

Effectiveness of Educational Intervention on Knowledge and Attitude of Complementary Therapies among Nursing Professionals

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Abstract

Background: The health care system is changing incrementally and becoming more complex. As a result, many consumers seeking to take more responsibility for their health are turning to complementary and alternative therapies. The increased number of health care consumers choosing complementary therapies to augment treatment regimens and enhance health makes it imperative that the nurses become informed of these therapies and their utilization in the nursing practice. **Objectives:** A study was conducted to assess the knowledge of nurses on complementary therapies to evaluate the effectiveness of educational intervention on complementary therapies among nursing professionals, and to find out association of knowledge with their socio demographic characteristics. **Material and Methods:** Hundred nursing professionals above 20 years of age were studied. They were assessed for the level of knowledge on complementary therapies before the education/training, followed by the educational intervention carried out in relation to Therapeutic Yoga, Progressive Muscle Relaxation Therapy and Massage. The post test was carried out after the intervention by using structured questionnaire. The data were analyzed with descriptive and inferential statistics

wherever required. **Results:** The results revealed that there was an improvement in the knowledge on complementary therapies (pre test mean score 8.79 ± 2.12 and post test score was 16.19 ± 2.65) with effectiveness of 37.05% was statistically significant ($t=11.39, p<0.05$). Nurses exhibited a positive attitude and valued the significance of complementary therapies. The knowledge had significant association with socio demographic variables like age, education and occupation. **Conclusion:** The educational intervention/training was useful in improving knowledge and enhancing the attitude on complementary therapies in nursing practice. It is essential to raise the awareness on significance of complementary therapies in health care practice and seek behavioral change among health care professionals to improve the health care services.

Keywords: Educational intervention; Complementary therapies; Nursing professionals.

Introduction

Complementary therapies are becoming an increasingly important part of health care and enjoy growing popularity among the general public. It's commonly used to complement conventional health care practices and becoming more accepted by the bio medical health care providers.[1]

The increasing and widespread use of complementary and alternative medicine (CAM) in the general population requires

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health care professionals to have a knowledge and appreciation of their use to ensure that decisions about care are appropriate, safe and meet patient's needs. There is a need for more education and training of health care professionals in CAM. Educational institutions are beginning to incorporate CAM components into curricula and even offer courses/fellowships in integrative medicine.[2]

Despite the evidence for integration of complementary and alternative medicine into professional nursing practice; gaps exist on nurse's basic knowledge, skills and learning needs for further education to facilitate the integration of CAM into nursing practice. Nurses cannot advocate for CAM therapies, unless they themselves are familiar with these practices. It is necessary to first establish nurse's awareness, beliefs and better attitude related to CAM to incorporate the CAM into the clinical practice.[3]

Nurses performing CAM do not yet have sufficient knowledge or utilization practices, and there are difficulties with skills and time management. In addition, a wide gap exists between the self reported knowledge and actual application of therapies in the practice. Developing CAM educational programs or providing training for nurses is a simple and easy way to use the CAM therapies in nursing practices, where nursing focuses on the whole person.[4,5]

Researchers had demonstrated that the training or educational interventions improves the knowledge, attitude and enhances the perception on complementary therapies. [6] These therapies are gaining importance, where it has a positive effect on their physical and psychological well being; and becoming increasingly acceptable to the scientific community. Thus, a study was planned to assess the effectiveness of educational intervention on the knowledge and attitude of nurses about complementary therapies.

Material and Methods

A Quasi - experimental study, pre test post

test design without control group approach was used. The present study was conducted on 100 nursing professionals of five nursing institutes at Ahmednagar district, Maharashtra. The nursing professionals who were above 20 years of age, able to follow and practice complementary therapies and willing to participate were included in the study. The subjects were selected by probability method i.e. simple random sampling technique. For the assessment of knowledge, a self prepared and pre tested structured knowledge questionnaire was used. The correct response indicated the score of one (1) and wrong response zero (0).

After obtaining the informed consent, pretest was conducted on first day followed by the educational intervention/training on complementary therapies was implemented by experts for a total of 8 hours. The intervention included both theory as well as practical sessions. Theory session of 2 hours and practical sessions of 6 hours, wherein, therapeutic yoga, progressive muscle relaxation therapy (PMR) and massage was taught for two hours each. The posttest was carried out after one week of education/training by using the same questionnaire. The collected data was analyzed based on objectives by using descriptive and inferential statistics.

Results

Findings Related to Socio Demographic Characteristics

One third of nursing professionals (34%) belonged to 20 - 25 years of age group, majority (70%) was male, and half (51%) of them had Diploma level of education (GNM) followed by Bachelor degree (26%). Half of nursing professionals were student nurses while the remaining were staff nurses and nurse educators respectively, and 66% obtained information on complementary therapies through books and journals.

Table 1: Effectiveness of Educational Intervention on Knowledge of Complementary Therapies

Areas	Max. score	Pre test			Post test			Mean difference
		Mean	SD	Mean %	Mean	SD	Mean %	
Overview of CAM	04	2.37	0.82	59.25	3.57	0.76	89.25	30.00
Therapeutic yoga	06	2.54	0.95	42.33	4.63	1.08	77.13	34.80
PMR therapy	03	1.41	0.76	46.60	2.02	0.80	67.33	20.73
Massage	07	3.48	1.98	49.71	5.46	1.52	78.00	28.29
Overall	20	8.79	2.12	43.95	16.20	2.65	81.00	37.05

't' value: 11.39* p<0.05 level *Significant

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The overall pre test mean score was 8.79±2.12 which was 43.95% of the total score indicating nursing professionals had average level of knowledge whereas the post test mean score was 16.19±2.65 which was 81%. Among the sub areas, therapeutic yoga had higher effectiveness with difference in mean percent of 34.8%. It interprets that the educational intervention/training significantly improved the knowledge (t=11.39, p<0.05). (Table 1) However, the training had demonstrated more effectiveness on various aspects of complementary therapies (Table 2). The knowledge had significant association with socio demographic characteristics like age (x²: 4.32), education (x²: 3.92) and occupation (x²: 4.02) at p<0.05 level.

Nursing Professionals' Attitude on Complementary Therapies

Majority (92%) felt that the complementary therapies were helpful to patients and families, followed by 78% who expressed openness to

the utilization of complementary therapies in clinical practice and 73% believed that these therapies did not cause any adverse reactions. 85% of them were interested in gaining additional knowledge/training on complementary therapies, whereas 64% of samples endorsed to integrate the complementary therapies into the mainstream medicine.

Discussion

Complementary therapies are the healing resources that encompass all health systems, modalities and practices used to prevent, treat illness and promote health and wellbeing. It is a therapeutic and preventive practice that is put forward as having the significant healing effects of medicine.[7]

Study findings revealed that the 66% of nursing professionals obtained complementary therapies related information through books and journals. Similarly, Holroyd, Zhang and Suen (2008) found in their survey that news

Table 2: Effectiveness of Educational Intervention on Various Aspects of Knowledge on Complementary Therapies

		N=100		
SN	Components	Pre test (%)	Post test (%)	Effectiveness (%)
1	Surya Namaskar controls the diabetes mellitus	07	74	70
2	Meditation increases the theta waves in the brain	05	71	66
3	Cortisol is the body's main stress hormone	24	84	60
4	Contra indication for massage - Bleeding disorders	21	79	58
5	Massage: Blocks the perception of pain impulses	31	86	55
6	Sequence of massage: stroking, kneading and friction	30	82	52
7	Origin of yoga (5000 year old) is India	41	84	43
8	Alternative tighten and relaxing muscle groups - PMR	44	85	41
9	Complementary therapies focus on holistic approach	42	82	40
10	Shavasana helps to maintain the blood pressure	51	88	37

papers and magazines (64.2%) were the most common sources of information for nursing professionals.[8]

The results depicted that the educational intervention was effective in improving the knowledge and attitude of nursing professionals on complementary therapies. It was congruent with a study carried out by Hessig, Archand and Frost (2008) that an eight hour educational intervention was useful in enhancing knowledge and, to some degree, increasing application of the therapies in practice. It was evident that there is a growing recognition of the need for more education and training of nurses in CAM.[9]

Overall, nursing professional under study exhibited a positive attitude and valued the significance of complementary therapies. Rojas and Grant (2009) studied nurses' knowledge and attitude on complementary therapies and observed that the attitude varied according to beliefs, practice and role, but were positive overall. The positive attitude would provide insight for realizing and sustaining robust changes to health care.[10]

The nurses' knowledge on complementary therapies had significant association with socio demographic variables like age, education and occupation. Similarly, Keyser, Cohen and Wagner (2006) also noted that several variables such as education, age and perceived health status were associated with knowledge and use of CAM.[11]

The results of this study provide the important implications for understanding the impact of training for developing and providing appropriate education. The education/training provides nurses with knowledge to support and advocate for their patients.

Conclusion

The complementary and alternative therapies are gaining importance rapidly in recent years. Educating the health care professionals including students regarding

these therapies will enhance their knowledge, and thereby increase utilization of these therapies in the clinical practice. Hence, the symptoms relief/management can be accomplished with minimal pharmacological measures.

The nursing professionals support complementary therapies because the therapies address healing within all human dimensions including mind, body and spirit. Further there is a need for increased knowledge and understanding through appropriate educational resources and incorporation in the curriculum to ensure safe and evidence based nursing care.

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References

1. Leckridge B. The future of complementary and alternative medicine models of integration. *J Altern Complement Med.* 2004; 1(2): 413-16.
2. Helms J. Complementary and Alternative therapies: a new frontier for nursing education? *J Nurs Edu.* 2006; 45(3): 117-23.
3. Mahan TT, Ling CL and Karan BB. Complementary and Alternative Medicine: Nurse's Attitudes and Knowledge. *Pain Management Nursing.* 2013; 14(4): 277-86.
4. Mary L, MacDonald J and Tracy M. Student nurse's knowledge and attitude toward CAM therapies. *British Journal of Nursing.* 2006; 15(11): 612-15.
5. Braun AC. Student Nurse's Knowledge and Perceptions of Alternative and Complementary Therapies. *Journal of Community Health.* 2007; 26 (9): 175-189.

6. Mary FT, Lindquist R, Savik K, Watanuki S and Brian B. Use of Complementary and Alternative Therapies: A National Survey of Critical Care Nurses. *Am J Crit Care*. 2005; 14(5): 404–15.
7. National Centre for Complementary and Alternative Medicine. Available from: <http://nccam.nih.gov/> [cited 2014 03.01.14].
8. Holroyd E, Zhang AL and Suen LK. Beliefs and attitudes towards complementary medicine among registered nurses in Hong Kong. *Int J Nurs Stud*. 2008; 45(11): 1660–6.
9. Hessig RE, Archand LL and Frost MH. The effects of an educational intervention on oncology nurse's attitude, perceived knowledge, and self-reported application of complementary therapies. *Oncol Nurs Forum*. 2008; 31(1): 71 – 78.
10. Rojas C and Grant M. Complementary and alternative medicine: oncology nurse's knowledge and attitudes. *Oncol Nurs Forum*. 2009; 36(2): 217–24.
11. Keyser FG, Cohen B and Wagner N. Knowledge levels and attitudes of staff nurses in Israel towards complementary and alternative medicine. *J Adv Nurs*. 2006; 36(1): 41–8.