

Effect of Educational Session on Nursing Students' Knowledge and Attitude toward Complementary and Alternative Medicine

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Received April 23, 2019; Revised June 01, 2019; Accepted June 18, 2019

Abstract Background and objective: Complementary and alternative medicine consider an extensive group of healthcare performs, remedies and modalities. This study aimed to evaluate effect of educational session on nursing students' knowledge and attitude toward complementary and alternative medicine. **Methods:** Research design: Quasi-experimental design. Setting: Faculty of Nursing at Assiut University. Sample: 200 students from first academic level (100) and second academic level (100). Tool: Students assessment sheet: it has three parts. Part I: Socio-demographic data of the students. Part 2: Students' knowledge questionnaire. Part 3: Students' attitude questionnaire. **Results:** There was a statistically significant difference between pre and post application of educational session as regarding nursing students' knowledge and attitude toward complementary and alternative medicine. **Conclusions and recommendations:** Educational session had significantly effect on nursing students' knowledge and attitude toward complementary and alternative medicine. Replicate the study on a larger study sample that includes students in four academic levels at Faculty of Nursing.

Keywords: educational session, knowledge and attitude, nursing students, complementary and alternative medicine

Cite This Article: Attyiat Hassan Hussein, Nagwa Mohamed Ahmed, and Shaymaa Sayed Khalil, "Effect of Educational Session on Nursing Students' Knowledge and Attitude toward Complementary and Alternative Medicine." *American Journal of Nursing Research*, vol. 7, no. 4 (2019): 652-656. doi: 10.12691/ajnr-7-4-26.

1. Introduction

Complementary and alternative medicine (CAM) is a group of traditional practices encompassed mainly of body and mind based treatments [1]. Complementary therapies considers health-related practices and products that have a history of use outside of conventional biomedical usage [2]. Complementary therapies give optimism and touch feeling and spiritual side, going elsewhere the 'symptoms' that consume conventional medicine [3,4].

The National Centre for Complementary and Alternative Medicine has assembled alternative therapies into: 1.natural products as herbal and dietary enhancements. These are extracted from nature and include herbs, vitamins and mineral as well as probiotics. They are generally promoted, promptly accessible to buyers and are frequently sold as dietary enhancements. 2. Mind and body prescription – reflection, needle therapy, unwinding strategies, helpful touch, petition/spiritual healing, music treatment and care groups. 3. Manipulative and body-based practices – rub treatment and fragrance based treatment [5].

The utilization of CAM around the globe has been expanded to treat interminable, intermittent, or genuine

disease [6]. The utilization of CAM might be affected by different factors, for example, discontent with traditional drug, the requirement for ideological coinciding, and the requirement for individual control [7]. Other explanations behind looking for CAM medications are chronic disease, which are not reacting admirably to traditional medicinal treatment (e.g., back pain, arthritis) and feeling a more prominent feeling of command over close to home wellbeing when utilizing CAM [8].

Patients may not uncover their utilization of complementary treatments because of a worry that they will experience a negative attitude of belief [9]. Non-divulgence results in the health provider lacking the fundamental data to help the patient to plan a fitting, admirably educated clinical choice. Notwithstanding a broadly held suspicion that complementary treatments are 'characteristic' and hence sheltered, there are various related dangers [10]. With the expanding the utilization of CAM, the requirement for guaranteeing satisfactory guiding on its utilization is very prescribed [11].

2. Significance of the Study

The use of complementary therapies is becoming increasingly prevalent. And research into CAM is on the

increase in recent times. The expanding utilization of integral treatments among all-inclusive community has made these treatments a significant for all health care professionals. Nurses are the corner stone of health care systems and should be equipped with sufficient information on those CAM therapies. Therefore the researchers decided to conduct this study to improve nursing students' knowledge and attitude toward complementary and alternative medicine.

2.1. Aim of the Study

To evaluate effect of educational session on nursing students' knowledge and attitude toward complementary and alternative medicine.

2.2. Research Hypothesis

After applying the educational session will improve the nursing students' knowledge and attitude toward complementary and alternative medicine.

3. Subjects and Methods

3.1. Research Design

Quasi-experimental research design.

3.2. Setting

This study was carried out in Faculty of Nursing at Assuit University.

3.3. Sample

The study Sample included (200) students from first academic level (100) and second academic level (100) currently enrolled in academic year (2018-2019) at Faculty of Nursing, Assiut University.

3.4. Tool of Data Collection

In this study, tools designed by the researchers after reviewing previous and recent available related literature.

Students assessment sheet: It has three parts.

Part I: Socio-demographic data of the students it includes age, gender, academic level.

Part 2: Students' knowledge questionnaire: it has 7 questions related to complementary and alternative medicine as definition, modalities, uses, reasons for seeking CAM treatments and barriers for using of alternative therapies.

3.5. Scoring System

Scores assigned to each item were between 0 and 1 points as follows; (1= yes and 0 = no).

According to range of total scores it was between (0-7 degrees),

The knowledge scores were classified into Poor knowledge less than 50%, Fair knowledge (50% - 75%), and more than 75% considered Good knowledge.

Part 3: Students' attitude toward complementary and alternative medicine questionnaire it consist of 13 statements regarding students' opinion of CAM.

Students' scores assigned to each item were between 0 and 1 points as follows; (1= agree and 0 = disagree).

According to range of total scores it was between (0-13 degrees),

Students' scores were classified as having positive attitude if their total score

Was $\geq 70\%$, and were classified as having negative attitude if their total score was $< 70\%$ degree.

3.6. Educational Session

It designed by the researchers after reviewing previous and recent available related literature regarding complementary and alternative medicine. It included definition, modalities, uses, reasons for seeking CAM treatments and barriers for using of alternative therapies.

3.7. Content Validity

The tools were tested for content validity by 5 experts of academic medical-surgical nursing staff from Faculty of Nursing at Assiut University who reviewed the tools for clarity, relevance, comprehensiveness, understanding, applicability and easiness for administration, they agreed and no comments. Internal consistency among the questionnaire items was 0.93 Cronbach's alpha (α) and it was considered within the acceptable range.

3.8. Pilot Study

A pilot study was used to test the instrument. It was conducted on 10% (20) students for testing clarity, applicability, practicability and feasibility of the study tools. Modifications were done for study tools, so the 10% of students were excluded from the study.

3.9. Ethical Considerations

Permission to carry out the study was obtained from the ethical committee of the Faculty of Nursing and from the head of Medical -Surgical Nursing Department in the Faculty. Oral agreement for voluntary participation was obtained from the students. Total confidentiality of any obtained information was ensured.

3.10. Procedure

The data collection phase of the study took about two months March and April (2019). Before starting any data collection, the explanation for the study aim was done to obtain agreement and cooperation from students for data collection. After ensuring the clarity of the study tool, the actual data collection from students was started. Arrangements were done to avoid any delay or affection of the regular teaching/learning activities. Pre-test questionnaire was distributed to assess students' knowledge and attitude toward CAM. Each student was filled the questionnaire before application of educational session then the researchers conduct a 45 minute for educational session. Teaching aids used were handouts

equipped with picture and diagram. After session there was 10-15 minutes for discussion and feedback. After finishing the educational session the post-test questionnaire was distributed to assess the effect of the session on students' knowledge and attitude toward CAM.

3.11. Statistical Analysis

The data were tested for normality using the Anderson-Darling test and for homogeneity variances prior to further statistical analysis. Categorical variables were described by number and percent (N, %), where continuous variables described by mean and standard deviation (Mean, SD). Chi-square test OR fisher and correlation (r) exact test used to compare between categorical variables where compare between continuous variables by Mann-Whitney Test, - independent t-test. Two-tailed $p < 0.05$ was considered statistically significant. All analyses were performed with the IBM SPSS 20.0 software and excel sheet data base version 2016.

4. Results

Table 1 Presents that highest percentage of students age was < 20 year (56%). Regarding gender the majority was female (73%).

Table 1. Percentage distribution of socio-demographic data of the students

| Socio-demographic data | N. | % |
|------------------------|-----|------|
| age | | |
| <20 | 112 | 56.0 |
| 20-25 | 86 | 43.0 |
| 25-30 | 2 | 1.0 |
| Gender | | |
| male | 54 | 27.0 |
| female | 146 | 73.0 |
| Academic year | | |
| first | 100 | 50 |
| second year | 100 | 50 |

Table 2 Illustrates that improvement in students' knowledge post application of educational session than before it. There are statistically significant difference between pre and post application of educational session regarding their knowledge.

Table 2. Comparison between pre and post educational session regarding total knowledge level of students (N= 200)

| Knowledge level | Pre session | | Post session | | P- value |
|-----------------|-------------|------|--------------|------|----------|
| | N. | % | N. | % | |
| Poor | 55 | 27.5 | 16 | 8.0 | 0.031* |
| Fair | 56 | 28 | 7 | 3.5 | |
| Good | 89 | 44.5 | 177 | 88.5 | |

Table 3 illustrates that the highest percentage of students had positive attitude post application of educational session. There are a highly statistically significant difference between pre and post application of educational session regarding their attitude.

Table 4 Shows a highly statistically significant difference between gender, Academic level and knowledge post application of educational session.

Table 5 Shows a statistically significant difference between students' attitude and Socio-demographic data post application of educational session.

Figure 1 shows that positive correlation between students' knowledge and attitude post application of educational session.

Table 3. Comparison between pre and post educational session regarding attitude of students (N= 200)

| Students Attitude | Pre session | | Post session | | P- value |
|-------------------|-------------|------|--------------|------|----------|
| | N. | % | N. | % | |
| Positive | 17.0 | 8.5% | 138.0 | 69% | 0.001** |
| Negative | 28.0 | 14% | 17.0 | 8.5% | |

Table 4. Relation between Socio-demographic data and total Students' knowledge post application of educational session:

| Sociodemographic data | Total knowledge (Post) (N=200) | | | | | | P-value |
|------------------------|--------------------------------|-----|------|-----|------|------|---------------------|
| | Poor | | Fair | | Good | | |
| | N. | % | N. | % | N. | % | |
| Gender: | | | | | | | .001** |
| Male | 1 | 0.5 | 3 | 1.5 | 50 | 25.0 | |
| Female | 15 | 7.5 | 4 | 2.0 | 127 | 63.5 | |
| Age: | | | | | | | 0.192 ^{ns} |
| <20 | 6 | 3.0 | 1 | 0.5 | 105 | 52.5 | |
| 20 – 25 | 10 | 5.0 | 6 | 3.0 | 70 | 35.0 | |
| 25-30 | 0 | 0.0 | 0 | 0.0 | 2 | 1.0 | |
| Academic level: | | | | | | | 0.001** |
| First year | 2 | 1.0 | 0 | 0.0 | 97 | 48.5 | |
| Second year | 14 | 7 | 7 | 3.5 | 80 | 40 | |

Table 5. Relation between Socio-demographic data and Students' attitude post application of educational session

| Sociodemographic | Student's attitude (Post) (N=200) | | | | P-value |
|------------------------|-----------------------------------|------|----------|------|---------|
| | Positive | | Negative | | |
| | N. | % | N. | % | |
| Gender: | | | | | .024* |
| Male | 49 | 24.5 | 5 | 2.5 | |
| Female | 106 | 53.0 | 40 | 20.0 | |
| Age: | | | | | 0.001** |
| <20 | 99 | 49.5 | 13 | 6.5 | |
| 20 – 25 | 54 | 27.0 | 32 | 16.0 | |
| 25-30 | 2 | 1.0 | 0 | 0.0 | |
| Academic level: | | | | | 0.001** |
| First year | 96 | 48 | 3 | 1.5 | |
| Second year | 59 | 29.5 | 42 | 21 | |

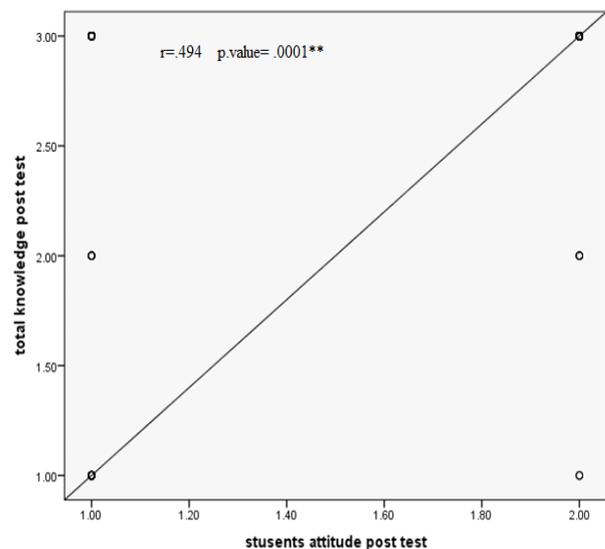


Figure 1. Correlation between students' knowledge and attitude post application of educational session

5. Discussion

The effective practice of integrated medicine inside the hospital must be provided after a good knowledge of CAM given for the nurses to ensure the safety and efficacy of using any CAM therapies [12]. Some nurses advance corresponding treatments as a chance to customize care and practice in a humanistic manner. Nurses have an inadequate education in this field and absence of professional backgrounds to assist them. The nursing profession needs to consider how to address current deficiencies in gathering the developing utilization of complementary therapies by patients [13].

Nurses' sustenance for complementary therapies is not an attempt to task mainstream medicine but rather an endeavor to progress the quality of patients care. There are various hindrances to nurses' help including institutional culture and clinical setting, time and learning impediments [13]. The present study showed that; the majority of students ages were >20 year and female. There are Improvement of students knowledge regarding CAM post application of educational session than pre application of it. There are significant difference of knowledge level between pre and post application of educational session. Similar with the current study Afifi et al. [14] reported that knowledge level in the post-session was high and better than in pre-session.

Also Ameade et al. [15] supported the current study results as they revealed that students in this study were deficient in knowledge on CAM. In addition Shorofi and Arbon [16] Concluded that, more than sixty percentage of studied nurses had very diminutive or no knowledge of CAM and should be provided with sufficient data. The current study illustrated that the highest percentage of students had positive attitude post application of educational session. There are a highly statistical significant difference between pre and post application of educational session regarding their attitude. In the same line Chang [17] stated that nurses play a vital role in patient care, education, advocacy and decision making. In that capacity, they are well-situated to speak with patients about their utilization of complementary therapies. an ongoing checking survey of quantitative investigations uncovered that most medical attendants exhibit an inspirational frame of mind towards complementary therapies.

Likewise Jasamai et al., [18] expressed that Psychosocial factors, for example, attitude towards CAM has been recommended as an indicator of CAM use in specific populaces. Nurses who were strong of patients' utilization of complementary therapies frequently face various obstructions to its incorporation. The work spot culture, absence of time to either examine or encourage the medicines and the clinical setting assumes a huge role in nurses' attitudes. In some areas, such as pain clinics, complementary therapies are considered much more applicable than others, for example, the operating theatre. All the more extensively, the country in which nurses practice likewise impacts their attitudes.

The current study revealed that there were statistically significant difference between students' knowledge, attitude and Socio-demographic data post application of educational session. Those study findings are consistent

with Akan et al., [19] who revealed that female and first year students, had more positive attitude toward complementary and alternative medicine. Contrary to this study Loh et al., [20] who reported that gender of students did not significantly affect attitude towards CAM use.

In our study there were positive correlation between total knowledge and attitude of students post application of educational session. This discoveries were bolstered by Shorofi and Arbon [16] who reasoned that a positive affiliation was found between the nurses' knowledge and their attitudes towards CAM. Nurses' positive attitudes towards CAM use could be an indication that they are poised for further integration of clinically approved CAM into nursing care of patients. Nurses' attitudes towards complementary therapies are influenced by their professional ideology and their knowledge.

6. Conclusion

Based on the results of the current study, it can be concluded that Educational session had significantly effect on nursing students' knowledge and attitude toward complementary and alternative medicine.

7. Recommendations

We can recommended that replicate the study on a larger study sample that includes students in four academic levels at faculty of nursing to gather more information about nursing students' knowledge and attitude toward complementary and alternative medicine.

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