

Assessment of Factors Associated with Nurses' Attitude Towards Effective Pain Management in Selected Secondary Hospitals in Ibadan, Oyo State, Nigeria

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Abstract

The study investigated the assessment of factors associated with nurses' attitude towards effective pain management in selected secondary hospitals in Ibadan, Oyo state, Nigeria. The study specifically examined the relationship between socio-demographic factors, socio-cultural factors, environmental factors, personal factors and nurses' attitude towards effective pain management. The study utilized descriptive research design. The population for the study comprises of all nurses working in the selected secondary hospitals in Ibadan, Oyo State, Nigeria. Two hundred and ninety-five nurses working in the selected secondary hospitals were selected using multi-stage sampling procedure. A self-designed questionnaire was used for data collection. The instrument for data collection was subjected to face and content validity. The items in the questionnaire were presented to experts in the test and measurement in nursing field for review, corrections and appraisal after which necessary corrections were made. The reliability of the instrument was ascertained using Cronbach's Alpha method and 0.825 was obtained to ensure the consistency of the instrument. Four hypotheses tested using multiple regression analysis and chi-square. The findings of the study revealed that environmental factors, sociocultural factors and personal factors have major influence on the attitude of nurses in the effective pain management. In addition, there was a major relationship between socio-demographic characteristics of nurses and attitude towards effective management of pain in selected hospitals in Ibadan. It was recommended among others that there is need for nurses to

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understand that pain management should be person centered care considering several factors including socio-demographic, environmental and personal factors of the nurses.

Keywords: Assessment, Factors, Nurses' Attitude, Pain Management,

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Introduction

Pain is a distressing feeling often caused by intense or damaging stimuli. The widely used definitions defines it as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage (International Association for the Study of Pain, (IASP) 2015). Pain is a complex, subjective phenomenon, it has been a challenge and it is regarded as a symptom of an underlying condition. Pain motivates the individual to withdraw from damaging situations, to protect a damaged body part while it heals, and to avoid similar experience in the future. Pain is not just a physical sensation, it is influenced by attitudes, beliefs, personality, cultural background and social factors, and can affect emotional and mental wellbeing (Pain Australia, 2015).

Persistent pain is a significant therapeutic challenge and a complex experience that is not easily communicated and a major stressor facing hospitalized patients (Ramira, Instone & Clark, 2016). Every patient has the right to be free of pain, effective pain relief not only provides physical comfort for patients, but also, improves their quality of life and facilitates more rapid return to everyday life, it reduces the duration of hospital stay and ultimately cuts the cost of healthcare (Fateme & Ali, 2019). Negative attitude towards pain management was reported as one of the major obstacles to implement an effective pain management among nurses (Osama, 2018). The associated factors that may be responsible for nurses' negative attitude towards effective pain management might be attributed to socio-cultural factor, demographic factor, environmental factor, personal factor and level of pain knowledge and its management.

Demographic characteristics such as age, working unit, educational qualifications may affect nurses' pain management competency. Age of a nurse is a major determinants of level of maturity to handling or managing pain in patients (Narayan, 2017), also working unit and graduating institution may affect nurses' pain management competency, Nurses' who obtained their education from government have high competency on pain management than private institution (Manaporn, 2015).

Cultures are the customs, beliefs, art, way of life and social organization of a particular country or group of people (Green, 2017). A person's culture determines how pain is perceived, experienced and communicated. A useful analogy of culture refers to it as an inherited 'lens' through which the individual perceives and understands the world and as a result learns how to live within it (Helman, 2016). Cultural factors influence beliefs, behavior, perceptions and emotions, all of which have important implications on health and healthcare, a person's culture determines how pain is perceived, experienced and communicated, it also affects nurses' attitude and determines their response to pain management (Peacock & Shilpa 2014). As cited in Sandy (2014), cultural and ethnic background of nurses had influence on their attitude to pain assessment and prompt response to pain management by nurses. Studies have shown that patients from minority cultures in developed countries are less likely to express their pain experience in a manner that sounds quietly enduring or might expressive (David, 2018). Similar study was reported that on the differences in healthcare professionals' attitude towards pain management according to cultural or ethnic background showed that nurses cultural background influences their interpretation of the patients' pain experience which affect how they respond promptly to pain control (Sandy, 2014).

Environmental factors such as organization policy, guidelines and protocol, nurse-physician relationship, medications availability can also determine nurses' attitude. The organizational structure has an impact on system use and have influence on nurses' attitude to effective management of pain (Hsiao, 2013). For pain management, having pain protocol, policy and guidelines is most important, in a study conducted in Bangladesh, majority of the



nurses (59.1%) stated that there was no pain management standard or protocol used as a basis in the hospital, which definitely affect their attitude to effective pain management.

Personal factor such as personality traits is another important aspect responsible for nurses' attitude to effective pain management. Personality traits reflect an individual nurse characteristic, behavior, attitude and values. It has been argued that a person's career unfolds is increasingly affected by his or her own values and personality characteristics. Two survey studies conducted to investigate the relationships between personality traits and career roles indicates that people's personality traits predicted their preference for certain roles in the work context which in turn, predicted the career roles they occupy (Nicole, Wisse, Heesink & Van der Zee, 2019). This may be responsible for nurses' attitude for effective pain management.

Based on the foregoing, the study investigated the assessment of factors associated with nurses' attitude towards effective pain management in selected secondary hospitals in Ibadan, Oyo state, Nigeria. The study specifically examined:

1. the relationship between socio-demographic factors (age, designation, educational level, years of experience, working units and graduating institution) and nurses' attitude to effective pain management;
2. the relationship between socio-cultural factors (cultural and ethnic background) and nurses' attitude towards effective pain management;
3. the relationship between environmental factors (organizational factors such as protocols, policies and guidelines on pain management, adequate equipment and staff strength) and nurses' attitude towards effective pain management; and
4. the relationship between personal factors (personal experience of pain and medication use, interpersonal skills and personal belief of nurses on pain experience) and nurses' attitude towards effective pain management.

Research Hypotheses

The following null hypotheses were generated for this study:

1. There is no significant relationship between socio-demographic factors (age, designation, educational level, years of experience, working units and graduating institution) and nurses' attitude to effective pain management.
2. There is no significant relationship between socio-cultural factors (cultural and ethnic background) and nurses' attitude towards effective pain management.
3. There is no significant relationship between environmental factors (organizational factors such as protocols, policies and guidelines on pain management, adequate equipment and staff strength) and nurses' attitude towards effective pain management.
4. There is no significant relationship between personal factors (personal experience of pain and medication use, interpersonal skills and personal belief of nurses on pain experience) and nurses' attitude towards effective pain management.

Methodology

The study utilized descriptive research design that assesses the factors associated with nurses' attitude to effective pain management in three selected hospitals in Ibadan, Oyo-state. It ascertained the influence of the independent variable (factors) on the dependent variable (nurses' attitude toward pain management) without manipulations. The population for the

study comprises of all nurses working in the selected secondary hospitals in Ibadan, Oyo State, Nigeria. Two hundred and ninety-five nurses working in the selected secondary hospitals were selected using multi-stage sampling procedure.

A self-designed questionnaire was used for data collection. The questionnaire was made up of three sections namely socio-demographic characteristics (section A), measure of socio-cultural factors and Nurses' attitudes towards effective pain management (section B), measure of environmental factors and Nurses' attitudes towards effective pain management (section C) and measure of personal factors and Nurses' attitudes towards effective pain management (section D).

The instrument for data collection was subjected to face and content validity. The items in the questionnaire were presented to experts in the test and measurement in nursing field for review, corrections and appraisal after which necessary corrections were made. The reliability of the instrument was ascertained using Cronbach's Alpha method and 0.825 was obtained to ensure the consistency of the instrument. Four hypotheses tested using multiple regression analysis and chi-square. Multiple regression analysis was used to answer hypothesis one on socio-demographic factors at 0.05 level of significance while chi-square test was used to test three hypotheses at 0.05 level of significance.

Results

H₀₁: - There is no significant relationship between Socio-demographic factors (age, designation, educational level, years of experience, working units and graduating institution) and nurses' attitude to effective pain management.

Table 1: Multiple regression analysis showing the socio-demographic factors and nurses' attitude towards effective management

| R= 0.939, R ² =0.882, Adjusted R ² =0.879, Standard error of estimate= 4.54426 | | | | | | |
|--|-----------------------------|------------|----------------------------|--------|------|--------|
| Variables | Unstandardized Coefficients | | Standardize d Coefficients | T | Sig. | Remark |
| | B | Std. Error | Beta | | | |
| (Constant) | 2.400 | .262 | | 15.347 | .000 | |
| Age | .305 | .147 | .017 | 2.099 | .001 | Accept |
| Gender | .448 | .239 | .022 | 3.344 | .001 | Accept |
| Designation | .605 | .328 | .014 | 5.166 | .009 | Accept |
| Level of education | .414 | .150 | .022 | 3.278 | .001 | Accept |
| Years of Experience | .139 | .042 | .075 | 1.950 | .003 | Accept |
| Wards/Units | .303 | .121 | .010 | 2.135 | .003 | Accept |
| Graduating Institution | .217 | .175 | .015 | 1.223 | .003 | Accept |

(F_(7, 287) = 65.417; p < 0.05).

Table 1 showed the combination of the independent variables (socio-demographic factors variables) account for 88% of the variance on wellbeing variables (R² adjusted = 0.879). The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant at 0.05 alpha level (F_(7, 287) = 65.417; p < 0.05).

The results obtained above indicate the joint and relative effect of each of the independent variables (age, gender, designation, highest academic qualification, years of experience, wards/units and graduating institution) on the dependent variable (attitudes of

nurses towards pain management). In terms of most significant effect designation contributed significantly to the attitudes of nurses towards pain management ($\beta = 0.605$; $t=5.166$; $p < 0.05$). Next in terms of magnitude of contribution is Gender ($\beta = 0.448$, $t = 3.344$; $p<0.05$) followed by level of education ($\beta = 0.414$, $t = 3.278$; $p<0.05$) followed by age ($\beta = 0.305$, $t = 2.099$; $p<0.05$) followed by Ward/Unit of the nurses ($\beta = 0.303$, $t = 2.135$; $p<0.05$) followed by graduating institution ($\beta = 0.217$, $t = 1.223$; $p<0.05$) and then years of experience ($\beta = 0.139$, $t = 1.950$; $p < 0.05$). Hence, there is a significant relationship between socio-demographic factors and significant relations nurses' attitude to effective pain management in selected secondary health care facility in Ibadan.

H₀₂: There is no significant influence of socio-cultural factors (cultural and ethnic background) on nurses' attitude towards effective pain management in selected hospitals in Ibadan

Table 2: Chi-Square showing the influence of socio-cultural factors and nurses' attitude towards effective pain management

| Variables | Mean | Standard Deviation | N | X ² | P | Remark |
|-------------------------------------|---------|--------------------|-----|----------------|------|--------|
| Socio-cultural factors | 19.6266 | 4.36900 | 295 | 17.150 | 0.00 | Sig |
| Nurses' Attitude to pain management | 31.0065 | 3.24865 | | | | |

The result presented in the table 2 above revealed that, there is a significant influence of socio-cultural factors on nurses' attitude towards effective pain management in selected hospitals in Ibadan ($X^2= 17.150$ $p<0.05$). The result rejected the null hypothesis and accepted the alternate hypothesis, this showed that there was a significant influence of socio-cultural factors on nurses' attitude towards effective pain management in selected hospitals in Ibadan.

H₀₃: There is no significant influence of environmental factors (cultural and ethnic background) on nurses' attitude towards effective pain management in Ibadan

Table 3: Chi-Square showing the influence of environmental factors on nurses' attitude towards effective pain management

| Variables | Mean | Standard Deviation | N | X ² | P | Remark |
|-------------------------------------|---------|--------------------|-----|----------------|------|--------|
| Environmental factor | 17.7013 | 2.09274 | 295 | 11.610 | 0.00 | Sig |
| Nurses' Attitude to pain management | 31.0065 | 3.24865 | | | | |

From the result presented in table 3, which revealed that, there is a significant influence of environmental factors on nurses' attitude towards effective pain management in Ibadan ($X^2= 11.610$ $p<0.05$). The p- value is less than 0.05, therefore the null hypothesis is rejected while the alternate hypothesis is accepted which states that there was a significant influence of environmental factors on nurses' attitude towards effective pain management.

H₀₄: There is no significant influence of personal factors (personal experience of pain and medication use, interpersonal skills and personal belief of nurses on pain experience) on nurses' attitude towards effective pain management.

Table 4: Chi-Square showing the influence of personal factors on nurses' attitude towards effective pain management

| Variables | Mean | Standard Deviation | N | X ² | P | Remark |
|-----------|------|--------------------|---|----------------|---|--------|
|-----------|------|--------------------|---|----------------|---|--------|

| | | | | | | |
|--|---------|---------|-----|--------|------|-----|
| Personal factor | 15.8377 | 1.98026 | 295 | 21.481 | 0.00 | Sig |
| Nurses' Attitude to pain management | 31.0065 | 3.24865 | | | | |

From the result presented in the table above which revealed that, there is a significant influence of personal factors on nurses' attitude towards effective pain management in Ibadan ($X^2 = 21.481$, $p < 0.05$). The p-value is less than 0.05, therefore the null hypothesis is rejected while the alternate hypothesis is accepted which states that there was a significant influence of personal factors on nurses' attitude towards effective pain management in Ibadan.

Discussion

From the results, it was deduced that socio-demographic factors of the respondents have significant influence on nurses' attitude towards effective pain management. Age; $P = 0.05$, $P = 0.003$, gender; $P = 0.01$, designation; $P = 0.09$; educational level; $P = 0.001$, years of experience; $P = 0.003$; wards/units; $P = 0.003$ and graduating institution; $P = 0.003$ as well. The results inferred that for a nurse to have positive attitude to pain management, demographic factors have an important role to play as it determines the knowledge, competency, maturity of nurses which is essential in handling patient with pain experience to facilitate a quality, effective, efficient and satisfactory treatment.

The findings of the study on socio-cultural factors on hypothesis testing shows that there is a significant influence of socio-cultural factors on nurses' attitude towards effective pain management in selected hospitals in Ibadan. The result of the analysis is consistent with the findings of Peacock & Shilpa (2014) that sociocultural factors have significant impact on the nurses' attitude towards effective management of pain patients. The implication is that culture, upbringing and social values relates directly to the expression of pain in term of its nature, intensity and duration. This shows that cultural and ethnic diversity can make nurses become frustrated thereby determines their attitude and how promptly and effectively a pain patient will be handled. This is because patient may wish to share their pain experience in accordance to their cultural context but due to cultural disparity, nurse may find it difficult to understand patient's expression which can make nurses to develop negative attitude to such a patient and cause unsatisfactory and under-treatment of pain thereby prolonged patient hospital's stay and treatment cost as well (Lane & Smith, 2018).

The findings showed that environmental factors is significantly associated with nurses attitude to effective pain management ($X^2 = 11.610$, $p < 0.05$). The implication is that, for nurses to develop a negative attitude to effective pain management, there must be an established protocol, policies, and guidelines on pain management by each health facilities. The problem of brain drain must be given a serious attention to provide lasting solution to shortage of nurses which led to an increase nurse- patient ratio and work overload preventing them from promptly attending to their patient to deliver quality and efficient care to relief them of their pain. Adequate pain medications, Pain assessment tools, treatment equipment should be made available, environment should be conducive for nurses to work, good nurse-physician relationship should be established and maintain to facilitate effective pain control. Government should make policy that will enable nurses autonomously treat pain patient to assist them in smooth delivery of care to pain patient. This is in line with the findings of Fields and Basbaum, (2018) that despite the awareness of the environment's influence on pain, patients with pain continue to be treated in settings that are devoid of distracting stimuli. The typical treatment room is painted white, lacking decoration, sparsely furnished, and windowless which can play in influencing the pain experience and nurses'

attitude.

The findings showed that personal factors have influence on nurses' attitude towards effective pain management as well. The result corroborates with the findings of Abiru, Gugsu and Gadisa (2019) that a nurse past personal experience of pain and medication use has been found to be an important factor in changing their attitude towards pain management. The implication is that nurses need to work on their personal factors; they should try to acquire required knowledge on pain management through in-service training, part-time courses, and workshops to keep them abreast of current issues in nursing care. They should as well learn not to judge patient pain experience based on their own beliefs and values, which might make them deliver an unsatisfactory and pain care to patients and may even compound their pain experience emotionally, physically and socially. Nurses should likewise develop interpersonal skills such as active listening, empathy, compassion, acknowledging and valuing individual's perspectives so as to not underestimate and undertreat pain patients.

Summary of Major Findings

The following are the major findings of the study:

1. There was significant relationship between socio-demographic factors (age, designation, educational level, years of experience, working units and graduating institution) and nurses' attitude to effective pain management.
2. There was significant relationship between socio-cultural factors (cultural and ethnic background) and nurses' attitude towards effective pain management.
3. There was significant relationship between environmental factors (organizational factors such as protocols, policies and guidelines on pain management, adequate equipment and staff strength) and nurses' attitude towards effective pain management.
4. There was significant relationship between personal factors (personal experience of pain and medication use, interpersonal skills and personal belief of nurses on pain experience) and nurses' attitude towards effective pain management.

Conclusion

This study concluded that environmental factors, sociocultural factors and personal factors have major influence on the attitude of nurses in the effective pain management. In addition, there was a major relationship between socio-demographic characteristics of nurses and attitude towards effective management of pain in selected hospitals in Ibadan.

Recommendations

Based on the findings of this study, the following recommendations were made.

1. There is need for nurses to understand that pain management should be person centered care considering several factors including socio-demographic, environmental and personal factors of the nurses
2. Nurses should likewise develop interpersonal skills such as active listening, empathy, compassion, acknowledging and valuing individual's perspectives so as to not underestimate and undertreat patients in pain.
3. Course of study on Nigerian Peoples' Culture should be inculcated into nursing education curriculum at all levels to familiarize nurses to all cultural and ethnics groups in the country for effective and satisfactory pain management.

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