wished to start working again and be financially independent. As dialysis treatment demanded time, most participants verbalized difficulty finding jobs that permitted for flexible work timings. One participant stated, “My first and foremost thing is to get a good job. That should have much flexible timings...once we become economically independent then no other problems will arise” (Male, 32yrs). Some others who wished to work again reported lack of family support. One participant stated, “From past 15 days I was coaxing my husband that I want to do MA in English. But he says ...don’t take risk...why you want to do all this...I said...I want to work as a teacher...but he is not allowing me to do that” (Female, 36yrs). Although renal transplant was perceived as best option, lack of finances made it difficult to go for transplantation. Uncertainty about successful transplant also made them unsure to spend on this treatment modality. “The transplant is the best thing...but it depends on financial probabilities of your family and the success rate of transplant being successfully done” (Male, 32yrs).
Participants did not want to be talked about as ‘different’ or ‘diseased person’ among their social circle. Answering questions asked by people related to disease or treatment was frustrating for most of them. One participant stated, “I didn’t want people to see me in some other way...some other way means...obviously they can show their sympathy for me...she is a kidney failure patient...she is that...she cannot do this...that. They start showing much care or whatever it is...I don’t want that to happen” (Female, 24yrs). Most felt that presence of neck vein catheter made them look and feel awkward to go out in public as they had to answer peoples queries related to the catheter. Most chose to avoid going out when neck vein catheter was present. One of the participant stated, “That time the catheter was here...near neck...I used to feel very bad! It’s not good at all! I can’t go out, I can’t go to anybody’s house or I can’t roam...you can see it right? Someone can see it. I used to tie a scarf, but I never liked. It was there almost three months. I never went out” (Female, 24yrs). Avoiding social contact was perceived as solution by younger participants. Most felt that friends, relatives looked at them negatively. For example one participant stated, “The thing is I avoid all the things. My social life is zero now. I won’t entertain any meetings with the friends won’t go out to meet anybody. Before when we are normal they treat us like very important. After you get this disease the treatment they give you is entirely different” (Male, 36yrs). Some expressed that their social life was limited to meeting and interacting with dialysis department staff as they spent most of their time in the dialysis unit. One stated, “So social life in the sense going for dialysis, getting dialysis done, speaking to the dialysis staff, sisters...all...this is the social life! Outside I don’t have anybody” (Female, 31yrs).

Inability to perform day to day self-care activities gave rise to feelings of dependency on significant others. Feeling of loss of normalcy was expressed by most participants. For example one participant stated, “In my house we heat water on stove for bath. So in a vessel we keep water. So sometimes I will take it off from the stove. But my mother she will stop me. Every day she will scold me...never she will allow me to do that. So that one I feel very bad. Because every day morning calling her and saying...Please do this for me...that I feel very bad!” (Female, 24yrs). Physical inability to pursue work related activities, hobbies and social activities that were enjoyed once was found troublesome by many. For example some participants stated, “My main hobby was trekking...very often....once in three months at least...Another thing is swimming and rafting. Right now everything is paralyzed” (Male, 36yrs); “Before I used to cook, keep everything ready, then go to school; from school to Geeta classes, lectures like that I will attend and after coming, I used to do my work, all household work. But now to go for one place also is very difficult” (Female, 62yrs).

For younger participants disease and dialysis treatment halted future life plans. One participant stated, “I was just preparing for my MA literature exams and suddenly I had this swelling in February. I stopped those MA literature preparations. Then I came this way...dialysis way... I gave it up...it was very horrible!” (Female, 31yrs).

**Discussion**

Our findings offer interesting insights into stressors experienced by ESRD patients’ on initiation of haemodialysis. However, the limitations of the study include the small purposive sample. Hence generalisation of the findings to the larger population of patients may not be possible. However, the primary aim of the study was not to generalize the findings, but to develop an in-depth account of participants’ stressors on initiation of haemodialysis therapy.

It was observed that participants experienced physical, psychological and socioeconomic stressors on initiation of haemodialysis. Findings of this study suggest that psychological and socioeconomic stressors were predominantly expressed by the participants. Findings of study by Auer J et.al. also report that psychological stressors were predominant in these patients (Auer J et al., 1990).

Like the findings of our study, the literature highlights prevalence of fatigue that ranges from 60% to as high as 97% in patients on long-term renal replacement therapy (Chang, Hung, Huang, Wu, & Tsai, 2001; Murtagh, Addington- Hall, & Higginson, 2007; Weisbord et al., 2005). Findings of a qualitative investigation conducted by Theofilou et.al. reported that fatigue typically reported post and during dialysis interfered with daily activities and mobility (Theofilou, Synodinou, & Panagiotaki, 2013). Weisbord et al. reported that dry skin (72%), feeling tired or lack of energy (69%), itching (54%) were the most commonly reported symptoms by dialysis patients which led to significant reduction in health related quality of life among these patients (Weisbord et al., 2005).

Psychological stressors reported in our study are in agreement with many other studies that have reported depression, helplessness, uncertainty about prognosis in haemodialysis patients as stressors. (Harwood, Locking- Cusolito, Spittal, Wilson, & White, 2005; Burnette & Kickett, 2009; Ashby et al., 2005; Tagay, Kribben, Ho- henstein, Mewes, & Senf,
Understanding the Experience of stress on initiation of Haemodialysis

In addition to these, our study identified compliance to diet and fluid limitation as one of the major psychological stressors. Patients were anxious, constantly worried and were not effectively able to cope with these limitations. Feeling of being burden on family members was another important psychological stressor identified by our study.

Findings of our study draw attention to economic burden and social disconnect experienced by patients during transition to hemodialysis. Similarly Udayakumar et al. reported that patients on haemodialysis had higher scores in the “socio-economic aspect” of stress (75.87 ± 6.48) as compared to peritoneal dialysis patients (39.0 ± 5.57, P<0.001) (Udayakumar TR, 2003).

Differences in experience of stress by younger vs. older patients and acute vs. gradual transition to haemodialysis are important to be considered while designing patient preparation programs. Study also helps to bring out the real and imaginary fears of patients during transition to dialysis. Patients often are more depressed and are in need of psychological support during their transition to dialysis. Suicidal risk is high among depressed hemodialysis patients (Sachan Rekha, Gupta Pooja, Patel ML, Chaudhary Shipra, & Agarwal Reshu, 2012). It is important for nurses to understand the thoughts and feelings of patients on transition to haemodialysis, in order to provide needed information and counselling for these patients. Across several developmental and lifespan transitions, as discussed by Mahler & Kulis, (1998) and Rosenkotter & Garris, (2001) preparation has been identified as reducing psychological distress and improving general well-being. Good-quality education and counselling has central significance during patient preparation for treatment in chronic illnesses.

Conclusion

This study has identified stressors experienced by chronic kidney disease patients on initiation of haemodialysis in Indian context. Study’s findings illustrate physical, psychological and socioeconomic stressors experienced by patients. These findings can be utilized to design a pre-haemodialysis preparatory program which can be implemented for stage-4 chronic kidney disease patients to prepare them for haemodialysis.

Acknowledgements:

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Bibliography


Background: The provision and quality of mental health services in Acute General Hospitals is a growing concern. Developing research to elicit the views of patients and staff will offer insights into service improvements. The Rapid Assessment, Interface and Discharge service (RAID) developed in an Acute General Hospital to deliver a rapid-response, 24-hour, 7-day-a-week, age-inclusive intervention was evaluated for its impact on staff satisfaction, with emphasis on staff training; and patient satisfaction, with emphasis on the differences in satisfaction between working age (under 65 years) and older adults (over 65 years). Population: Staff working in acute hospital caring for patients with mental health needs, and patients presenting to acute hospitals, requiring clinical input for their mental health.

Methods: Data on patient satisfaction was collected through a structured telephone questionnaire including fixed and open-ended questions. Data related to staff satisfaction regarding the service provided was collected by a semi-structured interview administered face-to-face with staff from wards referring to the team. Training was evaluated using open-ended, Likert-scale and open-ended questionnaires.

Results: Results show that the majority of working age patients rated the service as ‘good’ (42.2%), felt that the team was helpful in their care (84.8%), met their mental health needs (69.7%), and treated them with respect (96.1%). Overall, older adults rated the service as ‘excellent’ (58.3%), felt that the team was helpful in their care (85.7%), met their mental health needs (85.7%), treated them with respect (92.9%) and stated that they were seen in good time (100%). The difference in satisfaction levels between patients of working age and older patients was statistically significant. Common aspects staff rated as most helpful were advice on managing patients (12.0%), support of staff (11.0%) and advice on medication (11.0%). The majority of staff surveyed felt that their practice would be improved following the training, and rated it as either excellent (61.6%) or good (36.3%).

Conclusion: This study highlighted the benefits of providing support and training to staff working directly with patients with mental health needs. It is more challenging to measure the satisfactory effect of older people who continue to give favourable answers on satisfaction questionnaires.
Background

Over the last decade, increasing attention has been paid to the quality of health care and mental health services in particular (Care Quality Commission, 2011). A study conducted in the UK by the Psychiatric Liaison Accreditation Network (PLAN) found that psychiatric teams across the country varied in size, caseload and the number of working hours (Royal College of Psychiatry, PLAN, 2010).

In 2012 the importance of mental health services in acute hospital settings was highlighted (Joint Commissioning Panel for Mental Health Liaison, 2012). Specifically, mental health disorders were found to account for approximately five per cent of A&E attendances, twenty five per cent of primary care attendances, thirty per cent of acute inpatient bed occupancy and thirty per cent of acute readmissions (Royal College of Psychiatry and British Association of Emergency Medicine, 2004).

Moreover, the Joint Commissioning Panel for Mental Health Liaison (2012) suggested that current psychiatry provision is often:

“patchy, despite its core role in risk management and in facilitating good physical health care...further complicated by the range of other services that provide behavioural input to physical healthcare. Liaison services have a unique and essential role in providing broad cover across health care settings, and in their capacity to handle the most severe and risky mental health problems” (pg. 8).

The Rapid Assessment, Interface and Discharge (RAID) is a new model for acute liaison services developed by Birmingham and Solihull Mental Health Foundation Trust and the University of Staffordshire. It is important to state that RAID is embedded within the acute hospital setting and whilst may be considered as ‘liaison psychiatry’ as a model; its structures and governance are managed within the acute hospital governance structures. This service delivers a rapid response, 24-hour, 7 day a week, age inclusive and comprehensive range of mental health specialties, including old age, working age, postnatal mental health and substance misuse, within one team. RAID has a one-hour target to assess patients who present to the Emergency department and 24 hour target for patients on wards. It is age inclusive, in that it provides service to any patient aged 16 years or over. Additionally, the team provides brief follow-up clinics within the acute hospital. This multi-professional team provides close clinical involvement alongside the provision of education, training, clinical support and supervision in mental health interventions for general hospital professionals, patients and carers. The team was launched at the City Hospital Birmingham serving an inner city ethnically diverse population and has 600 beds. The RAID service commenced in December 2009 as an integrated part of the hospital.

This study examined and evaluated both patient and staff satisfaction of the RAID service to inform further development of the service. An additional objective was to identify whether or not working age patients differed from older patients, in their experience of satisfaction of care provided by the RAID team, as found in other previous studies.

Hansson (2001) asserts that a comprehensive assessment of a service should be performed at both the system level (staff feedback) and patient level (those who directly receive the service). This study found that service use is influenced by a number of inputs to services, such as: capacity, availability of alternative community based services, mental health services delivered by the general health care system and social service system. It is presumed that measures of staff and patient satisfaction in relation to any service can be integrated as a valuable part of an evaluation (Priebe & Gruyters, 1995; Ruggeri, 1994). Elliot et al., (1995) argued that in order to better understand how treatment or services affect outcomes, patient and staff perspectives on service functioning, including patient well-being should be examined. It is clear that the processes involved in treatment within healthcare settings directly impact upon patient outcomes. Furthermore, the level of satisfaction expressed by a service user has been found to impact upon the course of treatment, qualities of patient -staff relationships and overall patient treatment outcomes (Björkman et al, 1996; Prebe & Gruyters, 1995). Patient satisfaction has also been correlated to compliance and participation in treatment (Priebe & Gruyters, 1995; Ruggeri, 1994).

Satisfaction with mental health services using telephone methodology was researched by Edlund and colleagues (2003). They found that ratings of quality of care were significantly associated with ratings of overall satisfaction. In contrast, dissatisfaction has been associated with patients feeling that they need more
information on medications, mental health problems and relapse-prevention (Cleary et al, 2003). Understanding the importance and influence healthcare professionals have on patient care is not a new phenomenon (Maycock, 1991). It is therefore vitally important that data surrounding staff and patient satisfaction is collected and analysed in order that new treatments and or services can be evaluated from the perspective of both those who have to implement them and those that receive them.

In relation to patient satisfaction scores, research has found differences between patient’s satisfaction ratings according to their age. Research shows that higher levels of satisfaction have been associated with older age (Blenkiron & Hammill, 2003; Gharabawi et al, 2006). In support of this finding, age has been found as a determinant of satisfaction ratings and that older adults scored higher and were more satisfied than younger people (Kong et al, 2007). The reasons for this may be manifold; including lower expectations of older patients with relation to greater waiting times, leading to better satisfaction rates (Kong et al, 2007). More recently, user involvement has been seen as an integral part of measuring the outcomes and performance of clinical service delivery (Brunero et al, 2009). Chang and colleagues (2003) have found that it is common practice in healthcare settings to utilise satisfaction as a quality improvement tool for health care providers and that satisfaction has become an important measurement for monitoring health care performance of health plans.

**Method**

**Patient Satisfaction**

Data on patient satisfaction was collected via a structured telephone questionnaire including fixed and open-ended questions. The fixed questions consisted of seven dichotomous questions and one five-point Likert scale. The dichotomous questions asked were:

- Did you find the mental health team helpful in your care?
- Do you think you were seen in good time by the mental health team?
- Did you feel your mental health needs were met by the mental health team?
- Were you satisfied with the information given by the mental health team?
- Did you feel you were treated with respect by the mental health team?
- The five-point Likert scale question was;
- How would you rate the service provided by the Mental Health Team?
- Two open ended questions asked included:
- Would you have liked there to be anything done differently?
- What the most helpful aspects of the care provided were?

The interview schedule was administered by telephone researchers. Demographics including ethnicity, age and gender were also collected during interviews. The contact details for all patients seen by RAID were obtained from the patient record electronic system.

Contact with patients was made as soon as possible after discharge from hospital. Responses were obtained using a telephone survey methodology. Interviews lasted between 5 and 60 minutes. Thematic analysis was utilised to analyse the data collected from open-ended question responses.

**Staff Satisfaction**

Data related to staff satisfaction regarding the service provided by the RAID team was collected by a semi-structured interview administered face-to-face with staff from wards referring to the RAID team in the preceding month. Data was collected using a questionnaire consisting of four dichotomous questions including:

- Did the service provided by Liaison Psychiatry have a positive impact on the care of the patient?
- Do you think the response time was appropriate?
- Do you think that the intervention/assessment provided by Liaison Psychiatry influenced the time the patient was on the ward?
- Do you think the involvement of Liaison Psychiatry improved the quality of care provided?
- One question consisted of a five-point Likert scale asking:
- How would you rate the service provided by liaison psychiatry?
- There were two open-ended questions including:
- Do you think there could have been anything done differently?
- What were the most helpful aspects of the service provided?

Thematic analysis was utilised to analyse the data collected from open-ended question responses. Typically interviews lasted between 5 and 20 minutes.
Training evaluation

As part of the RAID service there is an emphasis on providing training in assessment, detection and intervention of mental health difficulties for acute hospital staff. Training has been provided by the RAID team to acute hospital staff on mental health needs for working age adults, older adults and substance misuse patients. This training was evaluated using questionnaires, which were completed and returned by staff after each session. The questionnaire included three open-ended questions including:

- Can you say how you think it will/will not improve your practice?
- Are there any areas you would like us to provide further teaching on?
- What did you find most interesting/relevant to your work?
- Two questions consisted of five-point Likert scales, asking:
  - How relevant did you find the training?
  - How would you rate the training overall?
- Lastly, two dichotomous questions were utilised to evaluate the training. This included:
  - Do you think today’s session enhanced your knowledge/understanding?
  - Do you think today’s session will improve your practice?

Results

Patient Satisfaction

In total 886 patients were assessed by the RAID team between 1st December 2009 and 31st July 2010. Completed patient satisfaction surveys were obtained from 122 (13.8%) of these patients, as not all patients could be contacted. The mean age was 42.9 years and ranged between 16-92 years. The majority of participants were female (74, 60.7%). The most common ethnic groups surveyed were White British (70, 57.4%) and Asian/Asian British (15, 12.3%).

Data regarding feedback is categorised into two groups: patients surveyed under the age of 65yrs (106, 86.9%) and those aged over 65 (16, 13.1%) in order to compare responses of these user groups. However, it should be noted that percentages are given in relation to the number of people that responded to each question, as opposed to the number of people in the total sample category as not all participants answered every question asked.

Younger adults (below 65 years old)

The mean rating from patients of working age, in terms of the care provided by the RAID team, was 4.1 (good), on a scale ranging from 1 (very poor) to 5 (excellent). The majority of working age patients rated the service as ‘good’ (43, 42.2%). Where patients scored ‘excellent’, they felt that staff were considerate, understanding, professional, caring and helpful and made them feel that they were important (when answering what the most helpful aspects of the care provided were). Those who rated the service as ‘very poor’ felt that they were not offered help to get them back to work and felt worse off after the medication wore off. Table 1 summarises the responses obtained from patients of working age. Overall, majority felt that the team was helpful in their care (89, 84.8%), saw them in good time (87, 84.4%), met their mental health needs (69, 69.7%), treated them with respect (99, 96.1%) and provided them with a satisfactory level of information (89, 84.8%).

Older adults (65 years of age and over)

The mean rating from older adults for the question how would you rate the care provided by the Mental Health Team was 4.6 (good), on a scale ranging from 1 (very poor) to 5 (excellent). Overall, a higher percentage of older adults rated the service as ‘excellent’ (7, 58.3%). Patients that gave ‘excellent’ ratings felt that they were respected, their confidence was boosted; and that the team offered them reassurance, coordinated their care between other services and normalised the way that they were feeling.

Table 1 summarises the responses obtained from older adults and working age patients surveyed. When comparing patient responses by questionnaire item, all participants felt that the service was effective by answering yes, rather than no or unsure, on all measures, regardless of age group (see table 1).

Analysis between the mean quality ratings of the RAID service by age cohort suggests a statistically significant difference P=0.02, with older patients reporting higher levels of service satisfaction. The following themes were identified from the open-ended question in relation to the most helpful aspects of patient care; clinician attitude and service provided. Examples of these were:

- Patients felt that communication, follow up,
facilities, time, organisation, and unmet expectations could be improved. Examples of these were:

**Clinician Attitude**

'Staff were patient, professional, caring, discrete, done at my pace, showed empathy. Did not pre-judge, very positive experience. I would like to thank all of the team. Treated with upmost respect and would like my thanks to be fed back to the whole team' (30)

'They made me feel like I didn’t want to die anymore they boosted my confidence' (84)

'Was all exceptional, definitely doing the right job, generally mental health services in city of Birmingham are inadequate. Can’t speak for the rest of the hospital but she was exceptional' (56)

'They felt my pain, they really did. I felt really supported' (70)

'The main thing was that they said that the things I was experiencing were not all that uncommon, which was reassuring' (93)

**Patients responses regarding the mental health service provided**

'They liaised with my other mental health team about what was going to happen' (26)

'Trying to help identify triggers and talking really helped' (8)

'The plan (suicide management plan) was helpful and I’ve still got the Buzz guide you gave me, which I keep looking at' (19)

'There was someone there who was a specialist in mental health' (78)

**Carers responses regarding the mental health service provided**

'The understanding of my Father, he recognized what the problem was when everyone else was saying it was just confusion. It was such a lifeline to us, we needed somebody to recognize what was happening. We felt like somebody was on our side' (20)

**Staff Satisfaction**

In total, 50 staff were interviewed using a semi-structured questionnaire. The sample included ward sister (19, 38.0%) and ward manager (16, 32.0%). Members of the staff were asked to rate the services provided by RAID on a five-point Likert scale ranging from 0 (very poor) to 5 (excellent). The mean rating was 4.2, with responses ranging from 2.5 (poor) to 5 (excellent).

**Most helpful aspects of the service**

Pie chart 1 shows a breakdown of what staff reported were the most helpful aspects of the service provided by the RAID team. The most common aspects staff rated as most helpful were: advice on managing patients (25, 12.0%), support of staff (23, 11.0%) and advice on medication (23, 11.0%).

Results showed that all staff interviewed felt that the service provided by RAID had a positive impact on the care of the patient (50, 100%).

**Communication from Patient and Carers**

'I was quite upset at the time and had a lot going through my mind. I think it would have been better if I could have spoken to them when I was calmer. Also there were two of them and I would have felt more open to talk if it was just one person' (65)

'It was said that a letter would be sent to the GP with recommendations about her antidepressants and it has been sometime and the GP has not received anything. Would like a lot more communication with the family as we did not even know that she had seen the mental health team till near the end of her stay in hospital' (37)
Follow up

‘The follow on care could have been better. I’m still waiting to hear if I even have a referral to the Sutton and Erdington mental health team. I was left waiting with nothing. I understand that I’m no longer under your care but the communication could be better between the different departments’ (19)

‘Team was excellent but I need to talk and have not been sent anything from GP and I think it is disgusting’ (90)

Facilities

‘The only thing is I don’t think there were adequate facilities to be seen privately and talk’ (63)

Time

‘I would have liked more time to be seen for longer, felt a bit rushed. I found the Drs very helpful but if they could have given more information about my particular situation’ (64)

‘I waited four days from first referral, which was supposed to be urgent. I would have liked to have been seen quicker’ (66)

Organisation

‘Yeah maybe because they are a new team, in the new building they were unsure who the team were in the hospital when I arrived and for someone with mental health difficulties it is not what you want. The last thing I wanted was to be around people’ (107)

‘The only reason I am scoring so low is because I am already under a team and I would have rather been seen by my own team rather than someone I had never met’ (43)

Expectations

‘Not to have been given the leaflet at the start, before I was told what was going to happen and then the assessment. I was given leaflet with Samaritans underlined at the start and it gave me bad expectations’ (88)

‘Someone to come and see me at my house, but they wouldn’t’ (91)

In addition, results showed that 46 (92.0%) members of staff interviewed felt that RAID responded within the time frame stipulated by the RAID service. In relation to the intervention/assessment provided by RAID influencing the time the patient was on the ward, 12 (24.0%) staff felt that patients had a shorter stay, 38 (76.0%) felt that there were unsure and no staff felt that the team increased patients stay on wards.

In response to whether or not staff felt the involvement of RAID improved the quality of patient care, 43 (86.0%) indicated yes and 7 (14.0%) were unsure. In terms of improvements by the RAID team, staff suggested that more training in areas such as psychosis, psychiatric medication, the referral process, psychiatric services and use of the Mental Health Act 1983, would be beneficial.

Teaching and Training

There were 130 (out of 158, 82.3%) completed surveys following the training provided by RAID. When asked how relevant staff felt the training provided was, the most common response was ‘highly relevant’ (110, 90.2%). Other responses were: slightly relevant (8, 6.6%), neutral (4, 3.3%), slightly irrelevant (0) and not at all relevant (0).

When staff were asked about whether they felt the training would improve their practice, majority of staff surveyed felt that their practice would be enhanced following the training (93, 94.9%). Other responses were: neutral response (5, 5.1%) and would not advance practice (0).

When asked if staff felt that the training enhanced knowledge and understanding, the majority of staff stated they felt that it did (62, 85%). Other responses were: no response (7, 10%), neutral (4, 5%), and did not enhance knowledge and understanding (0).

The majority of staff rated the teaching overall as either excellent (74, 61.2%) or good (44, 36.4%). No respondents rated it as very poor or poor, and 3 (2.5%) were neutral.

Feedback from the open-ended question asking how the training would enhance practice was as follows:

- They were more confident and willing to make assessments of capacity.
- They could facilitate discharge planning.
- The training had helped them breakdown capacity.
- It had increased their general awareness, understanding and knowledge, and specifically in relation to patients with dementia and why they might act in certain ways.
- It will improve care delivery
- It helped to think in view of the ageing brain
- It will make you think before making judgments
- It helped to alleviate a slight fear of treating dementia patients
- It helped with how to approach patients with different types of dementia
- Staff also expressed a need for further training.

In terms of the areas that staff wanted teaching on Responses highlighted the following areas:

- Medication
- All areas relating to how we care for patients
- Assessments for capacity
- Case studies
Patients and staff satisfaction with a Rapid Response Psychiatric Liaison Service

- Process of Independent Mental Capacity Advocates [IMCA] and Deprivation Of Liberty Standards [DOLS]
- Concept of insight
- How to word questions when assessing capacity
- Power of attorney and advance directives

Items that were found to be most interesting/relevant to participants work were:

- Treating the patient as a human being and valuing them
- Communication
- How to deal with, care for and cope with patients with dementia
- Life story book/ This is me
- Person centred approaches
- Getting to know the person and carer
- Signs of dementia
- Ward environment
- Understanding why the patient is acting in a certain way and what is in their mind
- Strategies for coping

- See things from a patient perspective
- How to calm patients down
- Different types of capacity assessments
- Restriction and deprivation of liberty
- Concept of a sliding scale of capacity
- Principles and process of capacity
- IMCA
- Advance refusal
- Best interests
- Legal aspects
- Implications of capacity

Discussion
Participants of both genders in the present study, ranged between 16 and 92 years old, with a range of ethnic presentations. The majority of patients felt the team was respectful towards them and helpful in their care; and they were satisfied with the information that was provided by the team and appreciative of being seen in good time. Reasons for this could be attributed to the quality of care they received, as previous studies have found that quality of care was significantly associated with ratings of overall satisfaction (Edlund et al, 2003).
Following a thematic analysis of patient responses to open-ended questions, the results suggested that patients were satisfied with their clinicians’ attitude. In terms of the service provided, patients’ responses were extremely positive. The importance of mental health specialty knowledge in mental health was highlighted as suggested by Summers & Happell (2003) who found that availability of staff with psychiatric qualifications and experience to provide treatment, support and care were associated with patient satisfaction.

However, areas that were identified by patients as needing improvement included; communication, follow up, facilities, time, organisation and expectations. Previous evidence suggested that patients felt the negative aspects of mental health services included lengthy waiting times, lack of privacy in the triage area and negative attitudes of general staff (Summers & Happell, 2003). Lengthy waiting times have more of a negative effect on adults of working age (Kong et al, 2007).

When comparing responses from patients of working age and older adults, in terms of the overall care provided by the RAID team, a statistically significant difference was found; older adults scored the service higher (4.6) than working age patients (4.1). On satisfaction questions, the majority of older adults were satisfied with any information provided and felt that the team were helpful in their care, met their mental health needs and saw them in good time. This finding supports the work of previous research (conducted by Blenkiron & Hammill, 2003; Rosenheck, Wilson & Meterko, 1997; Gharabawi, Greenspan & Rupnow, 2006; Cohen, 1996; Wilde et al, 1995) who found that higher levels of satisfaction have been associated with older age.

In terms of staff satisfaction; advice on managing patients, support of staff and advice on medication were highlighted as the most helpful aspects of the service. Staff felt that the RAID team were successful in communicating appropriate care plans (e.g. onward referral or medication advice) following patient assessments.

In addition, staff felt that the RAID team were very efficient, in that they had a very quick response time and answered any queries very promptly. This led them to infer that patients could or would be discharged sooner should they receive the most appropriate treatment earlier. However, the authors may infer that the high satisfaction rates could be attributed to quick response rates to referrals.

A negative aspect of the staff experience was that at times, they are forced to make clinical decisions without as much guidance as they would have liked. Therefore, it is inferred that it may be beneficial for the team to carry out follow-up assessments on a regular basis.

It is suggested that higher levels of staff satisfaction are associated with sustainability and better patient care (South Staffordshire PCT, 2011). Moreover, motivated and involved staff have been found to be more knowledgeable in what is working well, and how to improve services for the benefit of patients and the public (South Staffordshire PCT, 2011).

Limitations of the study

A limitation of this research was the number of patients recruited to take part. Possible reasons include patients not being contacted immediately after discharge, with contact at between one and five weeks after discharge, due to the large volume of patients being discharged. In addition, the time of day patients were contacted may have impacted upon response rates, as contact was made between the hours of 9am and 5pm (working day).

A potential limitation of having a small sample size is that it is NOT possible to generalise conclusions (Yin, 1994), as the responses obtained may not be an accurate reflection of all the patients seen by the team. However, it has been found that smaller sample sizes may be more useful in examining a situation more closely (Myers, 2000).

Conclusion

The exploration of patient and staff satisfaction is integral to service evaluation and development. This study has demonstrated that the RAID service produced high levels of patient and staff satisfaction with this new way of working. This evaluation highlighted the benefits of providing support in managing patients through direct clinical intervention and training staff. Elderly patients are more likely, possibly for many non-service related reasons, to appear more satisfied with services compared to younger adults. Methods other than direct surveys are needed to measure their real satisfaction. With the increasing ageing population in acute hospitals, this needs urgent consideration. Rapid response ‘embedded’ psychiatric services might attract a better level of satisfaction for patients and acute hospital staff when com-
pared with traditional models of liaison psychiatry. This new service delivery models needs rigorous evaluation for its impact on patient and staff satisfaction when compared to traditional models of mental health care delivery in acute hospital settings.

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Examining demographic and psychosocial predictors of well-being in older pet owners
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ABSTRACT

Background: Worldwide, older adults represent a significant proportion of the total population. Due to the international increase in the numbers of aging adults over the next several decades, it is important for nurses to assist this populace in aspects of healthy aging. There are known indicators of well-being both positive and negative that influence aging. Objective: The objective of this study was to examine seven models consisting of demographic and psychosocial predictors of well-being among older adults. Population: This quantitative descriptive design included 209 older pet-owning adults whose age ranged from 48 to 93 (M = 71.66; SD 9.14). The participants were recruited from senior housing facilities designed for older adults or attended a senior citizen community centre.

Methods: Participants completed a demographics form and a loneliness, pet attachment, social support, and well-being scale. Demographic and psychosocial predictors of well-being were examined using hierarchical regression analysis (p < .05).

Results: The results revealed that age, gender, education, health, loneliness due to the loss, pet type, loneliness, social support, and pet attachment were significant predictors. Older adults are at risk for less than optimal well-being due to situational factors such as loneliness and alternations in social support due to natural life transitions. Since well-being is a multidimensional construct that affects the world’s people it is important for nurses to investigate its components.

Conclusion: Internationally, nursing is focused on maintaining positive health and well-being throughout the lifespan. The findings supported both positive and negative components influence well-being. Appropriate interventions should be selected based on positive or negative predictors. Implications for clinical application are discussed.

Keywords: Nursing; well-being; older adults.

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Background:

Worldwide, older adults represent a significant proportion of the total population. According to the World Health Organization (WHO; 2011) the world's population aged 60 and over will more than triple to 2 billion by 2050. The majority of the older adult population increase is occurring in developing countries with low levels of material well-being and this populace is expected to rise from 400 million in 2000 to 1.7 billion by 2050 (WHO, 2011).

In the United States older adults age 65 and older represented 13 percent of the total population corresponding to approximately 40 million people (Federal Interagency Forum on Aging-Related Statistics; FIFARS, 2012). It is projected that in 2030 the older adult population will grow to 72 million thereby representing nearly 20 percent of the total U.S. population (FIFARS, 2012). By 2050, the number of Americans aged 65 and older is projected to be 88.5 million (U.S. Department of Commerce Economics and Statistics Administration, 2010).

Due to the international increase in the numbers of aging adults over the next several decades, it is important for nurses to assist this populace in aspects of healthy aging. There are known indicators of well-being both positive and negative that influence aging. As a result, nurses can address these positive and negative indicators in order to globally improve the well-being of older adults.

Accordingly, well-being is a new topic area for Healthy People 2020 (U.S. Department of Health and Human Services, 2013). Moreover, four foundation health measures have been identified to help promote health, prevent disease and disability, eliminate disparities, and improve quality of life over the next 10 years (U.S. Department of Health and Human Services, 2013). One identified foundation health measure is well-being. Over the next decade, Healthy People 2020 will evaluate and monitor well-being in the United States and will “assess the positive evaluations of people’s daily lives – when they feel very healthy and satisfied or content with life, the quality of their relationships, their positive emotions, resilience, and realization of their potential” (U.S. Department of Health and Human Services, 2013). The key indicators of well-being have been identified for older Americans can also be translated globally.

Literature Review

Well-being

Well-being is theoretically described as a highly desirable condition that consists of a sense of joy, satisfaction, and a keen sense of awareness (Bradburn, 1969; Campbell, 1981). Diener (1984) explained that well-being is a multidimensional construct that includes positive and negative affect and life and domain satisfactions and for the purpose of this study includes anxiety, depressed mood, positive well-being, self-control, health, and vitality.

Well-being is a meaningful construct for clinical application just as other concrete health indicators are since well-being is a construct made up of both positive and negative health-related components. Since well-being is theorized to be a multidimensional construct, it is important to examine the components of the construct and the psychosocial predictors (e.g. loneliness, pet attachment support and social support).

Loneliness

Weiss (1973) proposed that aspects of well-being are negatively impacted by psychosocial concepts such as loneliness. Loneliness is an affect within the awareness of the individual that appears as a sense of incompleteness and a longing for or yearning for another individual (Leiderman, 1969). Weiss (1969) posited that relationships, whereby individuals can express their feelings freely and without self-consciousness, prevent feelings of loneliness. Moreover, there are situational factors such as loneliness and loss over time that effect older adults’ well-being (Authors, in press). Empirical research findings have shown significant relationships between loneliness and depression among elderly individuals in the United States (Cohen-Mansfield & Parpura-Gill, 2007; Poulin, Deng, Ingersoll, Witt & Swain, 2012) and in China (Poulin et al., 2012). Loneliness has also been shown to be associated with poor health (Cohen-Mansfield & Parpura-Gill, 2007). Moreover, another study of older adults revealed that loneliness was significantly related to anxiety (Baro, Huss-Ashmore, Wittink, Murray, Bogner, & Gallo, 2006) which in turn affects well-being. The inverse association among loneliness and depression with well-being in older adults have been well studied in Ireland, Finland, and India (Golden, Conroy, Bruce, Denihan, Greene, Kirby, & Lawlor, 2009; Routasalo,
Tilvis, Kautiainen, & Pitkala, 2008; Sing & Mica, 2009). Downs and Javidi (1990) found that a significant relationship exists between feelings of loneliness, self-control, inclusion, and affection in older adults. The ill effects on subjective well-being that arise from loneliness can be countered in part by means of pet attachment and social support.

**Pet Attachment**

Sable’s (1995) conceptualization of pet attachment supports Weiss’s (1974) social provisions of relationships as pets can provide opportunities for attachment and nurturance of others and more broadly offer extended social networks and social interactions. Pets enhance elderly individuals’ well-being by providing both intrinsic and extrinsic rewards. Among the intrinsic rewards include the provision of emotional support that provide feelings of being needed and valued (Pachana, 2007), which in turn can reduce or eliminate feelings of depression (Duvall Antonacopoulos, & Pychyl, 2010), and enhance feelings of relaxation (McNicholas, Gilbey, Rennie, Ahmedzai, Dono, & Ormerod, 2005). The companionship of a pet provides both the opportunity for nurturance as the pet needs the assistance of their master, and a sense of reliable alliance since the pet can count on their master for assistance (Author, 2012).

Among the extrinsic rewards include social interaction with other pet owners or in elderly groups that introduce pets to the group. Walking outside with one’s pet often provides the opportunity to meet other pet owners who are walking their pet that results in social interaction (McNicholas et al. 2005), as well as physical exercise that in turn leads to better health in general (Knight & Edwards, 2008), and has shown to enhance recovery from acute myocardial infarction (Friedmann & Thomas, 1995). Animal-assisted activities and therapy given in groups of elderly individuals has shown to increase their communication and social interaction between the animals and other individuals within the groups (Prosseer, Townson & Staiger, 2008) that has shown to decrease levels of depression (Souter & Miller, 2007). Additionally, pets can provide elderly with a sense of security and safety through their warning of the presence of some unfamiliar event (Author, 2007). Extrinsic rewards among pet owners such as enhanced social interaction and exercise lead to intrinsic rewards that include enhanced health and emotional well-being as well as decreased depression.

**Social Support**

Social support was theoretically defined for the purpose of this study as a multidimensional concept consisting of relational provisions including attachment, social integration, opportunity for nurturance, reassurance of worth, reliable alliance, and obtaining guidance (Weiss, 1974). Social support promotes well-being through sharing concerns, ideas, information with others as well as being a recipient of nurturant behavior, reassurance of worth, and assistance with needed services; but absence of these functions may lead to feelings of anxiety and vulnerability (Weiss, 1969). Positive social exchanges and greater availability of social support from a sample of Australian friends and family was demonstrated by middle and older community residents who volunteered their service (Pilkington, Willnsor, & Crisp, 2012). Individuals who volunteered their services experienced significantly higher levels of subjective well-being compared to non-volunteer individuals. Pilkington et al. also found that availability from friends as opposed to relatives or neighbors was the most consistent mediator between volunteering and subjective well-being. An international study by Poulin, Deng, Ingersoll, Witt, & Swain (2012) revealed that higher levels of family and friend support was associated with significantly lower levels of depression and higher health functioning in both elderly American and Chinese individuals. Researchers have suggested that well-being and health are affected by the magnitude of social networks in a sample of older adults from Delhi (Singh & Misra, 2009). Downs and Javidi (1990) found that a significant relationship exists between feelings of loneliness, self-control, inclusion, and affection in older adults. In a recent study conducted with HIV+ adults the results supported that those with higher levels of social support reported higher levels of vitality (Nguyen, Chng, Vosvick, & Perales, 2010). Empirical research regarding the presence of social support provides evidence for enhancement of elderly individual’s subjective well-being.

**Purpose**

Clinicians have utilized aspects of well-being to assess the effects of chronic illness on human health outcomes and evaluate treatment modalities in practice (U.S. Department of Health and Human Services, 2013). For this reason, identifying the predictors of well-being and its components will have important implications for clinical application, especially for older adults. Nurse researchers have an obligation to investigate positive
and negative predictors that effect well-being in order to effectively identify evidence-based interventions that improve well-being for this aggregate. Therefore, the purpose of this study involving secondary analysis of data (Author, 2007) was to examine seven models consisting of demographic and psychosocial predictors of well-being among older adults.

**Research Problem**

Loneliness, attachment, and social support affect aspects of well-being in older adults. Therefore, it is important that nurses and other health care providers identify whether positive or negative predictors of well-being are present in order to identify appropriate and effective evidence-based interventions in the clinical setting for this aggregate.

**Research Question**

How well does the psychosocial measures of loneliness, pet attachment support, and social support predict well-being and well-being components: anxiety, depressed mood, positive well-being, self-control, general health, and vitality, controlling for gender, age, education, subject’s health, experienced loneliness due to loss, and pet type?

**Method**

The study employed a non-experimental quantitative predictive design using the psychosocial measure to forecast the relationships among the dependent variable and its components. According to Polit and Beck (2012) this design is appropriate to examine the predictive nature of the relationships between variables. Therefore, this study design was fitting to answer the research question posed to examine how well psychosocial measures predict well-being and its components.

**Sample and Setting**

Institutional Review Board (IRB) approval was obtained from Rutgers University prior to data collection. All participants signed an informed consent prior to beginning the study and received a copy of the signed informed consent for their records. The convenience sample was recruited from the East Coast of the United States of America. The participants were recruited from senior housing facilities designed for older adults or who attended a senior citizen community centre. Men and women were eligible to participate if they met the following criteria: 1) resided in the community; 2) owned a canine or a feline; and 3) were able to communicate in English. Based on the power tables to ensure a medium effect size $f^2 = .15$ and $.05$ level of significance, a minimum number of 75 participants were needed to achieve a power of .82.

**Instruments**

A demographic questionnaire ascertained information on gender, age, race, educational history, marital status, experienced loneliness due to loss, pet type, and health status. Participants rated their health on a rating scale using anchors ranging from 1 (poor) to 5 (excellent) with a high score indicating better perceived health.

Well-being was measured by the Psychological General Well-Being Schedule (PGWB) (Dupuy, 1984). The PGWB Schedule is a 22-item summative Likert-type rating scale using anchors ranging from 0 (most negative option) to 5 (most positive option). The PGWB Schedule has six subscales: anxiety (5 items), depressed mood (3 items), positive well-being (4 items), self-control (3 items), health (3 items), and vitality (4 items). Scores can range from 0-110 for the total PGWB scale and between 0 and 15, 0 and 20, 0 and 25 depending on the subscale with higher scores indicating a higher degree of well-being. Subscale items for anxiety and depressed mood were reversed scored indicating that higher subscale scores indicated lower anxiety and depressed mood.

The psychometric evidence for the PGWB has been reported in a sample of the population consisting of 1,209 residents of Dayton, Ohio ($\alpha = .94$; Ware, Johnson, Davies, & Brook, 1979). Ware and colleagues (1979) examined this relationship between the scores on the PGWB and the theoretically relevant variables of mental health, social emotional support, and an assessment of one’s life satisfaction thereby establishing concurrent validity.

The Cronbach’s alpha reliability in the current study was .84. Cronbach’s alphas for each subscale indicated internal consistency for subscales: anxiety ($\alpha = .87$), positive well-being ($\alpha = .72$), health ($\alpha = .70$), and vitality ($\alpha = .78$). Cronbach’s alphas for depressed mood and self-control were $\alpha = .69$ and $\alpha = .55$, respectively.

Loneliness (total) was measured by the Revised UCLA Loneliness Scale (Russell et al., 1980). The
instrument is a 20-item summative Likert-type rating scale that uses anchors ranging from 1 (never) to 4 (often). Total scores can range from 20 to 80 with higher scores indicating a higher degree of loneliness. Concurrent and discriminant validity was appraised by examining the relationship between scores on the Revised UCLA Loneliness Scale and the theoretically relevant variables of social activities and relationships; and scores on other measures of mood and personality, respectively (Russell et al., 1980). Construct validity was established by Russell (1982) by examining feelings theoretically related to loneliness such as being abandoned, depressed and hopeless; and feelings unrelated to loneliness, such as surprised and thoughtful. The psychometric evidence for the Revised UCLA Loneliness Scale has been reported by the scale developers (α = .94; Russell et al., 1980). The Cronbach’s alpha obtained in this study was .84.

Pet attachment support (PAS) was measured by the Pet Attachment Scale (Albert & Bulcroft, 1988). The instrument is a 9-item summative Likert rating scale that uses anchors ranging from 1 (strongly disagree) to 5 (strongly agree). Total scores can range from 9 to 45, with higher scores indicating a higher degree of pet attachment. To avoid overlapping content with the loneliness scale, the word sad was substituted for lonely in question number six by permission (K. Bulcroft, personal communication, March, 13, 2006). Construct validity was established by the scale developers via multiple classification analysis that indicated pet attachment support, measured by the PAS, was found to be higher among never-married, divorced, widowed people and people who did not have children in the home (Albert & Bulcroft, 1988). The psychometric evidence for the PAS was reported by scale developer (α = .85; Albert & Bulcroft, 1988). The Cronbach’s alpha in this study was .89.

Social support was measured by the Coping Strategy Indicator (CSI): Seeking Support subscale (Amirkhan, 1990). The Seeking Support subscale is an 11-item summative Likert-type scale that uses anchors ranging from 1 (not at all) to 3 (a lot). Total scores can range from 11 to 33 with higher scores indicating a greater use of seeking social support. Construct validity was established by correlating the CSI scale scores with scores from other instruments measuring coping and validation indices. Discriminant validity was established by testing for independence from the Crowne-Marlow Social Desirability scale (Crowne & Marlowe, 1964). The psychometric evidence for the Seeking Support subscale was reported by scale developer (α = .93; Amirkhan, 1990). The Cronbach’s alpha in this study was .90.

**Procedure for Data Analysis**

Data were screened for normality, linearity, and homoscedasticity. Examination of residual scatterplots which provide a test of assumptions of normality, linearity, and homoscedasticity between predicted dependent variable scores and errors of prediction, for each of the seven models indicated the residuals were distributed in a rectangular form with a concentration of values along a straight line in the centre of the plot indicating the assumptions for normality, linearity, and homoscedasticity of residuals were met (Tabachnick & Fidel, 2007). Furthermore, there is no evidence of multicollinearity as no correlation coefficient within the models exceeded .543.

Data were analyzed using two-tailed tests at the .01 level of significance to control for type 1 error due to multiple model testing. Descriptive statistics, scale/subscale reliabilities, Pearson Product Moment correlations, and hierarchical multiple regression analyses were tested using the Statistical Package for Social Sciences (SPSS), version 20.0 for Windows. For the hierarchical regression analysis gender was coded male = 1 and female = 2; education was coded no formal school = 1, some grammar = 2, completed grammar school = 3, some high school = 4, completed high school = 5, some college = 6, and completed college = 7; experienced loneliness due loss of relative, friend, or pet was coded no = 1 and yes = 2; and pet was coded dog = 1 and cat = 2.

Hierarchical multiple regression analysis (Tabachnick & Fidel, 2007) was used to determine demographic and psychosocial predictors of well-being in seven regression models. The seven models varied only by the dependent variable. The dependent variable, well-being was measured by the total PGWB (Dupuy, 1984) and subsequently by each of the PGWB sub-scales to form the seven regression models. Dependent variables for the seven models were: well-being scale total, and the following subscales: anxiety, depressed mood, positive well-being, self-control, health, and vitality.

Each regression model included the same demographic and psychosocial variables to determine if predictors of well-being varied according to the total or subscales of the PGWB. The models examined the fol-
lowing demographic characteristics in each of the seven models: subjects’ gender, age, educational level, health, and experience of loneliness due to loss of a person or companion dog or cat. Psychosocial predictors included measures of loneliness, pet attachment support, and seeking social support.

Results

The participants were recruited from senior housing facilities designed for older adults (n = 24) or who attended a senior citizen community centre (n = 6). Descriptive statistics for the demographic characteristics of study participants were conducted. The sample consisted of 174 women and 35 men whose age ranged from 48 to 93 (M = 71.66; SD 9.14). All of the participants in this study met the inclusion criteria therefore no cases were excluded. Although older adults are defined mostly as 55 and older, the researchers felt that based on surveys and reports described below that the individuals who completed the surveys should be included in the analysis. There was a national survey conducted by AARP who identified among older adults as 45 years and older (Wilson & Moulton, 2010). In addition, the Centre for Disease Control (CDC, n.d.) identified older adults in a report as 45 years and older. Moreover, the mean age in this study was 71.66 years with a standard deviation of 9.14.

A majority of the participants were white (n = 200 [95.7 %]), a very small percentage were black (n = 3 [1.4 %]), and Hispanic/Latino (n = 3 [1.4 %]), one Native American/Alaskan American, and 2 undeclared. Approximately one-half of the participants completed some college course work or graduated from college (n = 95 [45.4 %]) and over one-third of the participants competed high school (n = 70 [33.5 %]), followed by attended some high school (n = 32 [15.3 %]), completed grammar school (n = 6 [2.9 %]), attended some grammar school (n = 4 [1.9 %]), 1 participant had no formal schooling, and 1 undeclared. The majority of the participants were widowed (n = 83 [39.7%]), followed by married (n = 58 [27.8%]), then divorced (n = 46 [22 %]), never married (n = 17 [8.1%]), 2 separated, and 2 partnered.

A majority of the participants lived alone (n = 127 [60.8%]) followed by lived with a spouse or significant other (n = 59 [28.2%]), family/relative (n = 17 [8.1%]), 3 lived with a friend, 2 with a parent(s), and 1 undeclared. Participants revealed their health as good (n = 72 [34.4%]), followed by very good (n = 63 [30.1%]), excellent (n = 36 [17.2%]), fair, poor (n = 33 [15.8%]), and 1 undeclared. A majority of the participants experienced loneliness due to loss of a person or companion dog or cat (n = 149 [71.3%]) compared to those who did not (n = 60 [28.7%]). Participants either had a companion dog (n = 99 [47.6%]) and/or a companion cat (n = 109 [83.7%]).

The descriptive statistics were run for the total well-being scale, the six subscales, and the loneliness, pet attachment support, and social support scales. The total well-being scale scores ranged from 12-110 (M = 76.74 , SD = 16.16 ) and for the subscales: anxiety scale scores ranged from 4-25 (M = 17.40, SD = 4.70 ) (5 items), depressed mood scale scores ranged from 3-15 (M =11.93 , SD = 2.48 ) (3 items), positive well-being scale scores ranged from 0-20 (M = 12.39, SD = 3.48 ) (4 items), self-control scale scores ranged from 2-15 (M = 12.01, SD = 2.47) (3 items), health scale scores ranged from 2-15 (M = 9.73, SD = 2.79 ) (3 items), and vitality scale scores ranged from 0-20 (M = 13.11, SD = 3.58) (4 items). The scale scores for loneliness ranged from 23-60 (M = 37.19, SD = 8.21), pet attachment support ranged from 13-45 (M = 36.41, SD = 6.46), and social support ranged from 11-33 (M = 25.08, SD = 5.15).

Pearson Product Moment correlations for the variables included in the hierarchical multiple regression models are displayed in Table 1.

Hierarchical regression analyses consisted of the following independent variables at Step 1: demographic variables that included the subjects’ age, gender, education, health, loneliness due to loss, and kind of pet. At step 2 psychosocial independent variables included: loneliness total, pet attachment, and social support.

Regression analyses began with testing Model 1 with the dependent variable, well-being total score and subsequent models using each of the well-being subscale scores. As shown in Table 3, all analyses of the models using the total and subscale well-being scores as dependent variables were statistically significant. The amount of explained variance via the adjusted R² following Step 1 entry of variables ranged between .161 (Model 5, self-control subscale) and .329 (Model 6, health subscale) and following Step 2 with the addition of psychosocial variables the adjusted R² ranged between .250 (Model 2, anxiety subscale) and .430 (Model 1, well-being scale total) as shown in Table 2. Hierarchical regression analyses were conducted for each
For Model 1, with the dependent variable, total well-being, two statistically significant demographic variables entered at step 1 that included the subject’s age and health status. At step 2, in addition to the significant psychosocial variable, loneliness, the same two demographic variables, subject’s age and health status, continued to be significant predictors of total well-being.

For Model 2 with the dependent variable, anxiety, two statistically significant demographic variables entered at step 1 that included the subject’s age and health status. At step 2, in addition to the significant psychosocial variable, loneliness, the same two demographic variables, subject’s age and health status, continued to be significant predictors of anxiety.

For Model 3 with the dependent variable, depressed mood, three statistically significant demographic variables entered at step 1 that included the subject’s age, health status, and loneliness due to loss. At step 2, in addition to the significant psychosocial variable, loneliness, two demographic variables, subject’s age and health status, continued to be significant predictors of depressed mood.

For Model 4, with the dependent variable, positive well-being, two statistically significant demographic variables entered at step 1 that included the subject’s health status, and loneliness due to loss. At step 2, in addition to the significant psychosocial variable, loneliness, the demographic variable, subject’s health status, continued to be significant predictors of positive well-being.

For Model 5 with the dependent variable, self-control, two statistically significant demographic variables entered at step 1 that included the subject’s age and health status. At step 2, in addition to the significant psychosocial variable, loneliness, the same two demographic variables, subject’s age and health status, continued to be significant predictors of self-control.

For Model 6, with the dependent variable, health, three statistically significant demographic variables entered at step 1 that included the subject’s education level, health status and type of pet. At step 2, in addition to the significant psychosocial variable, loneliness, the same three demographic variables, subject’s education level, health status, and type of pet continued to be significant predictors of health.

For Model 7, with the dependent variable, vitality, two statistically significant demographic variables entered at step 1 that included the subject’s age and health status. At step 2, in addition to the significant psychosocial variables, loneliness and pet attachment, the same two demographic variables, subject’s age and health status, continued to be significant predictors of vitality. The standardized Beta, t value, and p value for each of the regression models can be found in Table 3. A summary of the statistically significant variables that entered the Regression models at step 2 are shown in Table 4.

Discussion

Internationally, the older adult population is projected to triple by 2050 (WHO, 2011). Moreover, healthy people 2020 identified well-being as a leading health indicator that will be monitored over the next decade (U.S. Department of Health and Human Services, 2013). As pioneers in healthcare, nurses must be knowledgeable on how to assess and communicate actions that address older adult’s well-being in clinical settings across the globe. Interventions must be designed and implemented based on the identified positive and/or negative predictors of this multidimensional construct specific for this aggregate of elderly individuals.

There are several predictors of well-being and the subscales: anxiety, depressed mood, positive well-being, self-control, health, and vitality that were identified in the regression models. The findings are consistent with the theory proposed by Weiss (1973; 1974), namely, loneliness has a negative impact on well-being and both social support and attachment enhance well-being.

In regression model 1, the results supported that overall loneliness is highly significant as are age and health in assessing one’s total well-being. In model 2, the experience of overall loneliness as measured by the loneliness total scale was significant together with age and health in assessing the effects of anxiety on well-being. In model 3, due to the adjustment of the model variance that occurred in step 2, overall loneliness was highly significant as a predictor of depressed mood together with age and health, but not loneliness due to loss that entered at step 1. In model 4, after adjustment of the model variance that occurred in step 2, overall loneliness was highly significant as a predictor of positive well-being together with health, but not loneliness due to loss that entered at step 1. In model 5, after adjust-
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Well-being is a process and more than the absence of anxiety and depression (Duckworth, Steen, & Seligman, 2005). Moreover, loneliness is a known antecedent that can impair health. According to Hawley and Cacioppo (2010) loneliness is not merely a sense of aloneness. Recent research supported that loneliness in older persons is a significant predictor of functional decline and risk of death (Perissinotto, Cenzer, & Covinsky, 2012). Unfortunately loneliness may be a common feeling among older adults that diminishes positive well-being. Researchers suggested that for older adults experiencing loneliness and impaired well-being client-centred psychosocial group intervention should be explored (Routasalo, Tilvis, Kautiainen, & Pitkala, 2008). Nurses can facilitate and organize client-centred psychosocial group interventions for lonely older adults with impaired well-being in the clinical setting.

Gender was examined as a potential predictor of well-being in this study. Past research findings supported an absence of mean differences between males and females on well-being (Cummings, 2002; Levkoff, Cleary, & Wette, 1987; Myers & Diener, 1995). In this study gender failed to be predictors in any of the seven regression models supporting the findings from past research. As shown in Table 2, gender showed moderate negative correlations with the well-being total scale and subscales indicating that elderly men perceived a higher level of well-being than elderly women. Although gender failed to be a significant predictor of well-being in the regression models, this finding should be interpreted with caution since the sample size for men was 20 percent.

Negative Betas between subject’s educational level, experience loneliness due to loss, kind of pet, and overall loneliness with the dependent variable suggest higher levels of well-being. Positive Betas between subject’s age and dog companions rather than cat companions suggest higher levels of well-being as shown in Table 3. This result supported recent research conducted by Author (2012) on the benefit of pet companionship for older adults to enhance well-being. Nurses and healthcare professionals can use the results of this study to advocate for companion dogs for older adults to enhance their well-being. In addition, several studies have supported pets as a form of social support and a coping resource for older adults (Author, 2012; Author, 2008). In addition, the results of this study support the positive effects of health on well-being. However, social support had low correlations with all other study variables as shown in Table 1. The latter shortcoming probably influenced why seeking social support failed to be a significant predictor of well-being in all seven regression models. The seeking social support scale items may not have been relevant to this sample of older adults in light of where they were recruited (e.g. senior housing facility or senior citizen centre). It is possible that adults who participated in this study had adequate support and available social support networks; perhaps in part due to owning a personal/companion pet which is consistent with current literature (Walsh, 2009). Given that personal pets are always available they can provide that needed sense of sociability for their owners. Therefore, it is suggested in light of this finding that nurses discuss the potential benefit of pet ownership and/or the implementation of pet visitation programs at senior housing facilities and at senior citizen centres.

Limitations and Future Research Direction

This study used data from a convenience sample of predominately healthy white females therefore generalizability of the results is limited. For that reason, it is suggested that this study be expanded to include other older adult populations. It is also important that future research examine multidimensional scales using factor analysis in order to show how components of a scale explain a particular phenomenon of interest rather than merely looking at the overall effect. It is more informative for nurse researchers to provide the evidence that influences evidence-based practice by looking at the individual effects of a multidimensional construct such as well-being as this will provide nurses with more direction for appropriate referrals, intervention, and/or follow-up.

Conclusion

In summary, predictors of well-being among
older individuals varied according to whether the total or subscale scores of the PGWB scale were used suggesting the multidimensionality of well-being as shown in the scale’s subscales. Findings from model testing identified the importance of using the subscales to provide direction to nurses in promoting well-being of older individuals according to whether negative or positive predictors of well-being were present. Based on Healthy People 2020, well-being has been designated as a foundation health measure for the next decade (U.S. Department of Health and Human Services, 2013). The results of this study provide international nurses with the knowledge needed to identify positive and negative predictors and identify appropriate interventions to enhance well-being in this aggregate.

References


Krause-Parello CA et al. | Examining demographic and psychosocial predictors of well-being in older pet owners


Table 1. Pearson Product Moment Correlations among Predicted and Dependent WB Variable

<table>
<thead>
<tr>
<th>Number</th>
<th>Variable</th>
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<th>4</th>
<th>5</th>
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<td></td>
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<tr>
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<td>Positive WB Subscale</td>
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<td>Vitality Subscale</td>
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<td>.184**</td>
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*P < .05, **P < .01
Table 2. Incremental Regression Model Demonstrating Predictors of General Well-being among the Elderly

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<tr>
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<th>$R$</th>
<th>$R^2$</th>
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<th>$R^2$ Change</th>
<th>$F$ Change</th>
<th>Degrees of Freedom</th>
<th>Significance of $F$ Change</th>
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<td></td>
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<td>.139</td>
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<tr>
<td></td>
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### Table 3. Standardized Beta Coefficients and their significance for Predicted and Dependent General Well-being Variables

<table>
<thead>
<tr>
<th>Step</th>
<th>Regression Model 1 General Well-being Total Scale</th>
<th>Regression Model 2 Anxiety Subscale</th>
<th>Regression Model 3 Depressed Mood Subscale</th>
<th>Regression Model 4 Positive Well-being Subscale</th>
<th>Regression Model 5 Self-Control Subscale</th>
<th>Regression Model 6 General Health Subscale</th>
<th>Regression Model 7 Vitality Subscale</th>
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<tr>
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<td>Std.(β)</td>
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<td>Std.(β)</td>
<td>t</td>
<td>Std.(β)</td>
</tr>
<tr>
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<td></td>
<td></td>
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<tr>
<td>Sex</td>
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<td>-1.121</td>
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<td>-1.119</td>
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<tr>
<td>Age</td>
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<td>3.660</td>
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<td>Pet Type</td>
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<td>-2.228</td>
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</table>

Note: Sex (1=Male, 2=Female), Ed. (Education), Lonely Loss (Loneliness due to loss of someone), Pet Type (1=Dog, 2=Cat), Loneliness (Scale Score), Pet Attach (Pet Attachment Scale Score), Seek. Sup. (Seeking Support).
Table 4. Summary of Significant Indicators of GWB Total Scale and Subscales at Step 2

<table>
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<th>Regression Model</th>
<th>Demographic Variables</th>
<th>Psychosocial Variables</th>
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<tr>
<td>2. Anxiety</td>
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<tr>
<td>3. Depressed Mood</td>
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<td>X</td>
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<tr>
<td>4. Positive Well-being</td>
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<tr>
<td>5. Self-control</td>
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<td>X</td>
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<tr>
<td>6. General Health</td>
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</tr>
<tr>
<td>7. Vitality</td>
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</table>
Barriers to Screening for Domestic Violence Among Public Health Nurses: A Descriptive Study

Farbood F*1, Adelman T1*, Mckinnon Tc

ABSTRACT

Background: Domestic violence is a public health issue and public health nurses are in the best position to track it, provided they can overcome certain screening barriers. This study aimed to identify the main barriers public health nurses face while screening patients for domestic abuse.

Methods: A quantitative, descriptive survey was distributed to public health nurses stationed in three regional public health offices in a large, urban county in Northern California. Thirty-two nurses responded to the survey. Pender’s Health Promotion Model was utilized as a theoretical framework to test and improve nurses’ screening skills by identifying perceived barriers to action and by assessing situational influences.

Results: The study results showed three main identified barriers among public health nurses to be a lack of privacy, negative feelings and attitudes regarding screening, and a lack of time.

Conclusion: By providing in-service training, educational materials, and accessible computer applications, public health departments can help nurses overcome these barriers.

Keywords: Barriers; Domestic Violence; Public Health Nurses; Screening

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Introduction

Intimate partner, or domestic, violence is defined as physical, sexual, or psychological threats or harm inflicted by a current or former partner or spouse (National Centre for Injury Prevention and Control, 2003). Domestic violence causes about two million injuries per year in the United States (NCIPC, 2003). According to the first ever World Health Organization (WHO) study on domestic violence, intimate partner abuse can significantly affect women’s lives and women are more likely to suffer violence within rather than outside their homes (WHO, 2005). Domestic violence has enormous effects on women’s physical and mental health; therefore, WHO researchers have asked health care providers to treat domestic violence as a major public health issue. As nurses are often the first point of contact for survivors of domestic violence, they need to be well prepared to identify, manage, and prevent this major health problem. Unfortunately, they have not yet achieved enough success in this endeavor. A number of barriers still exist that prevent them from effectively screening their patients for domestic violence.

Background / Literature Review

The purpose of this section is to review studies that have been done to identify obstacles that prevent nurses from reporting cases of domestic violence. A variety of barriers have been cited either by nurses or by researchers. One of the most common barriers is a lack of knowledge.

In 2009, Natan and Rais conducted a study to assess the knowledge, attitudes, and workplace routines of Israeli nurses and to determine how these factors correlate with their ability to identify cases of domestic violence. The sample group consisted of 100 hospital and community nurses within the age range of 22-64. Nine percent of them were male and ninety-one percent were female. In terms of education, 30% of the participants were registered nurses, 55% had bachelor’s degrees in nursing, and 13% had master’s degrees in nursing. The participants had to answer a questionnaire created to identify barriers to screening for domestic violence, and which contained demographic and professional questions. The study showed a positive correlation between nurses’ knowledge and their attitudes toward identifying domestic violence.

On the other hand, in spite of the fact that American nursing students receive education regarding screening for domestic violence, researchers have noted some inconsistencies between their knowledge and attitudes and their screening behavior. In 2009, Johnson, Klingbeil, Melzer-Lange, and Humphrey suggested that an effective curricular program on preventing domestic violence might fill this gap and promote self-efficacy and the ability of nurses to better perform their screening role. Participants in that study included 68 paediatric nurses at a children’s hospital in Wisconsin. Ninety-six percent of the respondents were female and four percent were male. Their ages ranged between 18 and 50, and approximately 94% of them were white. The Intimate Partner Violence Questionnaire, a 24-item questionnaire, was administered before, directly after, and three months following their training. A factor analysis on the baseline of the self-efficacy questionnaire was then completed. Results suggested nurses’ fear factor had been significantly decreased after participation in the training program (P= .0176). Like Natan and Rais’ study, Johnson and colleagues (2009) could not check nurses’ practical ability to perform screening for potential victims of domestic violence, especially after the training program, and listed this as a limitation of their study. This was due to missing data in the post screening and later in the three-month follow-up screening for behavior measurements. In the end, the report implied that, regardless of the necessity of education, actual practice is needed to develop the belief that a nurse can be effective in his or her screening role.

There are also other reasons cited by nurses for the lack of proper screening. Ellis (1999) looked for factors that hinder emergency room nurses from identifying cases of domestic violence. Participants in this quantitative survey included 40 female RNs aged 20-59 years, 60% of whom had 10-19 years of job experience in nursing. The nurses were given a thirty-item questionnaire that contained specific questions about practices and barriers to screening for domestic violence. The research findings identified three main barriers nurses face in screening patients: 1) lack of privacy in the health care setting; 2) lack of enough time to screen patients for domestic violence; and, 3) not knowing how to ask patients about domestic violence.

Similar to Ellis (1999), Yonaka, Yoder, Darrow, and Sherck (2010) noted the importance of how to ask questions about abuse in the emergency depart-
ment. They aimed to find out what barriers may affect nurses’ ability to ask about domestic violence. In a quantitative study in 2010, Yonaka and colleagues administered a twenty-five item questionnaire to 33 RNs aged 20-60, primarily females who worked in emergency rooms. Forty-nine percent of participants were white and 51% were either Filipino or of other ethnicities. The study suggested that the highest ranking barrier to screening for domestic violence was the language barrier. Other barriers included a personal family history of abuse and a lack of training. Also, as in Ellis’ study, time limitation was reported as a barrier to screening for domestic violence.

In another study, Smith, Rainey, Smith, Alamare, and Grogg (2008) researched the effect of education on domestic violence. A sixteen-item questionnaire was mailed to 1000 RNs. Of 184 respondents, 176 were female, 68% had bachelors’ degrees, and 75% were Caucasian. Among these nurses, 73 (39.7%) said that they had reported abuse in the past. Of these 73 respondents who reported abuse among their patients, 44.8% cited personal experience of abuse, themselves. In contrast to Yonaka’s study, Smith’s did not consider a nurse’s personal experience of abuse as a barrier to screening for domestic violence. On the contrary, the study suggested nurses with personal experience of domestic abuse might be better advocates for victims. The study also insisted on the importance of multidisciplinary training in combating domestic violence.

Isaac and Puulani (2001), in a qualitative study, assessed medical records of 86 women who made 772 visits to obtain care from practitioners of various disciplines (physicians, nurses, psychologists, etc.) due to domestic violence. The records showed lack of proper documentation in terms of picture taking, body mapping, as well as nurse and/or physician notes and reports. Due to the increasing number of domestic violence cases, these researchers suggested developing a protocol to try to improve the way domestic violence is documented.

Research Question

Although the reviewed articles support the importance of training and education in increasing the ability of nurses to identify and report cases of domestic violence, they acknowledge other barriers to this approach. These barriers differ depending on the setting in which domestic violence is screened for. Recent studies have focused on emergency departments, pediatric hospitals, and general hospitals, yet the public health setting is another area that needs to be investigated for these obstacles. Due to the nature of public health services, which assist families in minimizing disabilities and maximizing positive lifestyles and habits, public health nurses can play an enormous role in tracking cases of domestic violence as long as they can overcome their screening barriers. Therefore, the aim of this study was to answer the following question: What are the main barriers public health nurses, who work in perinatal services, face in screening patients for domestic violence?

Conceptual Framework

Pender’s Health Promotion Model provides a method to assess patients in order to promote a healthier pattern of behaviour. To achieve its goal, Pender’s model guides nurses in evaluating patients for prior related behaviour such as perceived self-efficacy, perceived barriers to action, perceived benefits of action, and activity-related effect. Also, the model assesses interpersonal and situational influences relevant to the selected health behaviour (Peterson & Bredow, 2009). Pender’s model can also be used as a framework to promote nurses’ behaviour by identifying perceived barriers to action and by assessing situational influences that might affect nurses’ behaviour.

Methodology

Design

The research design for this study was a descriptive, cross-sectional, quantitative survey. The study tool utilized an anonymous questionnaire that asked public health nurses working in three regional public health offices in Northern California about their perceived barriers to screening for domestic violence.

Sample / Setting

A convenience sample of 32 public health nurses employed in perinatal services in three regional public health offices in Northern California were invited to participate in this research study.

Data Collection

After contacting one of the supervisors of a large public health department in Northern California and receiving IRB permission to conduct the research, the questionnaire was administered to the sample popu-
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Participants were briefed on how to complete the study questionnaire and informed of the purpose of the research, the anonymity of the questionnaire, and the confidentiality of their information.

**Instrumentation**

Barriers to domestic violence were assessed with a questionnaire originally used in a study by Moore, Zaccaro, and Parsons (1998) when looking at specific behaviours as barriers to screening for domestic violence. In 1999, Ellis adapted this tool for her study on barriers to screening for domestic violence among emergency room nurses. After the adaptation, the questionnaire was tested for validity. In addition, it was checked for reliability by distributing it among 19 registered nurses in a rural community hospital (Critical Care Nursing Quarterly, 1999). Permission for use of the adapted questionnaire was obtained from the owner.

This questionnaire consisted of 29 items, and took approximately ten minutes to complete. Five of the questions asked for demographic information such as gender, age, degree, years in nursing, and years in public health nursing. There were fourteen questions regarding barriers to screening for domestic violence that were to be answered with a “yes” or “no” response. Participants could also indicate an extra “other” option to report barriers that had not been cited. There were five questions related to the level of preparedness of nurses to intervene in screening. To answer these questions, participants could select their answers among three options: “prepared”, “somewhat prepared”, and “not prepared”. Lastly, there were four optional questions asking for any personal experience with domestic violence, and one extra question that asked nurses for ideas for further improvement in screening skills.

**Operational Definition**

Domestic violence is defined as physical, sexual, or psychological threats or harm inflicted by a current or former partner or spouse (National Centre for Injury Prevention and Control, 2003). A public health nurse is a nurse with a baccalaureate degree and training in public health nursing theory and practice. A barrier is an obstacle that prevents communication. Screening is defined as identifying health risks or problems by means of taking history, examining the patient, and using other procedures. The research tool is an anonymous questionnaire containing closed and open-ended questions.

**Data Analysis**

Data analysis was performed by using the Statistical Package for Social Sciences (SPSS) Version 20. Descriptive statistics were used to represent demographic characteristics of the sample population.

**Results**

Table 1. Demographics of Respondents (n=32)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>30</td>
</tr>
<tr>
<td>Male</td>
<td>02</td>
</tr>
<tr>
<td>Age (yr)</td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>01</td>
</tr>
<tr>
<td>30-39</td>
<td>09</td>
</tr>
<tr>
<td>40-49</td>
<td>08</td>
</tr>
<tr>
<td>50-59</td>
<td>06</td>
</tr>
<tr>
<td>≥60</td>
<td>03</td>
</tr>
<tr>
<td>Years in Nursing</td>
<td></td>
</tr>
<tr>
<td>1-9</td>
<td>06</td>
</tr>
<tr>
<td>10-19</td>
<td>18</td>
</tr>
<tr>
<td>20-29</td>
<td>06</td>
</tr>
<tr>
<td>≥30</td>
<td>02</td>
</tr>
<tr>
<td>Years in Public Health Nursing</td>
<td></td>
</tr>
<tr>
<td>1-9</td>
<td>14</td>
</tr>
<tr>
<td>10-19</td>
<td>17</td>
</tr>
<tr>
<td>≥20</td>
<td>01</td>
</tr>
<tr>
<td>Level of Education</td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>21</td>
</tr>
<tr>
<td>Master</td>
<td>11</td>
</tr>
</tbody>
</table>

Among the 32 public health nurses who completed the study questionnaire, 30 (94%) were female and two (6%) were male. Their ages ranged between 25 and 67-years-old, with a mean of 39 years of age. Twenty-six (81%) of the respondents had more than ten years of nursing experience and fifty-six percent had more than ten years of job experience in public health nursing. In terms of educational background, twenty-one nurses (65.6%) had bachelor’s degrees, and eleven (34.4%) had master’s degrees. Unfortunately, due to the small sample size (n=32), no relationships between years in nursing, years in public health nursing, and level of education, could be detected.

Among thirteen identified barriers, the four highest self-ranked barriers were: 1) a lack of privacy for screening in the health care setting, 2) feelings that the woman would end up staying in the abusive relationship anyway, 3) not being able to fix the problem, and 4) feeling uncomfortable asking the patient. Seven participants responded to the question about other barriers that nurses might perceive during screening. Two of the
respondents cited family and husband’s presence as barriers, two mentioned language and cultural barriers, and the remaining three cited either a lack of available referral resources, a patient’s discomfort, or a patient’s fear of not being able to get their children back from Child Protection Services (CPS).

Table 2: Identified barriers (n=32)

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a lack of privacy for screening in my healthcare setting</td>
<td>11</td>
<td>34.4%</td>
</tr>
<tr>
<td>I feel women will end up staying with the abuser anyway</td>
<td>7</td>
<td>21.9%</td>
</tr>
<tr>
<td>I can’t fix the problem anyway.</td>
<td>6</td>
<td>19.4%</td>
</tr>
<tr>
<td>I feel uncomfortable asking.</td>
<td>5</td>
<td>15.6%</td>
</tr>
<tr>
<td>I am afraid of offending the patient.</td>
<td>4</td>
<td>12.5%</td>
</tr>
<tr>
<td>I don’t know how to get the woman alone to ask the questions.</td>
<td>4</td>
<td>12.5%</td>
</tr>
<tr>
<td>I don’t have enough time to ask about domestic violence</td>
<td>3</td>
<td>9.4%</td>
</tr>
<tr>
<td>I don’t know how to ask about domestic violence.</td>
<td>1</td>
<td>3.1%</td>
</tr>
<tr>
<td>I don’t know what to do if the answer is yes.</td>
<td>1</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

Table 3: Level of Intervention Preparation (n=32)

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Prepared</th>
<th>Some what Prepared</th>
<th>Not Prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make appropriate referrals for victims of domestic violence</td>
<td>71.9%</td>
<td>25.0%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Provide support to a woman who discloses domestic violence</td>
<td>71.9%</td>
<td>21.9%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Ask routine questions about domestic violence</td>
<td>84.4%</td>
<td>9.4%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Identify warning signs of abuse.</td>
<td>84.4%</td>
<td>12.5%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Inform a battered woman about their legal options.</td>
<td>46.9%</td>
<td>40.6%</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

A nurse’s ability to intervene with victims of domestic violence was measured by a series of questions. As Table 3 illustrates, more than half of the participants (53.1%) were either not prepared or were somewhat prepared to inform a battered woman about her legal options. All respondents but two (n=30) answered the optional questions about personal experience of abuse. Half of the respondents (50%) knew someone who had been abused. The last question regarding further suggestions to improve screening skills was answered by six participants. Their suggestions included: additional training, attending seminars and workshops for domestic violence, training regarding referral resources, developing a screening form specific to domestic violence, discussing the issue of domestic violence with all clients on their first home visit, and tailoring questions based on each patient’s unique situation.

Table 4: Response to Optional Questions (n=30)

<table>
<thead>
<tr>
<th>Question</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you, a family member, or a friend</td>
<td>15</td>
<td>50.0%</td>
</tr>
<tr>
<td>experienced abuse?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes who experienced abuse?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>myself</td>
<td>3</td>
<td>10.0%</td>
</tr>
<tr>
<td>parent</td>
<td>3</td>
<td>10.0%</td>
</tr>
<tr>
<td>Spouse/partner</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>friend</td>
<td>5</td>
<td>16.7%</td>
</tr>
<tr>
<td>other</td>
<td>4</td>
<td>13.3%</td>
</tr>
<tr>
<td>Has anyone hit, kicked or punched you?</td>
<td>5</td>
<td>16.7%</td>
</tr>
<tr>
<td>Are you currently being hit, kicked or</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>punched?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Limitations

Limitations of this study included the small sample size (n=32) and utilization of a convenience sample. In addition, results may not be representative of the population as a whole. Some of the respondents did not answer all of questions, resulting in some missing values.

Discussion

Pender’s Health Promotion Model may be used as a framework to improve nurses’ screening skills by identifying perceived barriers to action and by assessing situational influences that might affect their behaviour and beliefs. This study’s results were similar to those of past studies; the most cited barrier to screening for domestic violence being a perceived lack of privacy. Eleven (34.4%) respondents stated they did not have enough privacy, and four (12.5%) said they did not know how to find a private setting in which to question the patient. To solve this problem, nurses should be more autonomous, and they need to look for new screening strategies that can assist them to remove this situational barrier. In fall 2012, Phyllis Sharp, PhD, RN and Linda Bullock, PhD, RN started to examine the use of tablet computers in screening at-risk pregnant women for partner abuse. Nurse researchers expect that the use of computer tablets with special applications will increase the number of cases of identified domestic abuse.
The second perceived barrier to action was nurses’ feelings and attitudes toward screening their patients. Negative feelings reported included the feeling that the patient will end up staying with her abuser, a perceived inability to fix the problem, feeling uncomfortable asking the patient, and being afraid of offending the patient. These negative feelings and attitudes can be categorized into two parts; one part is related to nurses’ negative perception about the outcome of their screening job, and the other part is related to perceived poor self-efficacy. Past research from literature reviews showed nurses’ feelings of low self-efficacy could be decreased by holding in-service teaching programs. These programs need to be focused on teaching nurses more effective communication skills and on helping them better interact with sensitive subjects. Teaching strategies such as role playing and creating situational scenarios may also assist nurses in overcoming this barrier.

Knowing how to inquire about domestic violence can be considered a benefit to action. Despite past studies, almost 94% of the nurses in this study indicated that they are either prepared or somewhat prepared to ask routine questions about domestic violence. Participant demographic information such as educational degree, years in nursing, and years in public health nursing also support nurses’ preparedness to ask routine questions and to make appropriate referrals. Approximately half of the participants had personal experience of abuse. In terms of informing battered women about their legal options, however, only 46.9% of the respondents said that they are prepared for this task. This lack of knowledge regarding patients’ rights appears to lead to a feeling of inadequacy in helping them. Educating nurses about patients’ legal options and rights can affect their screening outcomes. It may also motivate nurses to develop a positive sense of self-efficacy.

The third main perceived barrier to action reported was lack of time. To solve this challenge, nurses need to be more creative. For example, they can ask follow-up questions about domestic violence during medical examinations, and at that time, make appropriate referrals to community-based organizations as an effective way to advocate for their patients’ safety.

Conclusion

As domestic violence is a public health issue, it is important for public health departments and agencies to empower nurses working in this area to overcome barriers to screening for domestic violence. Public health nurses can be supported by their departments by being provided with in-service training classes, educational materials, and accessible computer applications. In addition, collaborative work among public health departments, interdisciplinary university institutions, and the judiciary system can help empower public health nurses in tracking cases of domestic abuse.

References


SCREENING FOR DOMESTIC VIOLENCE QUESTIONNAIRE

Background information

__ Gender:  1: Female  2: Male

__ Your age:

__ Years in Nursing  1: 1-9  2: 10-19  3: 20-29

__ Years in Public Health Nursing  1: 1-9  2: 10-19

__ Level of Education  1: Diploma  2: Associate  3: Bachelor  4: Master

Questions about identified barriers

__ There is a lack of privacy for screening in my healthcare setting.  1: Yes  2: No

__ I don’t have enough time to ask about domestic violence.  1: Yes  2: No

__ I don’t know how to ask about domestic violence.  1: Yes  2: No

__ I don’t know how to get the woman alone to ask the questions.  1: Yes  2: No

__ I feel uncomfortable asking.  1: Yes  2: No

__ I am afraid of offending the patient.  1: Yes  2: No

__ I don’t know what to do if the answer is “yes.”  1: Yes  2: No

__ I don’t know enough about the issue of domestic violence.  1: Yes  2: No

__ I can’t fix the problem anyway.  1: Yes  2: No

__ I feel the woman will end up staying with the abuser anyway.  1: Yes  2: No

__ I don’t feel I have support from nursing management.  1: Yes  2: No

__ I don’t feel it is really my job to screen.  1: Yes  2: No

__ I don’t feel the screening box is conveniently located  1: Yes  2: No

__(Other) please cite barriers not listed:

Questions about intervention preparation

Please circle selected number.
1= prepared  2=somewhat prepared  3=not prepared

_ Make appropriate referrals for victims of domestic violence. 1  2  3
_ Provide support to a woman who discloses domestic violence. 1  2  3
_ Ask routine questions about domestic violence. 1  2  3
_ Identify warning signs of abuse. 1  2  3
_ Inform a battered woman about their legal options. 1  2  3

Optional Questions

_ Have you, a family member, or friend experienced abuse?

_ If yes, who experienced abuse? 1: myself  2: parent  3: spouse/partner  4: friend  5: other

_ Has anyone hit kicked or punched you?

_ Are you currently being hit, kicked or punched?

_ Do you have any suggestion for further improvement in screening skills?