Assessment of Knowledge and Perception of Senior Secondary School Students Towards Nursing as a Career Choice for Men in Selected Local Government of Lagos State, Nigeria

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Abstract

The number of men in nursing has remained low despite the many benefits and opportunities associated with the profession. Currently, males make up only 6.6% of the three million nursing professionals in the United States. The study assessed the knowledge and perception of secondary school students towards nursing as a career choice for men in selected Local Government of Lagos State, Nigeria. This is a descriptive cross-sectional study that was carried out on 293 respondents. A multi staged sample technique was used to select study participants. Results revealed that majority of respondents (91.4%) knew nursing as a profession and 88.9% knew that a legal certificate was required to practice nursing. Respondents generally demonstrated a good knowledge of Nursing. There was also a general positive perception towards Nursing as a career (93%). Even though there was a positive perception towards nursing as a career choice for men generally (53%), half (50.2%) of the students in this study disagreed that nursing was a career choice for female only. Thirty-seven (37%) percent of the students stated that nursing was not a masculine type of career for males to pursue. Also, 65.6% of respondents agreed that nursing was more appropriate for females because they are more caring. There is a need for secondary school students to be aware of what nursing as a profession entails and that gender is not a determining factor of being a better nurse.

Keywords: knowledge, Perception, Nursing, career choice, men.

Introduction

Nursing profession is the largest single health care profession in the health care context\textsuperscript{1}. The sustainability of nursing profession depends largely on maintaining equilibrium between those that enter and exit the profession\textsuperscript{2}. Historically, nursing profession has been considered a single sex occupation, one dominated by female gender and not appropriate for men\textsuperscript{3}. Despite many benefits and opportunities associated with a nursing career which contributes to high level of job satisfaction, nursing remains a gender-lopsided profession\textsuperscript{4}. Male nursing students’ experience of isolation may come from being male in a predominantly female career, and they express a desire to interact more often with male role models.

Diversity is crucial in the nursing workforce\textsuperscript{4} and gender imbalance presents a problem since it ignores diversity\textsuperscript{5}. The benefits of diversity, from the point of view of the male nurse, are to make the workforce more welcoming and accommodating towards men, encouraging a larger number of male recruit and reducing male attrition\textsuperscript{6}. Having more males in the profession is identified as an additional potential advantage of having a more balanced workforce\textsuperscript{5}.

Currently, males make up only 6.6% of the three million nursing professionals in the United States.\textsuperscript{7} “While more men are choosing nursing than in decades past, men will likely remain the minority in nursing for many years to come.”\textsuperscript{8} The low numbers of male nurses is also reflected in the nursing workforce in Oregon. As of 2011, the Oregon State Board of Nursing identified 45,946 people as holding a Nursing license through the state board with 35,849 of those employed as nurses\textsuperscript{9}. Of this group, 10% identified as male, a number slightly above the national average.

The nursing profession is currently experiencing a global shortage of personnel complicated by an aging workforce and an expected increase in demand for nurses in the near future\textsuperscript{10}. Recruiting men
into nursing has significant implications as the profession faces a growing workforce shortage. With the impending shortage of registered nurses nationally and internationally, the recruitment of more men into nursing becomes more important. Men make up over 50% of the workforce, and constitute a viable population to answer the inevitable nursing shortage. Recruiting men into nursing, and retaining them, would prepare the national and international communities, for the large nursing shortages that will occur when current populations of nurses retire. Therefore, this study assessed the perception of senior secondary school students towards nursing as a career choice for men in selected Local Government area of Lagos State, Nigeria.

This study assessed the secondary school student knowledge about the nursing profession, provided them with relevant and useful information and corrected any misconceptions they had about the nursing profession. A better understanding of secondary school students’ perception of nursing as a career choice for men is required to further efforts to increase the number of men in nursing.

Materials and methods

A self-administered questionnaire containing close ended questions was used for collecting data. The questionnaire gathered information on knowledge about nursing, perception towards nursing as a career, and perception towards nursing as a career choice for men. It also provides relevant information about the socio demographic characteristics of the respondents. The instrument was validated through a review by a panel of experts consisting of nursing professionals as well as experienced professional researchers. A test re-test of the instrument was carried out on thirty-one (10% of total sample) respondents to ensure that the instrument measure what it is supposed to measure. Ethical approval for the study was obtained from the ethics and research committee of the institution. Permission was sought from the principals of the selected schools. Informed consent was obtained from each of the participant with an assurance of confidentiality.

Descriptive cross sectional study was carried out among senior secondary students of twelve randomly selected schools. A sample size of 293 respondents was determined using the formulae

\[
n = \frac{z^2 \cdot pq}{d^2}
\]

Where:
- \(n\) = minimum required sample size
- \(z\) = standard normal deviate which is 1.96 at 95% confidence interval
- \(p\) = prevalence given as 0.5
- \(q\) = proportion of failure (1-p), given as 0.5
- \(d\) = expected difference as 0.05

This gave us \(n\) = 267.

To compensate for improperly completed questionnaires or opt out by any of the selected respondents, the calculated sample size was increased by 10%, \(n\) = 10\% × (267) + 267 = 293 participants.

A multi stage sampling technique was used to select study participants. Firstly, the sampling frame for the study was made by serially listing the wards under Mushin Local Government.

Secondly, three wards (ward A, B and F) were selected from the exiting 10 through a simple random sampling method, afterwards three schools were selected, One from each wards using simple random sampling methods which included: Mushin community senior high school, Idi Araba, Mushin and New state high school, palm avenue, Mushin and Atunrase senior secondary, Surulere, Mushin.

Data collected was double checked manually for correctness and completeness immediately after collection and thereafter coded for data entry. The data collected was analyzed using EPI-INFO Version 7. Frequency tables were generated for relevant variables. Knowledge about nursing was categorized into good or poor. Each correct answer got 1 mark and maximum obtainable score was 7. Knowledge was scored on a scale of 0-7 with a score of 0-3 being poor knowledge and a score of 4-7 being good knowledge. The perception towards nursing as a career was also categorized as positive or negative. Responses to strongly agree were given 5 marks, agree 4 marks, undecided 3 marks, Disagree 2 marks and strongly disagree 1 mark. Maximum score obtainable was 35 marks. It was scored on a
scale of 7-35 with a score of 7-20 is regarded as a negative perception while a score of 21-35 is regarded as positive perception.

The perception towards nursing as a career choice for men was also categorized as positive or negative. Responses to strongly agree were given 5 marks, agree 4 marks, undecided 3 marks, Disagree 2 marks and strongly disagree 1 mark. Maximum score obtainable was 30 marks. It was scored on a scale of 6-30 with a score of 6-18 being regarded as a negative perception while a score of 18 -30 is regarded as positive perception.

**Results**

Out of 293 questionnaires administered, 267 questionnaires were correctly filled by the respondents and entered for analysis. This gives a response rate of 91.1%. Majority of respondents were between the ages of 16-18 years (61.4%).

**Table 1.** Socio-demographic characteristics of respondents

| Variables (n=267) | F   | %    |
|------------------|-----|------|
| **Age**          |     |      |
| 10-12            | 1   | 0.4  |
| 13-15            | 78  | 29.2 |
| 16-18            | 164 | 61.4 |
| Above 18         | 24  | 9.0  |
| **Gender**       |     |      |
| Male             | 101 | 37.8 |
| Female           | 166 | 62.2 |
| **Religion**     |     |      |
| Christianity     | 141 | 52.8 |
| Islam            | 125 | 46.8 |
| Traditional      | 1   | 0.4  |
| **Ethnic group** |     |      |
| Igbo             | 75  | 28.1 |
| Yoruba           | 173 | 64.8 |
| Hausa            | 5   | 1.9  |
| Others           | 14  | 5.2  |
| **School**       |     |      |
| New state high, Surulere | 77  | 28.8 |
| Atunrase secondary school, Surulere | 135 | 50.4 |
| Mushin community high school, Mushin | 55 | 20.6 |
| **Department**   |     |      |
| Art              | 56  | 21.4 |
| Science          | 72  | 27.1 |
| Commercial       | 139 | 51.5 |

Majority knew that nurses protect patients in the health care system (98.9%) and it was agreed by all the respondents that nursing involved caring for people. [See table 2].

**Table 2.** Respondents knowledge about nursing

| Variables (n=267)                  | Frequency | Percent |
|------------------------------------|-----------|---------|
| Nursing is a profession            | 244       | 91.4    |
| Nurses protect patient in the health care system | 264 | 98.9 |
| Nursing involves caring for        | 267       | 100.0   |
There was an overall good knowledge (93%) about nursing [see table 4].

Table 3. Respondents overall knowledge about nursing

| Variable                             | Frequency | Percent |
|--------------------------------------|-----------|---------|
| Good knowledge about nursing          | 248       | 92.9    |
| Bad knowledge about nursing           | 19        | 7.1     |
| Total                                | 267       | 100.0   |

Nurses were viewed as respected and valued by society by more than two-thirds of the study population although more than half (55.9%) believed that nurses only followed doctors’ orders and it was the view of 35.6% of respondents that nursing was for females only.[see table 4].

Table 4. Respondents’ perception towards nursing as a career

| STATEMENT                                      | Strongly agree (%) | Agree (%) | Neutral (%) | Disagree (%) | Strongly disagree (%) | TOTAL (%) |
|------------------------------------------------|--------------------|-----------|-------------|--------------|-----------------------|-----------|
| Nurses are respected and valued by society    | 56 (21.0)          | 145 (54.3)| 50 (18.7)   | 11 (4.1)     | 5 (1.9)               | 267 (100) |
| Nurses follow only doctors order without questioning | 45 (16.9) | 104 (39.0)| 50 (18.7)   | 47 (17.6)    | 21 (7.9)              | 267 (100) |
| Nursing is for female only                    | 35 (13.1)          | 60 (22.5) | 22 (8.2)    | 88 (33.0)    | 62 (23.2)             | 267 (100) |
| Nurses earn a lot of money                    | 23 (8.6)           | 88 (33.0)| 76 (28.5)   | 68 (25.5)    | 12 (4.5)              | 267 (100) |
| Nurses play important role in preventing disease among community | 41 (15.4) | 157 (58.8)| 41 (15.4)   | 9 (3.4)      | 19 (7.1)              | 267 (100) |
| Nursing is a slavery profession              | 10 (3.7)           | 34 (12.7)| 29 (10.9)   | 102 (38.2)   | 92 (34.5)             | 267 (100) |
It takes intelligence to be a nurse

|                | Frequency | Percent |
|----------------|-----------|---------|
| 81 (30.3)      | 134 (50.2)| 23 (8.6)| 22 (8.2) | 7 (2.6) | 267 (100) |

There was a positive perception (93%) towards nursing as a career [see table 5]

Table 5. Respondents overall perception towards nursing as a career

| Variable                        | Frequency | Percent |
|---------------------------------|-----------|---------|
| Positive perception towards    | 248       | 92.9    |
| nursing                         |           |         |
| Negative perception towards    | 19        | 7.1     |
| nursing                         |           |         |
| Total                           | 267       | 100.0   |

More than half (50.2%) disagreed that nursing was a career choice for females only however it was the view of as much as 37.9% that nursing was not a masculine type of career for males to pursue. Less than half of the students surveyed agreed that they would encourage a male family member to become a nurse. [See table 6]

Table 6. Respondents’ perception towards nursing as a career for men

| STATEMENT                                              | Strongly agree (%) | Agree (%) | Neutral (%) | Disagree (%) | Strongly disagree (%) | TOTAL (%) |
|-------------------------------------------------------|--------------------|-----------|-------------|--------------|-----------------------|-----------|
| Nursing is a career choice for females only           | 31 (11.6)          | 67 (25.1) | 34 (12.7)   | 103 (38.6)   | 32 (12.0)             | 267 (100) |
| Nursing is not a masculine type of career for male to| 17 (6.4)           | 84 (31.5) | 51 (19.1)   | 66 (24.7)    | 49 (18.4)             | 267 (100) |
| pursue                                                |                    |           |             |              |                       |           |
| Nursing is more appropriate for females because they  | 64 (24.0)          | 111 (41.6)| 41 (15.4)   | 30 (11.2)    | 21 (7.9)              | 267 (100) |
| are more caring and compassionate                      |                    |           |             |              |                       |           |
| I feel all male nurses are gay                        | 16 (6.0)           | 34 (12.7) | 37 (13.9)   | 110 (41.2)   | 70 (26.2)             | 267 (100) |
| Nursing is not appropriate for male because they are  | 18 (6.7)           | 67 (25.1) | 59 (22.1)   | 73 (27.3)    | 50 (18.7)             | 267 (100) |
| not caring enough                                     |                    |           |             |              |                       |           |
| I will encourage a male family member to become a    | 19 (7.1)           | 94 (35.2) | 55 (20.6)   | 56 (21.0)    | 43 (16.1)             | 267 (100) |
| nurse                                                |                    |           |             |              |                       |           |

More than half of the respondents (53.2%) held positive perception towards nursing as a career choice for men [see table 7].

Table 7. Respondents overall perception towards nursing as a career choice for men

| Variable                                      | Frequency | Percent |
|-----------------------------------------------|-----------|---------|
| Positive perception towards nursing           | 142       | 53.2    |
| Negative perception towards nursing           | 125       | 46.8    |
| Total                                         | 267       | 100.0   |
Figure 1. Responses to “will encourage a male family member to become a nurse”

As figure 1 above illustrates, of the 166(100%) female respondents, 66(39.8%) disagreed while 72(43.4%) agreed that they will encourage a male family member to become a nurse and of the 101(100%) male respondents, 34(33.7%) disagreed while 51(50.5%) agreed that they will encourage a male family member to become a nurse.

Hypothesis testing

1. Null hypothesis (H₀): There will be no statistically significant relationship between sex of respondents’ and knowledge about nursing.

Table 8. Relationship between sex of respondents’ and their knowledge about nursing

| SEX   | KNOWLEDGE | Chi-square | p-value |
|-------|-----------|------------|---------|
|       | GOOD (%)  | BAD (%)    | TOTAL (%) |          |
| FEMALE| 156 (94.0) | 10 (6.0)   | 166 (100.00) | 0.792*   |
| MALE  | 92 (91.1)  | 9 (8.9)    | 101 (100.00) | 0.374*   |

*chi-square

Table 8 shows the relationship between sex of respondents and knowledge about nursing. The chi-squared test was used to determine the level of statistical significance and a 5% level of significance (p≤0.05) was used. The table shows that there is no statistically significant relationship between sex of respondents and knowledge about nursing as the p-value was greater than 0.05, thus the null hypothesis is accepted.

2. Null hypothesis (H₀): There will be no statistically significant relationship between sex of respondents’ and perception towards nursing as a career choice for men.

Table 9. Relationship between sex of respondents’ and their perception towards nursing as a career choice for men

| SEX   | PERCEPTION | Chi-square | p-value |
|-------|------------|------------|---------|
|       | POSITIVE (%) | NEGATIVE (%) | TOTAL (%) |          |
| FEMALE| 93 (56.0)   | 73 (44.0)   | 166 (100.00) | 1.417*   |
| MALE  | 49 (48.5)   | 52 (51.5)   | 101 (100.00) | 0.233*   |

*chi-square
Table 9 shows that there is no statistically significant relationship between sex of respondents and perception towards nursing as a career choice for men as the p-value was greater than 0.05, thus the null hypothesis is accepted.

3. **Null hypothesis (H₀):** There will be no statistically significant relationship between respondents’ knowledge about nursing and perception towards nursing as a career choice for men.

**Table 10.** Relationship between respondents’ knowledge about nursing and their perception towards nursing as a career choice for men

| KNOWLEDGE | PERCEPTION | Chi-square | p-value |
|-----------|------------|------------|---------|
|           | POSITIVE (%) | NEGATIVE (%) | TOTAL (%) | 1.008* | 0.315* |
| GOOD      | 134 (54.0)   | 114 (46.0)   | 248 (100.00) |         |       |
| BAD       | 8 (42.1)     | 11 (57.9)    | 19 (100.00)  |         |       |

*chi-square

Table 10 shows that there is no statistically significant relationship between knowledge of respondents about nursing and perception towards nursing as a career choice for men as the p-value was greater than 0.05, thus the null hypothesis is accepted.

**Discussion**

The study was a cross-sectional descriptive study carried out to assess the knowledge and perception towards nursing as a career choice for men among senior secondary school students.

**Socio-demographic profile of respondents**

Majority of respondents included in this study were adolescents between the ages of 16-18 years (61.4%) made up of 62.2% females and 37.8% males. Slightly more than half of the respondents were Christians (52.8%). The largest proportion by ethnicity was the Yoruba ethnic group (64%) although other ethnic groups were also represented in the sample. Although respondents were drawn from three secondary schools in the region, half of the study population (50.4%) was from Atunrase Secondary school while the largest proportion came from commercial department of their respective school.

**Respondents’ knowledge about nursing**

With regard to knowledge of nursing, the majority of respondents in this study (91.4%) knew nursing as a profession and 88.9% knew that a legal certificate was required to practice nursing. In an assessment of the knowledge of the role of nursing in the healthcare system, results of this study found that majority of the students knew that nurses protect patients in the health care system (98.9%) and it was agreed by all the respondents that nursing involved caring for people. It was also a common view that nurses always worked in hospitals and their service is as important as doctors. This shows a good level of knowledge (93%) of nursing among the study population. This is similar to a study carried out by on image of nursing profession as viewed by secondary school students in Ilala district, Dar-es-salaam in which 66.1% males and 65.5% females have a good knowledge about Nursing out of the 100 respondents in the study13.

**Respondents’ perception towards nursing as a career**

Majority of respondents (74.2%) were of the view that nurses played an important role in preventing disease in the community and as much as 80.5% knew it takes intelligence to become a nurse, there was still a small proportion (16.4%) who saw the nursing profession as a slavery profession. In this study nurses were viewed as respected and valued by society by more than two-thirds of the study population although more than half (55.9%) believed that nurses only followed doctors’ orders without questioning. Another common misconception relates to gender in this study was the view of more than one-third of the respondents (35.6%) that nursing was for females only and
can result in making the nursing profession unattractive to the males in secondary school where peer influence is strong. Making the nursing profession attractive to young people also requires that it is viewed as a financially rewarding prospect as this serves as an incentive for prospective nurses. In terms of incentives to work only 41.6% of the respondents in this study believed that nurses earned a lot of money. An overall assessment of perception in this study showed that a majority of the students surveyed had positive perception (93%) towards nursing as a profession. Similarly, the respondents in a study carried out by on Adolescents’ perception of career choice of Nursing among selected secondary school in Jos², Nigeria showed a positive perception of nursing majority of the respondents (91.25%) agreed that nurses are respected and valued by the society, 90% of the respondents’ agreed that it takes intelligence to be a nurse while 47.5% agreed that “nursing is a feminine profession”

Respondents’ perception towards nursing as a career for men

Although, more than half of the respondents (53%) held a positive perception towards Nursing as a career choice for men, half (50.2%) of the students in this study disagreed that nursing was a career choice for females only. However it was the view of as much as 37.9% of the students that nursing was not a masculine type of career for males to pursue. It was the view of 65.6% of respondents that nursing was more appropriate for females because they are more caring and 32.8% said nursing was not appropriate for males because they were not caring enough. The study also shows that there is no statistically significant relationship between sex of respondents and perception toward nursing as a career choice for men (p-value = 0.419). Furthermore, majority (63.4%) believed that all male nurses were gay, which for young people could have the negative effect of stigmatization. These negative perceptions expressed by secondary school students are also sometimes enhanced at different levels of the social system such as at the family or community level. For instance, in this study although more than half of the respondents (53.2%) held positive perception towards nursing as a career choice for men, less than half of the students surveyed agreed that they would encourage a male family member to become a nurse. However in a study on attitude and perception towards men in nursing education in which the respondents consists of nursing and non-nursing students, majority of the respondents agreed that nursing is not a masculine type of career for male to pursue and there is a general perception that female nurses are more caring and nurturing when compared to male nurses¹⁴.

Conclusion

There was a general positive perception towards Nursing as a career as majority of the respondents were of the view that nurses play important role in preventing disease in the community. Also, nurses were viewed as respected and valued by society by more than two-thirds of the study population. Although, more than half of the respondents (53.2%) held positive perception towards nursing as a career choice for men, it was the view of majority of respondents that nursing was more appropriate for females because they are more caring and less than half of the students surveyed agreed that they would encourage a male family member to become a nurse and majority of the respondents agreed that all male nurses are gay. In conclusion, there is a need for secondary students to be aware of what nursing as a profession entails and that gender is not a determining factor of being a better nurse.

Nursing implications

The findings of this study have practical implication for the nursing education, practice and research. The perception that nursing is a feminine profession is reinforced in the findings of this studies and so adequate awareness that Nursing as a career provides them with opportunity to help and care for others either as a male or a female. Modern healthcare delivery requires a multidisciplinary approach in order to be effective. It is therefore important to emphasize the value of team work in the decision making process of patient care at the level of the practicing nurse as well as at the secondary school level where the next generation of nurses can be attracted. Organizing programs and advertisements that portray both male and female nurses in a variety of settings, demonstrating their professionalism as nurses and their caring ability are required.
Recommendations

Nursing as a career for both males and females should be strongly incorporated in career counseling in secondary schools in order to increase awareness and foster positive perception towards nursing. Nursing department of various academic institutions should admit more males into the institution while the Nursing and midwifery council should take measures to stop the media negative portrayal of nursing as a feminine profession.

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