

CARDIO CEREBRAL RESUSCITATION

Mr. Manjunath Beth

Maniba Bhula Nursing College, Gopal Vidyanagr, Tarsadi, Bardoli, Surat, Gujarat

ARTICLE INFO

Article History:

Received on 25th Jan 2018

Received in revised form: 26th Feb. 2018

Accepted on : 30th March 2018

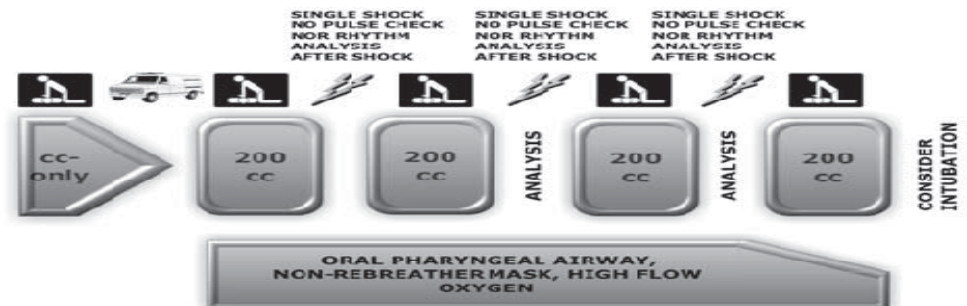
Published online: 5th April 2018

ABSTRACT

CCR saves more lives! In the absence of early defibrillation by AEDs, survival of patients with out-of-hospital cardiac arrest (OHCA) treated per American Heart Association guidelines. Cardio Cerebral Resuscitation (CCR) is a new approach to patients with out-of-hospital cardiac arrest that has been shown to improve rates of neurologically intact survival by 250%–300% over the approach advocated by the 2000 American Heart Association (AHA) guidelines.

Key Words:

CCR, AFD, OHCA, ACLS, CPR, AHA



Copyright © UTUJAH 2018 : Manjunath Beth. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction:

Cardio Cerebral Resuscitation (CCR) is a new approach to patients with out-of-hospital cardiac arrest that has been shown to improve rates of neurologically intact survival by 250%–300% over the approach advocated by the 2000 American Heart Association guidelines. And EMS systems can realize these improvements without having to buy a single new gadget or device. CCR consists of three major components:

- ◆ Continuous chest compressions (CCC) without mouth-to-mouth ventilation for all bystanders of witnessed cardiac arrests and for first responders.
- ◆ A new advanced cardiac life support algorithm that delays endotracheal intubation, emphasizes minimal interruptions of chest compressions, deemphasizes positive-pressure ventilations, prioritizes defibrillation according to the three-phase time-sensitive model of ventricular fibrillation, and encourages early administration of epinephrine. Cardio cerebral resuscitation is also for basic

EMTs—they, too, should deliver continuous chest compressions at a rate of 100 per minute. Invasive airway insertion is delayed, and positive-pressure ventilations are not utilized during the initial minutes of resuscitation. Epinephrine, when appropriate, is administered via IV or IO ASAP when paramedics arrive.

- ◆ The newest component of cardio cerebral resuscitation is advocating the establishment of cardiac arrest centers that can provide optimal care that includes urgent cardiac catheterization, controlled mild therapeutic hypothermia and standardized supportive care for patients in coma after resuscitation from cardiac arrest.

Why “CARDIO CEREBRAL RESUSCITATION” instead of standard CPR and ACLS?

It saves more lives! In the absence of early defibrillation by AEDs, survival of patients with out-of-hospital cardiac arrest (OHCA) treated per American Heart Association guidelines has, since their introduction in 1947.

been poor in most of the world. It has not significantly improved in spite of updated standards and/or guidelines in 1980, 1992 and 2000, despite millions of dollars and man-hours spent in development, training and implementation. While we are intellectually convinced that CCR is now the optimal approach to patients with out-of-hospital cardiac arrest, the greatest proponents are providers in systems that have adopted CCR. CCR was instituted in Tucson, AZ, in 2003; in Rock and Walworth Counties, WI, in 2004; in metropolitan Phoenix in 2005 and across Arizona thereafter; and in Kansas City, MO, in 2006 and Kansas City, KS, in 2007. Providers in these communities have viscerally experienced the improved results.

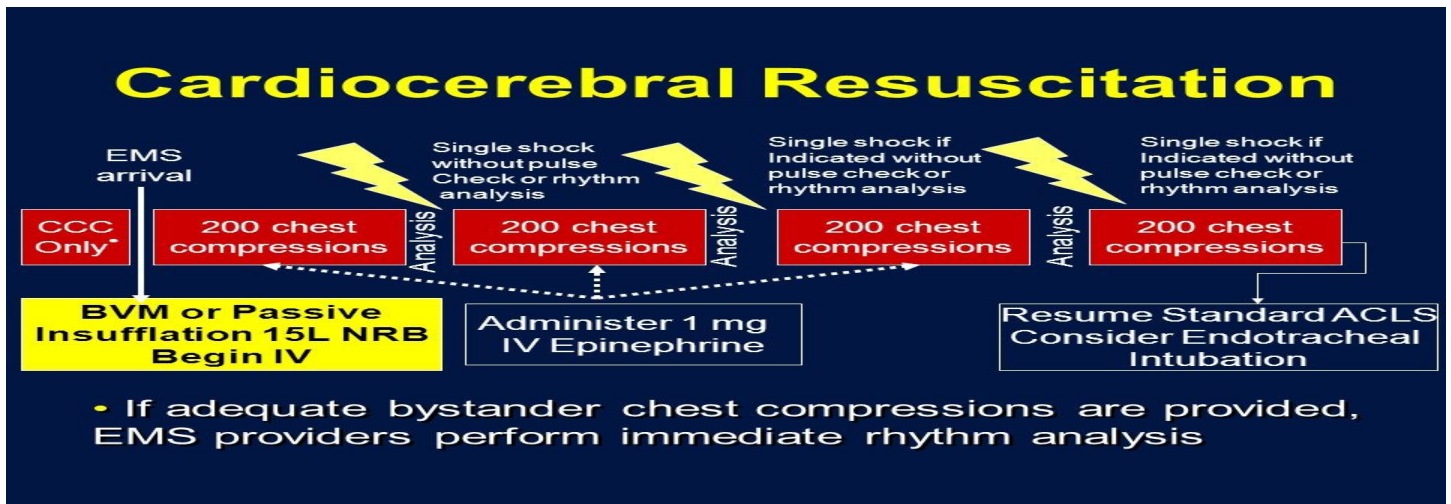
In 2008, CCR was instituted in other areas of Wisconsin. Darren Bean, MD, an emergency physician in Madison, reported that, "We have had four survivors in the past 14 days, one of whom had 43 minutes of refractory VF prior to ROSC. To our collective disbelief (even the most enthusiastic supporters of CCR have difficulty believing that 43 minutes of low-flow state could result in anything other than neurologic devastation), he awoke with a completely normal neurologic outcome."

CCR FOR BYSTANDERS: We were delighted that the AHA recently advocated "hands-only" or "compression-only" CPR for bystanders of witnessed arrests. We have been advocating this approach for years. However, we do not think the AHA recommendations go far enough, as they state that trained individuals should still utilize the 30:2 compression-to-ventilation ratio if they believe they can perform the ventilations with minimal interruptions of chest compressions. While ventilations are probably necessary in unwitnessed cardiac arrests, patients with witnessed arrests do not initially need assisted ventilation because their arterial oxygen content is sufficient for several minutes of chest compression-only CPR. In subjects who gasp, the arterial oxygen content remains adequate for up to 15 minutes with chest compressions only. Because the perfusion of the brain and heart are so marginal during resuscitation efforts, interrupting or delaying chest compressions for ventilation or other interventions, except for defibrillation, is deleterious. If there is more than one person on scene, should one of the rescuers do assisted ventilations while the other does CCC? Surprisingly, the answer is no. With normal ventilation, breathing results in a negative pressure inside the chest that not only causes air to enter the lungs, but enhances blood return to the heart as well. This negative intrathoracic pressure also improves cerebral blood flow. On the other hand, when one ventilates a patient with cardiac arrest, one is increasing the pressure inside the chest, decreasing blood return to the chest and decreasing blood

to the brain. This is in stark contrast to respiratory arrests, such as drowning, where continued normal cardiac output in the face of inadequate oxygen results in rapid depletion of arterial oxygen content, leading to hypotension and, finally, secondary cardiac arrest. Here ventilatory support is clearly needed, and until better information is available, the AHA's 30:2 ratio is recommended. One reason the guidelines have not, until now, advocated different approaches to cardiac and respiratory arrests was the assumption that lay individuals could not tell the difference between them. It is important, in your training of the

public, to emphasize that any person who collapses suddenly, is not responsive and is not breathing normally is indeed a cardiac arrest victim. Be sure to emphasize that there are two types of abnormal breathing: gasping (snoring or agonal respirations), and not breathing at all. Many subjects with witnessed arrests will continue to gasp and provide physiologic ventilation—that is, ventilation with decreased intrathoracic pressures—so that assisted positive-pressure ventilation is not necessary. Or, if allowed, they will begin gasping with CCC CPR.

CCR FOR EMS: The cardio-cerebral resuscitation protocol (*Figure 1*) is reserved for cases in which an out-of-hospital arrest is presumed to be cardiac in origin—i.e., individuals with sudden, unexpected collapses with absent or abnormal breathing. In all other situations, AHA guidelines for ACLS should still be used. EMS should give 200 uninterrupted chest compressions (100 per minute) before each rhythm analysis and single shock, if indicated, followed immediately by another 200 chest compressions and repeat rhythm analysis. Patients are not moved from the scene until three cycles of 200 compressions/rhythm analysis. In most cases they are not transported until they are resuscitated or pronounced dead. Initial airway management is delayed until a second rescuer is available and is initially limited to placement of an oral-pharyngeal airway and administration of oxygen by non-rebreather mask. Insertion of an invasive airway and assisted ventilation are not performed until either return of spontaneous circulation or after three cycles of chest compressions, analysis and, when needed, shock. Most who have ROSC are intubated prior to transportation. When positive-pressure ventilations are delivered, it was initially recommended that they be limited to a rate of 8–10 per minute. There is good evidence that this should be as few as six. The technique of chest compressions is ideally performed with a metronome attached to the defibrillator to emphasize the importance of a rate of 100 per minute. Full chest recoil after each compression is essential. If only one responder is on scene, the defibrillator or AED pads are applied before chest



compressions are initiated in an effort to minimize the pause between stopping compressions and the defibrillation shock. For CCR, AEDs need to be reprogrammed, or their voice instructions ignored.

SUPPORTING LITERATURE:

To date there have been four formal publications of outcomes using cardio cerebral resuscitation.

1. The first was from Wisconsin, where survival during the first year of CCR was compared to the previous three years of CPR per the 2000 guidelines.

Neurologically normal survival of witnessed arrests with shockable rhythms tripled, from 15% to 45%.

2. The second was from Arizona, including cities in the Phoenix metropolitan area; there survival of such patients more than tripled, from 5% to 18%.

3. The third was a three-year follow-up of the Rock and Walworth County results, in which survival increased from 15% to 40%, including one patient who received post-resuscitation hypothermia.

4. A prospective, multicenter cohort study was conducted to explore nurses' knowledge and competence in performing chest compression cardiopulmonary resuscitation training & which promotes rescuer self-confidence and increased secondary training. The study includes the setting from academic medical center in patient wards and subject where the adult family members or friends (≥ 18 yrs old) of inpatients admitted with cardiac-related diagnoses. The interventions are included In a multicenter randomized trial, family members of hospitalized patients were trained via the educational method of video self-instruction. Subjects were randomized to continuous chest compression cardiopulmonary resuscitation or standard cardiopulmonary resuscitation educational modes. The measurements of this study of Cardiopulmonary resuscitation performance data were collected using a cardiopulmonary resuscitation skill-reporting manikin. Trainee perspectives and secondary training rates were assessed

through mixed qualitative and quantitative survey instruments. The results of the study are Chest compression performance was similar in both groups. The trainees in the continuous chest compression cardiopulmonary resuscitation group were significantly more likely to express a desire to share their training kit with others (152 of 207 [73%] vs. 133 of 199 [67%], $p = .03$). Subjects were contacted 1 month after initial enrollment to assess actual sharing, or "secondary training." Kits were shared with 2.0 ± 3.4 additional family members in the continuous chest compression cardiopulmonary resuscitation group vs. 1.2 ± 2.2 in the standard cardiopulmonary resuscitation group ($p = .03$). As a secondary result, trainees in the continuous chest compression cardiopulmonary resuscitation group were more likely to rate themselves "very comfortable" with the idea of using cardiopulmonary resuscitation skills in actual events than the standard cardiopulmonary resuscitation trainees (71 of 207 [34%] vs. 57 of 199 [28%], $p = .08$). Thus the study concludes that the Continuous chest compression cardiopulmonary resuscitation education resulted in a statistically significant increase in secondary training.

This work suggests that implementation of video self-instruction training programs using continuous chest compression cardiopulmonary resuscitation may confer broader dissemination of life-saving skills and may promote rescuer comfort with newly acquired cardiopulmonary resuscitation knowledge.

Bibliography

1. Kellum MJ, Kennedy KW, Ewy GA. Cardiocerebral resuscitation improves survival of patients with out-of-hospital cardiac arrest. *Am J Med* 119:335–40, 2006.
2. Bobrow BJ, Clark LL, Ewy GA, et al. Minimally interrupted cardiac resuscitation by emergency medical services providers for out-of-hospital cardiac arrest. *JAMA* 229:1,158–65, 2008.

RESEARCH ARTICLE

EFFECT OF SELF- INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING POLYCYSTIC OVARIAN SYNDROME AMONG RISK ADOLESCENT GIRLS

Mrs. Anjana Stephen. Mrs. Sreeja G Pillai, Mrs. Shani Mathew
College of Nursing, ACME, Pariyaram Kerala, India.

ARTICLE INFO

Article History:

Received 3rd April, 2018

Received in revised form 5th April 2018

Accepted on 7th April 2018

Published online on 9th April 2018

Key Words:

Knowledge, Polycystic Ovarian Syndrome, Instructional, Module, Adolescent, Girls.

ABSTRACT

Background: Polycystic ovary syndrome (PCOS) is a complex disorder most commonly characterized by chronic anovulation and clinical and biochemical features of hyperandrogenemia. It affects 4% to 12% of reproductive-aged women. **Objectives:** To identify the adolescent girls who are at risk for PCOS, To assess the knowledge regarding PCOS among risk adolescent girls, To evaluate the effect of Self Instructional Module on knowledge regarding PCOS among risk adolescent girls, To find association between knowledge regarding PCOS among adolescent girls and selected socio personal variables. **Methods:** Seven hundred adolescent girls were selected using consecutive sampling for the first phase of the study. Identified eighty four risk adolescent girls were in the second phase of the study. The tool used were risk assessment tool for the first phase to identify adolescent girls at risk for PCOS. Structured knowledge questionnaire for the second phase to assess the knowledge regarding PCOS. **Results:** Findings revealed that of 700 adolescent girls 84 (12%) adolescent girls are at mild (11.42%) and moderate (0.57%) risk for developing PCOS and among the 84 risk adolescent girls, 67.85% have menstrual irregularities, 22.61% have hirsutism, 82.14% have acne, 2.38% have acanthosis nigricans, 19.04% are overweight and 2.38% are obese. About 33.33% sample have their waist/hip ratio >0.8 which is a sign of abdominal obesity. The mean posttest knowledge score (89.30%) was more compared to mean pretest knowledge score (28.91%). There is significant difference in knowledge score regarding PCOS among risk adolescent after the administration of SIM ($p=0.000$). There is significant association between knowledge score regarding PCOS with educational status of father ($p<0.05$). **Conclusion:** The study concluded that Self Instructional Module is effective in improving the knowledge score of risk adolescent girls regarding PCOS.

Copyright © UTUJAH 2018. Mrs. Anjana Stephen et. al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Gynaecological problems of adolescents occupy a special space in the spectrum of gynaecological disorders of all ages. Menstrual abnormalities are the common problems of adolescents. This is because of the physical nature of the problems which are so unique, special, and specific for the age group, and also because of the associated and psychological factors which are very important in the growth and psychological remodeling of someone in the transition

between childhood and womanhood.

Polycystic ovarian syndrome is a common reproductive endocrine disorder affecting 7 -10% of women in the reproductive age group (12-45 years) and accounts for 72-84% of adult hyperandrogenism. It is a heterogeneous condition characterized by menstrual irregularities, hyperandrogenism, obesity, psychological and psychosexual morbidity associated with the accumulation of under develop follicles in ovary. It is an important cause of hirsutism and infertility.

Extraneous variable- Selected socio personal variables such as age, type of family, father’s educational status, mother’s educational status, family history of PCOS and source of information regarding PCOS.

Setting of the study

The study was conducted in 6 higher secondary schools (State and CBSE syllabus) in Kannur district.

Sample and sampling technique

In the first phase of the study, 700 adolescent girls were screened to identify the risk of PCOS based on risk assessment tool. In the second phase of the study, sample consisted of 84 adolescent girls who are at mild to moderate risk for developing PCOS. In the study consecutive sampling technique was used.

Inclusion criteria

Adolescent girls who:

1. are in the age group 16-19 years
2. attained menarche at least two years before
3. are willing to participate in the study
4. are available at the time of data collection

Exclusion criteria

Adolescent girls who are differently abled

Tool/ Instruments

Tool I : Risk assessment tool to identify the adolescent girls at risk for Polycystic Ovarian Syndrome

Tool II : Structured knowledge questionnaire to assess the knowledge regarding Polycystic Ovarian Syndrome among risk adolescent girls

Instruments : Calibrated weighing machine and non-stretchable inch tape.

Results

Table 1: Distribution of adolescent girls based on risk for PCOS (n=700)

Range of score	Risk status	f	%
0-3	No risk	616	88
4-7	Mild	80	11.42
8-11	Moderate	4	0.57
12-15	Severe	0	0

Table 1 depicts that, of 700 adolescent girls 11.42% have mild risk and 0.57% have moderate risk for developing PCOS. Based on the risk assessment tool 84 (12%) adolescent girls are identified as mild to moderate risk for developing PCOS.

Table 2: Distribution of risk adolescent girls based on symptoms associated with PCOS

(n= 84)

Sl. No	Symptoms	f	%
1	Menstrual irregularities	57	67.85
2	Hirsutism	19	22.61
3	Acne	69	82.14
4	Acanthosis nigricans	2	2.38
5	Overweight	16	19.04
6	Obese	2	2.38

Table 2 reveals that of 84 risk adolescent girls, 67.85% have menstrual irregularities, 22.61% have hirsutism, 82.14% have acne, 2.38% have acanthosis nigricans, 19.04% are overweight and 2.38% are obese. About 33.33% sample have their waist/hip ratio>0.8 which is a sign of abdominal obesity. This shows that a timely diagnosis of PCOS in symptomatic adolescent girls is important for the initiation of appropriate screening and treatment.

It is evident from the table 3 that the calculated t value $t=38.57$, is larger than the critical value (tabled value) $t_{83}=1.66$ at $p<0.05$ level of significance. Hence the test is found to be statistically significant at $p<0.05$ level of significance at 95% confidence interval. Therefore, the null hypothesis (H_{01}) is rejected and research hypothesis (H_1) is accepted. Hence, it is inferred that there is a significant difference between the mean pretest and posttest knowledge score, which showed that SIM has beneficial effect in improving knowledge regarding PCOS among risk adolescent girls.

Table 3: Significance of difference between pretest and posttest knowledge score regarding PCOS among risk adolescent girls. (n=84)

Area	Mean effectiveness (%)	95% CI	t value	p value
Knowledge regarding PCOS	13.88	LL-4.28 UL-5.68	38.57	0.000* **

PCOS is a characteristic amalgamation of cosmetic, gynecologic and metabolic syndromes. Cosmetic symptoms include facial hair, thinning of the scalp and acne. Gynecological symptoms include irregular or scanty periods which are usually the first red flag in adolescents. Recognizing the features of this syndrome can be very challenging in adolescence. Efforts should be made to diagnose and treat PCOS to minimize the development of symptoms and prevent the onset of cardiovascular and metabolic disturbances and associated reproductive morbidities. Hence, proper awareness about PCOS and its prevention will help adolescent girls to modify their lifestyle and to have better reproductive life later. An article published in The Hindu reported that “about 18% women in India is affected by PCOS”.

The common age of onset for PCOS is adolescence while the common time of diagnosis is during a woman's third or fourth decade of life because the majority of symptoms do not become evident until a woman reaches her twenties or thirties, even though some symptoms may appear starting at menarche. In adolescents, the hallmark clinical features of PCOS include menstrual irregularity (amenorrhea, oligomenorrhea, or polymenorrhea) and/or androgen excess (hirsutism, alopecia) and obesity. Reproductive Health of women is of prime concern for every nation to lay down the foundation of a healthy society. Women are the building stones of a society. A woman owns the privilege of giving birth, raising up a family and thus creating the basic unit of society. The unhealthy food habits and lack of exercise lead to many adverse effects on the body of women during her reproductive phase. Poly Cystic Ovarian Syndrome is one such disease which puts question mark on the womanhood of a woman by taking from her the right of motherhood.

Polycystic Ovarian Syndrome (PCOS) (also correctly called Polycystic Ovary Syndrome) is a complex, broad-spectrum hormonal disturbance affecting the entire body with numerous implications for a woman's long-term health and quality of life from adolescent to beyond menopause. Now a days, it is also referred to as the 'Syndrome O' i.e. Overnourishment, Overproduction of insulin, Ovarian confusion and Ovulatory disruption. Globally, there is an alarming increase in the rate of polycystic ovary disease. PCOD- Epidemic in India: becoming an emerging public health challenge that needs careful assessment, timely intervention, and appropriate treatment. However, it is important to make an early diagnosis in order to prevent early and late sequel of the disease. An early diagnosis of PCOS leads to an awareness of this lifelong condition associated with hormonal and possibly metabolic complications and provides an opportunity for meaningful intervention.

info.healthinformatics@gmail.com

Statement of the problem

Evaluate the effect of Self Instructional Module on knowledge regarding Polycystic Ovarian Syndrome among risk adolescent girls in selected higher secondary schools of Kannur district

Objectives of the study

1. Identify the adolescent girls who are at risk for PCOS
2. Assess the knowledge regarding PCOS among risk adolescent girls
3. Evaluate the effect of Self Instructional Module on knowledge regarding PCOS among risk adolescent girls
4. Find association between knowledge regarding PCOS among adolescent girls and selected socio personal variables.

Hypothesis

Following hypotheses will be tested at 0.05 level of significance:

- H₁: There is significant difference between mean pre test and mean post test knowledge score regarding PCOS among risk adolescent girls as measured by structured knowledge questionnaire
- H₂: There is significant association between knowledge regarding PCOS among risk adolescent girls and selected socio personal variables

Material and Methods

Research Approach

The study was conducted in two phases. Hence, two approaches were used for the study. In the first phase, a non-experimental approach was used to identify the adolescent girls at risk for PCOS and in the second phase an experimental approach to evaluate the effect of Self Instructional Module on knowledge regarding Polycystic Ovarian Syndrome (PCOS) among risk adolescent girls.

Research Design

The research design adopted for the first phase was descriptive survey approach as it aimed to identify the adolescent girls who are at risk for PCOS. In the second phase of the study the investigator adopted pre experimental one group pretest posttest design to evaluate the effect of Self Instructional Module on knowledge regarding Polycystic Ovarian Syndrome (PCOS) among risk adolescent girls.

Variables

Independent - Self Instructional Module regarding PCOS.
Dependent - Knowledge gained by risk adolescent girls regarding PCOS.

Table value $t_{83} = 1.66$

*** Highly significant at $p = 0.000$ level

CI – Confidence interval

LL- Lower limit of confidence interval

UL - Upper limit of confidence interval

Study also reveals that all the calculated chi-square value related to age, type of family, educational status of mother and exposure to source of information regarding PCOS are smaller than the critical value (table value) $t = 3.84$ at $p > 0.05$ level of significance. Hence the test is not found to be statistically significant as the computed $p > 0.05$ level of significance. Hence the null hypothesis (H_{02}) is accepted and research hypothesis (H_2) is rejected. Thus it can be interpreted that there is no significant association between knowledge regarding PCOS with age ($\chi^2 = 3.372$; $p = 0.066$), type of family ($\chi^2 = 0.013$; $p = 0.910$), educational status of mother ($\chi^2 = 0.017$; $p = 0.897$) and exposure to source of information regarding PCOS ($\chi^2 = 0.182$; $p = 0.669$).

Study indicates that the calculated fisher's exact probability value ($p = 0.018$) related to educational status of father is found to be statistically significant at $p < 0.05$ level of significance. Therefore the null hypothesis (H_{02}) is rejected and research hypothesis (H_2) is accepted. Thus, it can be interpreted that there is significant association between knowledge score regarding PCOS with educational status of father. However the calculated fisher's exact probability value ($p = 0.480$) related to family history of PCOS is not found to be statistically significant at $p > 0.05$ level of significance. Therefore the null hypothesis (H_{02}) is accepted and research hypothesis (H_2) is rejected. Thus, it is interpreted that there is no significant association between knowledge score regarding PCOS with family history of PCOS.

Discussion

The impact of modernization and technological ascertainment reflects in daily life. Our lifestyle has changed a lot. Food consumption is concentrated increasingly on sugar, fast food, and soft drinks. This unhealthy eating habits and lack of exercise leads to many diseases in adolescents as Polycystic Ovarian Syndrome (PCOS). Polycystic Ovary Syndrome is a common health problem which increases in adolescent's girls and young women during their reproductive years. It is one of the most endocrine disorders of women in reproductive age, with prevalence of 5–10% in different ethnic populations and as much as 22% of women in general population have polycystic ovaries on ultrasound.

Polycystic ovary syndrome is clinical and public health importance as it is very common, affecting up to one in five women of reproductive age. It has significant and

diverse clinical implications including reproductive (hyperandrogenism, infertility, hirsutism), metabolic (insulin resistance, diabetes mellitus, cardiovascular risk) and psychological features (increased anxiety, depression). It is associated with about 75% of all condition of an ovulatory infertility.

Prevalence of PCOS among adolescent is rising gradually in India and it may be a major health concern in future. The approaches to management of these patients involves addressing the patients dominant symptoms as well as the metabolic consequences of this disease. Hence, early diagnosis and intervention will reduce the long term health complications associated with PCOS.

“Polycystic ovarian disease is not a life threatening problem, definitely a lifestyle threatening problem”. PCOS cannot be prevented or cured; it can be controlled, with varying degrees of success, with healthy lifestyle choices increase awareness of girls about PCOS can helps them to gain knowledge, early detection of features and prevention of morbidities among adolescents and young women in India.

Conclusion

Based on the findings of the study, the following conclusions are derived.

- The study stressed the importance of proper evaluation and timely diagnosis of PCOS in symptomatic adolescent girls for the initiation of appropriate screening and treatment.
- The SIM regarding PCOS has beneficial effect in enhancing the knowledge regarding PCOS among risk adolescent girls.
- Informative and educable interventions create an increase awareness among the adolescent girls which can empower them to take care of their own health as well as protect themselves from possible health problems related to PCOS.

Nursing implications of the study

The study findings will help to think and implement several possible strategies in the field of nursing practice, nursing education, nursing research and nursing administration

Reference

1. Adolescents in India. UNICEF. 2013 [cited 2016 June]. Available from: www.unicef2013.org
2. Padubidri GV, Daftary NS. Hawkins & Bourne Shaw's textbook of gynaecology. 13thed. New Delhi: Elsevier; 2004.P 654-675
3. Sebanti G, Rekha D, Sibani S. A profile of adolescent girls with gynecological problems. Journal of obstetrics and gynecology [Internet]. 2005 Aug [cited 2016 Jan]; 55(4): 353-355. Available from: www.joj.org

TO ASSESS THE KNOWLEDGE AND PRACTICE ON MENSTRUAL HYGIENE AMONG FEMALE NURSING STUDENTS

Ms. Sejal Suchal, Ms. Vratika Patel, Ms. Rupal Rajput, Ms. Snehal Patel, Mr. Rajnesh Solanki
BMCB College of Nursing, Bhuj

ARTICLE INFO

Article History:

Received 28th March, 2018

Received in revised form 3rd April 2018

Accepted On : 7th April 2018

Published online: 10th April 2018

Key Words:

Knowledge, Practice, Menstrual hygiene, female nursing students.

ABSTRACT

Today adolescent are tomorrow's adults. An adolescent is a transitional period, during that time there is rapid physical, intellectual, emotional and social growth will takes place, the Indian academy of pediatrics stated that adolescent is period of life between 10 to 18 years. A descriptive study was conducted to assess the knowledge and practice on menstrual hygiene among female nursing students at BMCB Girls hostel, Lakhond - Bhuj. A total of 100 female nursing students belonged to the age group of 17 to 24 years were included in the study after obtaining informed consent by using convenient sampling technique. The study result shows that the overall knowledge among female nursing students in which 26% [26] had adequate knowledge, 66% [66] had moderate knowledge, 8% [8] had inadequate knowledge and for practice in which 55% [55] had adequate practice 44% [44] had moderate practice, 1%[1] had inadequate practice. The study concludes that, majority of female nursing students are having moderate knowledge and practice on menstrual hygiene.

Copyright © UTUJAH 2018. Sejal Suchal. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Today adolescent are tomorrow's adults. An adolescent is a transitional period, during that time there is rapid physical, intellectual, emotional and social growth will takes place, the Indian academy of pediatrics stated that adolescent is period of life between 10 to 18 years. They are a large growing segment of the world's population. Menstruation is a phenomenon unique to the females. The onset of menstruation is one of the most important changes occurring among girls during the adolescent period. The first menstruation occurs between 11 to 15 years in that more common age of attaining menarche is 13 years.²

Need for the Study

Sheila Dikshit (2011), Chief Minister of Delhi launched a scheme 'Kishori' under which free sanitary napkins will be given to all government school adolescent students, the campaign seeks to educate the grassroots of workers and build awareness on menstrual health.

info.healthinformatics@gmail.com

Union Health Ministry (2010) announced the scheme for the importance of menstrual health in women; the scheme envisages supplying a pack of six sanitary napkin to below poverty line girls. This scheme has launched to increases the access and use of sanitary napkins to adolescent girls in rural areas also.³

In India woman has been used the cloth as menstrual pad in practice since ancient days, **WHO** reported that 74% of women had suffered with reproductive tract infections due to improper maintenance of cloth pads. Menstrual is a normal physiological impact of each girl's life. Menstrual is a monthly uterine bleeding for 3 – 5 days of every 28 days that takes place from puberty till menopause. **Times of India (2011)** reported that around 50% of the school girls who drop out of school in secondary classes are because of lack of sanitary pads, coupled with lack of separate toilet facilities and no easy access to water sources within the school, so menstruation is most contributing factor to school absenteeism among school girls.³

Statement of the Problem

A descriptive study to assess the knowledge and practice on menstrual hygiene among female nursing students at BMCB Girls Hostel, Lakhond - Bhuj.

Objectives

1. To assess the level of knowledge regarding menstrual hygiene among female nursing student.
2. To assess the level of hygienic practice regarding menstrual hygiene among female nursing students.
3. To correlate the relationship between the level of knowledge and practice regarding menstrual hygiene among female nursing students.
4. To associate the level of knowledge and practice regarding menstrual hygiene among female nursing students with their selected socio – demographic variables such as, age education, religion menarche attained age, types of menstrual cycle, duration of menstrual flow, types of menstruation pad, etc.

Hypothesis

H₁:- There will be a significant relationship between the level of knowledge and practice regarding menstrual hygiene among the female nursing students.

H₂:- There will be association between the levels of knowledge regarding menstrual hygiene among female nursing student with their selected socio-demographic variables.

H₃:- There will be association between the levels of practice regarding menstrual hygiene among female nursing student with their selected socio demographic variables.

Methodology

Research Approach	: Qualitative approach
Research Design	: Non experimental Descriptive research design
Research Method	: Descriptive research design
Setting	: The study will be conducted at BMCB Girls Hostel, Lakhond.
Population	: Female nursing students
Sample	: Female nursing students staying at BMCB Girls Hostel at Lakhond -Bhuj.
Sample size	: 100 samples
Sampling Technique	: convenient sampling technique.

Selection of Samples

Inclusion Criteria

1. Those who are willing to participate in this study.
2. Female nursing students who are in the age group of 17 – 24 years.

3. Female nursing students who are able to read and write Gujarati and English.
4. Female nursing students who are residing at BMCB Girls hostel.

Exclusion Criteria

1. Female nursing students who are not willing to participate.
2. Female nursing students who have age >24 and <17 years are excluded.
3. Female nursing student who are day's scholar are excluded.

Development of the Tool

The instrument was developed after an extensive review of literature and discussion from experts. By referring various textbooks and network the investigator had developed a multiple choice questionnaire to assess the knowledge and check list to assess the practice on menstrual hygiene among girls in BMCB girl's hostel, Lakhond, Bhuj. The tool was edited by experts of various disciplines such as nursing and medical and profession. The tool consisted of the following:

Tool-1:- Sociodemographic Data

It deals with the selected socio demographic data of female nursing students such as age, education, religion, type of menstrual cycle, menarche attained age, duration of menstruation flow, types of menstrual pad, pain during menstruation, place of present residence, and source of information.

Tool-2:- Knowledge

It consists of 25 multiple choice questions regarding knowledge on menstrual hygiene. Each question carries score of 1 for correct answer and 0 for wrong answer. The maximum possible score is 25.

Tool-3:- Practice

It consists of check list with 10 questions regarding practice on menstrual hygiene. Each question Carries score of 1 for correct answer and 0 for wrong answer. The maximum possible score is 10.

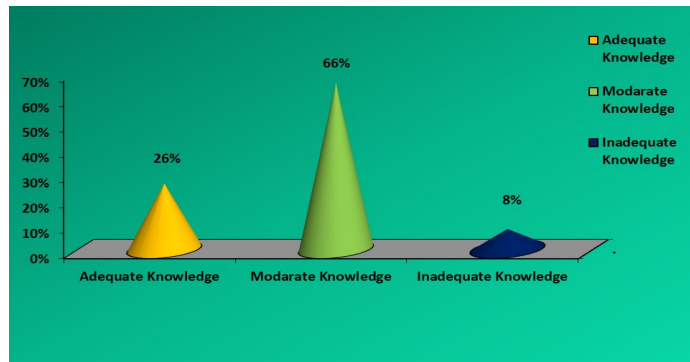
Results of the Study

Section A: Indicates the distribution of demographic variables of female nursing student such as age between 17-18 years (35%), 19-20 (20%), 21-22 (45%), the education was B. sc nursing (54%), GNM (33%), ANM (13%), Religion was majority of Hindu (91%) with regard to student attained menarche age 14 years and above (58%). the majority of student regular menstrual cycle (76%), the majority of menstrual flow is 3-4 days (58%) the majority of menstrual pad is cloth pad (62%) and (85%) of female

nursing student having pain during menstruation, (76%) female nursing student residing in B.M.C.B. Girls Hostel. The majority of female nursing student had got health information on menstrual hygiene through mother (85%).

Section B:

Figure 1: Distribution of Knowledge on Menstrual Hygiene among Female Nursing Student



The study also showed that the frequency and percentage distribution of knowledge on menstrual Hygiene among female nursing student adequate knowledge (26%) moderate knowledge (66%) inadequate knowledge (8%).

Section C:

Table -1: Distribution of level of Practice on menstrual Hygiene among female nursing student.

(n=100)

Sr. No.	Level of Practice	Frequency	Percentage %
1	Adequate Practice (75-100%)	55	55%
2	Moderately Adequate (50-74%)	44	44%
3	Inadequate (below 49%)	01	01%

The frequency and percentage distribution of level of Practice on menstrual Hygiene among female nursing student adequate practice (55%) moderate practice (44%) inadequate practice (1%).

Section D:

Table -2: Co-relation between knowledge and practice on menstrual hygiene among female nursing student.

(n=100)

Sr. No.	Category	Value
1	Co-relation and Co-efficient	0.84

The study finally concluded by analyzing correlation between knowledge and practice on menstrual hygiene among female nursing student and it is found that $r = 0.84$. Hence the H^1 is accepted.

The study also revealed that the age and education distribution among female nursing students in level of knowledge,

in that the calculated chi-square value is greater than the table chi-square value. Hence the null hypotheses are rejected. The researcher accepts that, there is significant relationship between age and education distributions among female nursing students with knowledge on menstrual hygiene. The researcher accepts that there is no significant relationship between their other socio demographic variables among female nursing students with knowledge on menstrual hygiene.

The study shows that, all socio-demographic variables among female nursing students in level of practice, in that the calculated chi-square value is less than the table chi-square value. Hence, the null hypothesis is accepted. The researcher accepts that there is no significant relationship between their socio demographic among female nursing students with practice on menstrual hygiene.

Discussion

Findings of the study was compared in this study for practice, the 55% female nursing student had adequate practice, 44% had moderate practice, 1% had inadequate practice. Hence, the researcher concluded that maximum of female nursing students having adequate practice than inadequate.

The finding were supported by ADHIKARI P, et al (2007), The result of study shows that only 6% of girls know that menstruation is physiological process, 94% girls used pad during menstruation but only 11.3% dispose it by burning overall practice was 40.6% respectively.¹

Conclusion

The finding of this study indicate that most of the female nursing students having moderately adequate knowledge regarding menstrual hygiene and practice. The knowledge and practice was enriched by administer the pamphlet. Proper guidance and education should be given in order to maintain their health.

Reference

1. Dr. Prashad Adhikari. P(2007), "A STUDY ON KNOWLEDGE AND PRACTICE AMONG ADOLESCENT GIRLS." The Indian journal of medical science. Page no.382-386. (retrieved from <http://www.rgues.ac.in>)
2. Dongre.p,(2007), "The effect of community based health education intervention on management hygiene among rural Indian adolescent girls." The Indian journal of medical science, volume 9,page no.48-54 (retrieved from <http://www.pubmul.com>)
3. EL-Shazly MK, et al(1998), "Knowledge about menstruation and practice of nursing students Affiliated to university of Alaxzandria," The journal of Egyptian public health association, volume 65, page no 509.

TAKAYASU ARTERITIS

Mrs. Rani Jose and Ms. Sruthi S.K.
College of Nursing, ACME, Pariyaram

ARTICLE INFO

Article History:

Received 27th March 2018

Received in revised form 3rd April 2018

Accepted on : 6th April 2018

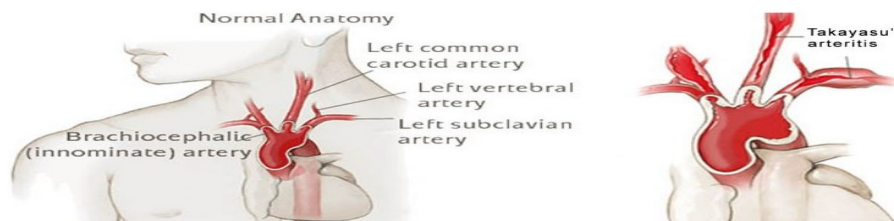
Published online: 16th April 2018

ABSTRACT

Takayasu arteritis is a rare, systemic, inflammatory large-vessel vasculitis of unknown etiology. It progresses through 3 stages. The presentation of Takayasu arteritis is heterogeneous with constitutional symptoms and cardio-vascular features. It commonly affects women of childbearing age and the perinatal period may be complicated by the associated symptoms. Diagnostic studies includes laboratory tests imaging studies and histologic findings. The American College of Rheumatology has established classification criteria for Takayasu arteritis. Management depends on the disease activity and the complications that develop.

Key Words:

Takayasu Arteritis, Systemic Vasculitis



Copyright © UTUJAHl 2018 ; Mrs Rani Jose. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Mrs. Rajeena, a 20 years old postnatal woman was admitted in Sahakarana Hridayalaya, Pariyaram with the complaints of bruit over the neck and tiredness. Her perinatal history shows that during the 9th month of gestation she was admitted with complaints of decreased fetal movements and she was diagnosed as having aorto-arteritis {Takayasu Arteritis}. She delivered a still female baby.

Meaning

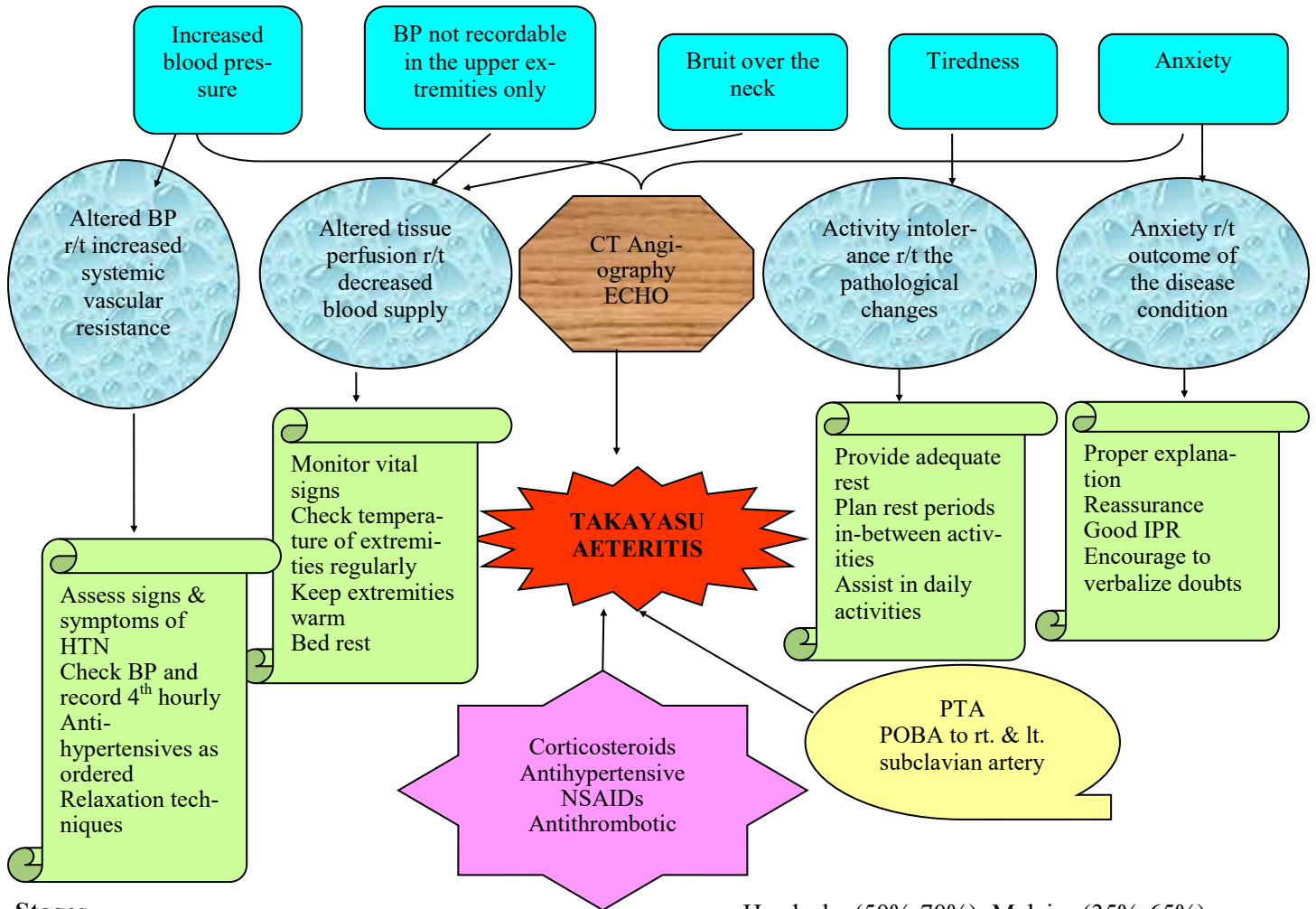
Takayasu arteritis is a rare, systemic, inflammatory large-vessel vasculitis of unknown etiology that most commonly affects women of childbearing age. Takayasu disease has also been referred to as *pulseless disease*, *aortic arch syndrome*, *Takayasu's disease*, and *Takayasu's arteritis*. It is defined as "granulomatous inflammation of the aorta and its major branches" by the Chapel Hill Consensus Conference on the Nomenclature of Systemic Vasculitis.

Incidence

Worldwide incidence is estimated at 2.6 cases per million per year. Although the disease has a worldwide distribution, it is observed more frequently in Asian countries and Central and South America. Approximately 80% of patients are women. Most patients are aged 4-63 years, with the mean age of onset being approximately 30 years.

Etiology

The etiology is unknown. The underlying pathologic process is inflammatory, with several etiologic factors having been proposed, including spirochetes, *Mycobacterium tuberculosis*, streptococcal organisms, and circulating antibodies due to an autoimmune process. Genetic factors may play a role in the pathogenesis.



Stages

Takayasu arteritis progresses through 3 stages. Most patients do not fall readily into such groupings.

The **first stage** is an early systemic stage during which the patient may complain of constitutional symptoms (eg, fatigue, malaise, giddiness, fever). This stage is considered to be prevasculitic.

The **second stage** is the vascular inflammatory stage, where stenosis, aneurysms, and vascular pain (carotidynia) tend to occur.

The **third stage** is the burned-out stage, when fibrosis sets in, and is generally associated with remission. This stage does not occur in all patients, and even in patients who are in remission, relapses can occur. Presumably, this stage manifests with minimal symptoms.

Clinical Features

The presentation of Takayasu arteritis is heterogeneous. Approximately 10% of patients with Takayasu arteritis are asymptomatic, with the disease detected based on abnormal vascular findings on examination. Constitutional symptoms may precede clinical vascular involvement.

⇒ Constitutional symptoms include:

- Headache (50%-70%); Malaise (35%-65%)
- Arthralgias (28%-75%); Fever (9%-35%)
- Weight loss (10%-18%)
- ⇒ Cardiac and vascular features include:
 - Bruit, most common in carotid artery (80%)
 - BP difference of extremities (45%-69%)
 - Claudication (38%-81%)
 - Carotodynia or vessel tenderness(13-32%)
 - Hypertension
 - Aortic regurgitation (20%-24%)
 - Raynaud’s syndrome (15%)
 - Pericarditis (< 8%)
 - Congestive heart failure (< 7%)
 - Myocardial infarction (< 3%)
- ⇒ Neurologic features include:
 - Headache (50%-70%)
 - Visual disturbance (16%-35%)
 - Stroke (5%-9%); Seizures (0%-20%)
 - Transient ischemic attacks (3%-7%)
- ⇒ Dermatologic manifestations include:
 - Ulcerated nodular lesions (<2.5%)
 - Erythema nodosum (6%-19%)
 - Pyoderma gangrenosum (< 1%)

Client picture

Mrs. Rajeena had:-

- ◆ Bruit over neck
- ◆ BP not recordable in upper limb
- ◆ Hypertension(as elicited from lower limb)
- ◆ Anxiety

Takayasu arteritis in pregnancy

Pregnancy is not a reason for the occurrence of takayasu arteritis and inflammatory activity is not enhanced by the pregnancy. But the perinatal period may be complicated by the associated symptoms. Blood pressure may not be measurable due to pulselessness, thus making patient monitoring difficult. Often, calf pressures need to be obtained. In pregnant women with Takayasu arteritis, uncontrolled blood pressure may lead to subarachnoid/intracranial hemorrhage and subsequent seizures, eye changes, preeclampsia, aortic regurgitation, syncope, fetal complications, and nephrotic syndrome

Client picture

Mrs. Rajeena was apparently normal till her 9th month of gestation and the problems started abruptly there after.

Diagnostic studies**Laboratory tests**

Laboratory tests in an individual with Takayasu arteritis tend to be nonspecific.

- ◆ Increased ESR, > 50 mm/h
- ◆ Autoantibodies observed in other connective tissue diseases.
- ◆ High titers of circulating anti-endothelial antibodies.
- ◆ Increased levels of soluble vascular cell adhesion molecule-1 (VCAM-1), fibrinogen, alpha2-globulin, and gamma globulin
- ◆ Hypoalbuminemia

Imaging studies

CT scanning, MRI, ultrasonography, and 18F-fluorodeoxyglucose positron emission tomography (18F-FDG-PET)

Histologic Findings

Takayasu arteritis is characterized by a special pattern of histopathologic changes. The early stage consists of a continuous or patchy granulomatous inflammatory reaction and progresses to a sclerotic stage, with intimal and adventitial fibrosis and scarring of the media. Lesions are initially inflammatory and later become occlusive.

Diagnostic Criteria**American College of Rheumatology Criteria**

The American College of Rheumatology has established classification criteria for Takayasu arteritis (3 of 6 criteria are necessary). The presence of any 3 or more criteria yields a sensitivity of 90.5% and a specificity of 97.8%. The criteria are as follows:

- Age of 40 years or younger at disease onset
- Claudication of the extremities
- Decreased pulsation of 1 or both brachial arteries
- Difference of at least 10 mm Hg in systolic blood pressure between arms
- Bruit over 1 or both subclavian arteries or the abdominal aorta

Arteriographic narrowing or occlusion of the entire aorta, its primary branches, or large arteries in the upper or lower extremities that is not due to arteriosclerosis, fibromuscular dysplasia, or other causes

Client picture:

- Lab values : with in normal limits
- ECG : Normal, sinus tachycardia
- ECHO : EF=65%, mild PAH,PASP=41 mmHg
- CT Angio : Pan Aortic Ostial Stenosis

Complications

- Hypertension;Pulmonary hypertension
- Aortic aneurysm; Aortic insufficiency
- Congestive heart failure
- Hypotensive ischemic retinopathy
- Vertebrobasilar ischemia
- Hypertensive encephalopathy

Management

Management of Takayasu arteritis (Takayasu arteritis) depends on the disease activity and the complications that develop. The 2 most important aspects of treatment are controlling the inflammatory process and controlling hypertension.

Medical Management

- ◆ Corticosteroids can be started orally at 1 mg/kg daily or divided twice daily and tapered over weeks to months as symptoms subside. Long-term, low-dose corticosteroid therapy may be required.
- ◆ Cytotoxic agents are used for patients whose disease is steroid resistant or relapsing. Usually continued for at least 1 year after remission and are then tapered to discontinuation.
- ◆ Anti-tumor necrosis factor (anti-TNF) agents are beneficial.

Cardiovascular risk factors

Strict management of risk factors such as dyslipidemia, hypertension, and lifestyle factors that increase the risk of cardiovascular disease is mandatory to minimize secondary cardiovascular complications. Diet modification and activity limitations are recommended. Use of antihypertensive agents, Antiplatelet agents and low-dose aspirin prevent complications.

Surgical / Interventional Management

- ◆ Bypass graft surgery is the procedure with the best long-term patency rate.
- ◆ Percutaneous balloon angioplasty provide good outcomes for short lesions.
- ◆ Angioplasty and stenting have been used to treat recurrent stenosis. Conventional stents seem to be associated with high failure rates in patients with Takayasu arteritis.
- ◆ Endarterectomy is usually indicated in patients with Takayasu arteritis involving short segment, high flow artery.
- ◆ Other procedures include aneurysm clipping and vascular reconstruction

Client picture

Percutaneous angioplasty, POBA right and left subclavian artery, was done through right femoral artery approach, using 5× 60 for plus balloon which was inflated 7 atm for 36 sec.

Medications used during procedure:

Inj. Heparin-5000U ;Inj. Midazolam-4mg
Inj. Morphine-1mg ; Inj. Betaaloc-2.5mg

Conclusion

Takayasu arteritis is a very rare condition. The occurrence during the period of gestation is still rarer and more complicated. Interventional procedure was successfully completed without any complications. Mrs. Rajeena was discharged on 15/10/2011.

Discharge medications:

Tab. Amlol-2.5mg OD; Tab. Rantac-150mg BD

Tab. Ecospirin-75mg OD;

Tab. Prednisolone-4mg ½ OD

Tab. Clonotril-0.5mg OD

Tab. Rosuvastatin-5mg OD

She was advised to come for follow up after 2 weeks. Now the client is apparently normal as evidenced by relief from bruit, controlled hypertension and decreased tiredness.

Reference

- Smeltzer CS, Bare GB. Textbook of Medical-surgical Nursing. 9th ed. Philadelphia: Lippincott; 2001
- Loscalzo J, Creager MA, Dzan VJ, Chobanian A. Vascular Medicine A Textbook of Vascular Biology & Diseases. 2nd ed. New York: Little Brown & Company; 2004
- Schlant RC, Alexander RW. Hurst's The Heart. 8th ed. New York: Mc Graw Hill; 2001
- Libby p, Bonow RO, Mann DC, Zipes DP. Braunwald's Heart Disease A Textbook of Cardiovascular Medicine. 8th ed. New Delhi: Reed Elsevier India Pvt. Ltd. 2008
- Rutherford RB. Vascular Surgery. 6th ed. Philadelphia: Saunders; 2005

RESEARCH ARTICLE

EFFECT OF BREATHING TECHNIQUES ON PAIN PERCEPTION AMONG PRIMIPARTURIENTS

Ms. Anju M V, Mrs. Sreeja G Pillai and Mrs. Mini Joseph
College of Nursing, ACME , Pariyaram

ARTICLE INFO

Article History:

Received 11th April, 2018

Received in revised form 13th April, 2018

Accepted on 16th April, 2018

Published online

ABSTRACT

Child birth is the one of the marvellous and memorable segments in women's lives.⁵ It is a revolutionary act, an evolutionary happening, in the manner of the silk worm getting transferred in to some winged angel. A quasi experimental study was conducted to Evaluate the effect of breathing techniques on pain perception among primiparturients admitted in labour room of E K Nayanar Memorial Woman and Children Hospital Mangatuparamba in 2017. A total number of 60 samples were selected by using purposive sampling method. The data was collected by using interview schedule, Numerical Pain Rating Scale, Behavior Observational Pain Rating Scale and modified W H O Partograph. The findings revealed that there is significant difference in mean pre test and post test pain score among primiparturients in experimental group before and after intervention ($p=0.000$) and mean pre test and post test pain score among primiparturients in experimental and control group ($p=0.000$). There is significant association between pain score among primiparturients with education and income ($p<0.05$).

Key Words:

Effect; Breathing techniques; Pain perception; Primiparturients.

Copyright © UTUJAH I 2018. Ms. Anju MV. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Motherhood is a great responsibility and it is women's highest crown of honour. It is the highest holiest service assumed by mankind. Labour pain is the result of a complex and subjective interaction of multiple physiologic and psychological factors on a woman's individual interpretation of labour stimuli. The non-pharmacologic approach to pain management includes a wide variety of techniques, Breathing technique have been shown to reduce stress, chance of acquiring an assisted birth as well as ensuring that the baby has enough oxygen during labour to stay healthy and to conserve energy.

Statement of the problem

Evaluate the effect of breathing techniques on pain perception among primiparturients admitted in labour room of E K Nayanar Memorial Woman and Children Hospital Mangatuparamba.

Objectives of the study

- Evaluate the effect of breathing techniques on pain perception among
- Assess the pain perception among primiparturients during first stage of labour
- Find out the association between pain perception among primiparturients and Primiparturients socio personal variables.

Hypothesis

Following hypotheses will be tested at 0.05 level of significance

H₁- There is significant difference between the mean pain perception score among primiparturients in experimental group before and after breathing techniques as measured by Numerical Pain Rating Scale and Behavior Observational pain Rating Scale.

H₂- There is significant difference between the mean pain perception score among primiparturients in experimental and control group as measured by Numerical Pain Rating Scale and Behavior Observational pain Rating Scale.

H₃- There is significant association between mean pain perception score among primiparturients and socio personal variables.

Methods and material

Research approach

The experimental approach was considered appropriate for the present study as the objective of the study is to evaluate the effect of breathing techniques on pain perception among primiparturients.

Research design

The non equivalent control group pre test post test design involves two groups of participants, from whom outcome data are collected before and after implementing an intervention.

Variables

Independent variable - Breathing techniques imparted to primiparturients during active and transitional phase of first stage of labour

Dependent variable - Pain perception of primiparturients in active and transitional phase of the first stage of labour.

Setting of the study

The study was conducted at Govt. E K Nayanar Memorial women and Children Hospital Mangattuparamba.

Sample and sampling technique Sample

The sample consisted of 60 primiparturients admitted in the labour room of E K Nayanar Memorial Women and Children hospital, Mangattuparamba, Kannur, who fulfilled the criteria of sample selection, 30 in experimental and 30 in control group.

Inclusion criteria

Primiparturients who

- had normal course of pregnancy
- are between 37-40 weeks of gestation
- are in first stage of labour
- are willing to participate in the study
- are able to comprehend and follow instructions

Exclusion criteria

Primiparturients

- with pre existing and existing respiratory disorders
- with cardiac disease
- who have received pain medication during the last 6 hrs
- who are differently abled

Sampling technique

Non probability Purposive sampling technique was used for the sample selection in this study.

Description of the tool

Tool I: Interview schedule to assess the socio personal variables and the obstetric variables.

Tool I consist of two sections:

Section A- Socio personal variables Socio personal variables consist of 10 items: age, religion, education, occupation, monthly income, type of family, marital status, residential area, exposure to source of information regarding complementary therapies, and sources of information.

Section B- Obstetric variables It deals with the obstetric assessment of the patient at the time of admission to the labour room and during labour. It consisted of 11 items: LMP, EDD, gestational age, antenatal check up, medications, mode of pregnancy, duration between marriage and conception, labour assessment, medication, duration of labour and mode of delivery.

Tool II: Numerical Pain Rating Scale and Behavior Observational Pain Rating Scale to assess the pain perception among the primiparturients in first stage of labour.

Tool II consists of two sections:

Section A- Numerical Pain rating Scale (NPRS) Pain perception of primiparturients during first stage of labour was assessed using Numerical Pain rating Scale (NPRS). It is one of the standardized tools for quantifying pain perception which consist of a scale with values ranging from zero to ten. The pain was assessed by four observations that are during active phase (O1, O2), transitional phase (O3) and within one hour after delivery (golden hour-O4).

Section B- Behavior Observational pain Rating Scale (BORS) It is used to assess the pain perception during first stage of labour by observing the behavior response of the primiparturients towards pain. It consist of five items of behavior response to pain which include Facial expression, Position, Cry, Consolability, and Verbal response with the score ranges from zero to two for each item and total score is 10. (The pain perception is the sum total of Numerical Pain Rating Scale Score and Behavior Observational Pain Rating Scale Score.) Tool III: Modified WHO Partograph.

Experimental group received two sets of intervention (breathing techniques -cleansing breathing technique and Indian breathing technique) in four observations during each contraction in active and transitional phase of labour along with routine intra partum care where as control group received only intrapartum care.

Result

Table 1: Significance of difference between mean pain perception score among primiparturients in experimental group before and after breathing technique.

n=30

Pain assessment	Mean	SD	't' value	p value
Set I				
O ₁ -O ₂	2.500	0.572	23.924	0.000***
Set II				
O ₃ -O ₄	3.800	0.714	29.135	0.000***

Table value t₂₉ =1.7

*** Highly Significant at p=0.000

From the table 1, it is evident that the calculated t value in two set of observation O₁-O₂ and O₃-O₄ ('t'=23.924, 't'=29.135) are larger than critical value (tabled value t₂₉=1.7) at p<0.05 level of significance. Hence the test is found to be statistically significant at p<0.05 level of significance. Therefore the null hypothesis is rejected and the research hypothesis is accepted. It is evident that there is significant difference in mean pain perception score among primiparturients in experimental group before and after breathing technique and hence it is interpreted that breathing techniques is effective in reducing pain perception in first stage of labour among primiparturients.

Table 2: Significance of difference between mean pain perception score among primiparturients in experimental and control group.

n=60

Pain perception	Group	Mean	95% CL	SD	't' Value	p value
Set I Intervention						
O ₁ -O ₂	Experimental (n=30)	2.500	LL:2.286 UL:2.714	0.572		
C ₁ -C ₂	Control (n=30)	1.600	LL:1.888 UL:1.312	0.770	24.17	0.000***
Set II Intervention						
O ₃ -O ₄	Experimental (n=30)	3.800	LL:3.533 UL:29.13	0.714		
C ₃ -C ₄	Control (n=30)	1.933	LL:2.151 UL:1.716	0.583	35.17	0.000***

Table value t₅₉=1.67

*** Highly significant at P=0.000; CL: Confidence Int.

UL: Upper Limit; LL: Lower Limit

From the table 2, it is evident that the calculated t value in two set of observation O₁-O₂, C₁-C₂ and O₃-O₄, C₃-C₄ (t=24.17, t=35.17) are larger than critical value (tabled value t₅₉=1.67) at p<0.05 level of significance. Hence the test is found to be statistically significant at p<0.05 level and 95% confidence interval. Therefore the null hypothesis is rejected and the research hypothesis is accepted. It is inferred that there is significant difference between mean pain perception score among primiparturients in experimental and control group.

Table 3: Significance of association between pain perception score among primiparturients and socio personal variables.

S I N o .	Socio personal variables	Calculated value χ ₂	Df	p value	Inference
1	Age	0.8251	1	3.84	p>0.05 NS
2	Religion	1.337	1	0.287	p>0.05 NS
3	Education	4.949	1	0.026	P<0.05 *S
4	Monthly Income	4.207	1	0.040	P<0.05 *S
5	Type of family	0.361	1	0.554	p>0.05 NS
6	Occupation	0.341	1	0.559	p>0.05 NS
7	Residential area	0.006	1	0.939	p>0.05 NS
8	Exposure to source of information on complementary therapies	0.00	1	3.84	p>0.05 NS

Note: Table value χ² 0.05(1) = 3.84; NS: not significant at p>0.05 level; * S: significant at p<0.05 level

There is significant association between mean pain perception score among primiparturients with education and monthly income (p<0.05). There is no significant association between mean pain perception score among primiparturients with age, religion, type of family, occupation, residential area and exposure to source of information on complementary therapy (p>0.05).

Breathing technique in labour has beneficial effect in reducing pain perception in first stage of labour among primiparturients. Parturients reported satisfying and memorable birth experience with breathing exercise.

Discussion

This study was a quasi-experimental research designed to determine the effect of breathing on pain perception among primiparturients. In this section the major finding of the present study has been discussed with reference to the results obtained by others investigators. The study done by various investigators suggested that breathing techniques can be incorporated as a safe and effective pain reducing in labour which gives comfort to the mother and can positively influence the quality of woman's birth experience.

In the present study there is no change in duration of labour with breathing technique. This finding is incongruent with a study in which there was significant reduction in duration of first stage of labour with breathing technique among experimental group. The study also in harmony with the study conducted by Thomas E, Dhiwar S on effectiveness of patterned breathing technique in reduction of pain during first stage of labour among 60 primigravida which revealed that there was significant reduction in pain level among primigravida women in experimental group after practicing selected Patterned breathing technique during first stage of labour as compared to the pain level among women in control group without practicing Patterned breathing technique ($p=0.000$) which indicate that patterned breathing was effective in reducing pain perception during labour.

Practicing the breathing techniques becomes an automatic response to pain. A mother more relaxed will respond in a positive manner to pain. Breathing techniques determine the wellbeing status and become a measure of control. The present study included breathing exercises as a complementary pain relief therapy in labour. Breathing exercises secure more oxygen in order to have strength and energy for mother and child and brings a purpose for each contraction, making them more productive.

The present study hence concluded that the use of breathing exercise during labour was effective during childbirth to reduce pain perception and duration of labour. It is recommended that the obstetric nursing personnel should focus on teaching breathing exercises as complementary therapy during labour and to practice them to make childbirth a less painful and stressful experience.

Conclusion

Implementation of breathing techniques in labour can have positive influence in the development of confidence and feeling of empowerment in the expectant mother. Effective use of these techniques can contribute to better outcomes, higher patient satisfaction during birth experience, which is one of the life's most memorable and challenging experience.

Nursing implications of the study

The study findings will help to think and implement several possible strategies in the field of nursing practice, nursing education, nursing research and nursing administration.

Limitations

- Study was done in a single setting.
- The investigator could not control the extraneous factors like physical and psychological factors and presence of investigator which may influence pain perception of primiparturients in labour.

Recommendations

- A similar study can be replicated on a larger sample for better generalization,
- A comparative study can be conducted to evaluate the effect of breathing techniques on labour pain perception among primi and multi mothers
- A descriptive study can be conducted to assess the knowledge and attitude of nurse midwives on complementary and alternative therapies for labour pain management
- A study can be conducted to assess the effect of three types of breathing techniques (slow paced breathing, deep cleansing breathing, pantic breathing) on pain perception among primiparturients.
- A comparative study can be done to evaluate the effect of breathing technique and massage on pain perception among primiparturients.
- A similar study can be conducted to assess pain perception among primiparturients in Government and private setting.

Reference

- Bhore N R. A study to assess the effectiveness of selected aspects of lamaze method on pain among primigravida mothers during first stage of labour in selected hospitals of Sangli. [Internet]. 2016 March [cited 2017 February]; 7(10): 13547-13550. Available from: www.ijsr.org
- Kaur K, Rana A K, Gainer S. Effect of video on Breathing Exercises during labour on Pain Perception and Duration of Labour Among Primigravida Mothers. [Internet]. 2013 January [cited on 2017 January]; 9 (1) Available from: www.ncbi.in
- Breathing techniques during labour. Available from www.momjunction.com

RESEARCH ARTICLE
EFFECTIVENESS OF PTP ON KNOWLEDGE AND ATTITUDE REGARDING ILL EFFECTS OF JUNK FOODS AMONG STUDENTS OF 1ST YEAR G.N.M

Ms. Parisha Chaudhari, Maniba Bhual Nursing College, Bardoli.

ARTICLE INFO
Article History:

 Received 11th April, 2018

 Received in revised form 13th April, 2018

 Accepted on 16th April, 2018

 Published online on: 27th April 2018

Key Words:

Knowledge, PTP, Junk foods, Students

ABSTRACT

A pre experimental Study was conducted to find out the effectiveness of planned teaching program on knowledge and attitude regarding ill effects of junk food among 1st year GNM student of Maniba Bhula Nursing College Bardoli, Gujarat in July, 2016. A total 30 samples were selected by using convenient sampling method to collect the data. Knowledge questionnaire and modified Likert Attitude scale was used to collect the data. The results of the study revealed that Majority of the students (76.66 %) had a good knowledge followed by 23.33 % students who had average knowledge about ill effect of junk foods. Majority of students 60% had average attitude regarding ill effects of junk food, least 10% of students had poor attitude and rest of students had 30% good attitude regarding ill effects of junk food. The study summarizes that, The overall experience of conducting study was good. The constant encouragement and guidance of guide, cooperation, interest of students contribute to the successful completion of the study. Respondents were satisfied and happy with information they received.

Copyright © UTUJAH 2018. Ms. Parisha Chaudhari. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Junk food is the term given to food that is high in calories but low in nutritional content. In adolescents both boys and girls undergo several physical and psychological changes which make them to become partly responsible for their own health and welfare. Junk foods have no or very less nutritional value and irrespective of the way they are marketed, they are not healthy to consume. Psychological development of adolescents such as independence and acceptance by peers may affect adolescent's food choices and nutrient intake, which places them to adopt unhealthy eating behaviours like addiction to junk foods. (Rajan Walia R, 2011)

Junk food contain high amount of oil and fat and therefore our body finds difficulty to digest. When we consume junk foods in excessive amount, major portion of the blood gets diverted to intestine and thus we feel drowsy and encounter reduced concentration. (Rajan walia,2011).

Need for the Study

Nutritional needs during adolescence are increased because of the increased growth rate and changes in body composition associated with puberty. The dramatic increase in energy and nutrient requirements coincides with other factors that may affect adolescents' food choices and nutrient intake and thus nutritional status. These factors, including the quest for independence and acceptance by peers, increased mobility, greater time spent at school or work activities, and preoccupation with self-image, contribute to the erratic and unhealthy eating behaviors that are common during adolescence. In recent years consumption of "junk foods" has increased in many western countries as well as in urban population of developing countries like India. (Zhu SP,2008)

A study conducted on Delhi's school going children showed 18 per cent of the children were overweight. The study was carried out by Anoop Mishra from the

Fortis Hospital in Delhi and published in the journal Nutrition. The study estimated that 15-20 per cent of urban schoolchildren in India are at risk of developing type-2 diabetes. (Dixon HG, 2007).

Statement of Problem

“A study to assess the effectiveness of planned teaching programme on knowledge and attitude regarding ill effects of junk foods among students of 1st year G.N.M students of Maniba Bhula Nursing College, Bardoli”.

Objectives of the study

1. To assess the knowledge of 1st year G.N.M students of maniba bhula nursing college regarding ill effects of junk food in M.B.N.C, Bardoli.
2. To assess the attitude of 1st year G.N.M students of maniba bhula nursing college regarding ill effects of junk food in M.B.N.C, Bardoli.
3. Find out association between pre test knowledge score regarding ill effects of junk food with selected demographic variables.
4. To find out co-relation between the post test knowledge mean score and post test attitude mean score regarding ill effects of junk food.

Hypotheses

- H₁. There will be significant increase in mean post-test than pre-test knowledge score on ill effect of junk food as evident from structured knowledge questionnaire at 0.05 level of significance.
- H₂. There will be improve mean post-test than pre-test attitude score on ill effect of junk food as evident from likert scale at 0.05 level of significance.
- H₃. There will be significance association between demographic variables with pre test knowledge score among 1st year G.N.M. Students of M.B.N.C, Bardoli.
- H₄. There will be significance co-relation between post test knowledge mean score with post test attitude mean score regarding ill effects of junk food.

Assumptions: The study assumes that;

1. There will be inadequate knowledge among 1st year G.N.M. Students of maniba bhula nursing college regarding ill effect of junk food.
2. There will be unfavourable attitude among 1st year G.N.M. Students of maniba bhula nursing college regarding ill effect of junk food.

Delimitation: The study is delimited to 1st year G.N.M. students studying in M.B.N.C. Bardoli.

Research Approach: Quantitative approach

Research Design: Pre experimental - one group pre-test posttest design.

Variables

Independent variable: The Planned Teaching Programme on ill effect of junk food.

Dependent variable: Knowledge and attitude of 1st year G.N.M

Research Setting: Maniba bhula nursing college, Bardoli

Target Population: 1st year of G.N.M Students.

Sample Size: 30 samples

Sampling Technique: Non probability convenient sampling technique.

Criteria for sample selection

1. Inclusion Criteria for sampling

- Boys and girls from 1st year G.N.M., who are studying in a Maniba Bhula Nursing College, Bardoli.
- Students who are willing to participate in the study.
- Students who are available at the time of data collection.

2. Exclusion Criteria for sampling

- Students who were not available at the time of data collection.
- The students who are not willing to participate in the study.

Data Collection Method

Data will be collected by using structured teaching questionnaires, which contains section A and section B and likert scale.

- SECTION A: Items of demographic variables like gender, religion, residency, education status of parents, parents income, habits of taking fast food, source of previous knowledge, diet
- SECTION B: Items of knowledge regarding introduction, definition, ill effects on health, types of junk food.
- SECTION C: Items of attitude regarding introduction, definition, ill effects on health, types of junk food

Data Collection Instrument

1. Structured knowledge questionnaires regarding ill effect of junk food.
2. likert scale
3. Planned teaching programme on ill effect of junk food.

Reliability of Tool

The reliability is a criterion for measuring adequacy, consistency, accuracy of tool. The reliability of Structured Knowledge Questionnaire was determined by Test Retest Method. With Test Retest method, the reliability of the Structured Knowledge Questionnaire was found 0.87 (By Karl Pearson Correlation Coefficient Formula).

The reliability of the likert scale was found 0.78. It was computed by Karl Pearson Correlation Coefficient formula.

Procedure of Data Collection

Prior permission will be obtained from the concerned authority from maniba bhula nursing college, bardoli. The sample will be collected by non-probability convenient sampling technique used for present study.

Plan for Data Analysis

The Investigator had planned to analyze the data in the following manner.

- Section I: Demographic variables will be analyzed using frequency and percentage distribution and presented in the form of table.
- Section II: The data from the Structured Knowledge Questionnaire analyzed using mean score, standard deviation (SD), ‘t’ test and presented in the form of tables and graphs.
- Section III: The data from the likert scale before and after administration of planned teaching programme will be analyzed using mean score, standard deviation (SD), ‘t’ test and presented in the form of tables and graphs.

Results of the study:

Fig. 1: Area wise mean, mean percentage, Standard deviation (SD), mean difference and Percentage gain of Pre test and Post test Knowledge scores of samples.

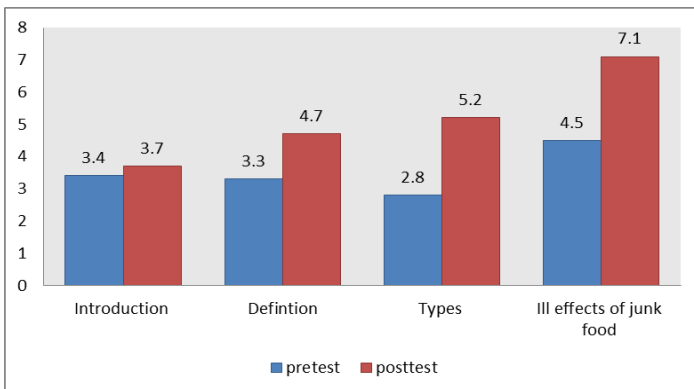


Table 1: Mean, Mean difference, Standard deviation (SD), Calculated ‘t’ test value and Tabulated ‘t’ test value of Pre test and Post test Knowledge Scores of 1st year G.N.M. students regarding ill effects of junk food. n=30

(P<0.05)

Mean knowledge score		Mean difference	SD	‘t’ value calculated	‘t’ value Tabulated
Pre test	Post test				
14.13	20.8	06.67	2.2	20.18	2.05
			1.4		

Table 1 depicts that the calculated ‘t’ value (20.18) is higher than the tabulated value. Hence H₁ accepted. Here we can conclude that the planned teaching programme is effective and it will increase the knowledge of the students. n=30

Table 2: Effectiveness of STP on attitude of students regarding ill-effects of junk food.

Attitude	Mean	Mean Difference	SD	Calculated ‘t’ test	Tabulated ‘t’ test
Pretest	31.6	5.3	4.47	5.57	2.05
Post-test	36.9		4.2		

Table 2 depicts that the calculated ‘t’ value is higher than table value. Hence H₁ is accepted.

The results of the study also revealed that there is significant association between knowledge scores of students and their socio-demographic variables such as religion, education and dietary pattern.

Discussion

- There was study conducted on knowledge of teenagers regarding harmful effect of junk food among students in 3 selected schools at District Jalandhar (2013).The result revealed that 81.67% had below average knowledge regarding harmful effects of junk food followed by 18.33% adolescents who had poor knowledge about the harmful effects of junk food
- The result of the present study shows that Majority of the students (76.66 %) had a good knowledge followed by 23.33 % students who had average knowledge about ill effect of junk foods.
- So that the investigator found that the planned teaching programme is an effective teaching strategy to increase the knowledge and improve the attitude of the students.

Conclusion

The study findings concluded that 1st year G.N.M. Students had adequate knowledge regarding ill effects of junk food. The PTP had great potential for accelerating the awareness regarding ill effects of junk food.

Bibliography:

- Raghunath .k.R. “Nutrition & Health. The vegetarian way, 1st Edition, Sterling publisher, New Delhi, 2002.
- Dixon HG, Scully ML, Wakefield MA, White VM, Crawford DA. The effects of television advertisements for Junk food versus nutritious food on children’s food attitudes and preferences. Journal of Soc Sci Med 2007 October; 65(7):1311-23. Available from <http://www.ncbi.nlm.gov/pubmed/17587474>.

RESEARCH ARTICLE

KNOWLEDGE AND ATTITUDE OF PRIMARY SCHOOL TEACHERS REGARDING BEHAVIOURAL PROBLEMS OF PRIMARY SCHOOL STUDENTS.

Mr. Johnson LK, Mrs. Mallika Ashith, Mrs. Pathima Voilet Almeida
Lourde College of Nursing, Taliparamba, Kannur.

ARTICLE INFO

Article History:

Received 24th April, 2018

Received in revised form 26th April 2018

Accepted on 30th April 2018

Published online on 2nd May 2018

Key Words:

Knowledge, Attitude, School
Teachers, Behavioural, Students

ABSTRACT

A pre-experimental one group pretest post-test study was conducted to assess the effectiveness of a planned teaching programme on knowledge and attitude of teachers regarding behavioural problems of primary school students in selected school at Mulki, Mangalore (2009-10). Sample size of 40 primary school teachers was selected using convenient sampling. A structured knowledge questionnaire and attitude scale was developed by the investigator for data collection. A planned teaching programme was administered regarding Behavioural Problems of primary school students. Findings of the study revealed that the primary school teachers had Mean pretest knowledge score (17.4) and attitude score (119.2) regarding Behavioural problems. The mean post-test knowledge score (27.9) and attitude score (143.5), which were higher than the pretest score. The 't' test computed for knowledge was ($t(39)=12.31, P<0.05$) and attitude was ($t(39)=11.47, P<0.05$) showed highly significant difference suggesting that the planned teaching programme was effective in gain in knowledge and change in attitude of teachers regarding Behavioural problems. All children have moments when they do not behave properly. Schooler and adolescents can have their challenging moments and this might mean they push limits from time to time.

Copyright © UTUJAH I 2018. Mr. Johnson LK. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

“Behaviour is what a man does, not what he thinks, or believes, but behaviour in the human being is sometimes a defense, a way of concealing motives and thoughts, as language can be a way of hiding our thoughts and preventing communication”. (Emily Dickson and Abraham Maslow). Most of the (individual) students find ways to express their individuality and creativity while keeping their behavior within the boundaries of what is considered as appropriate. Behavioral problems means, an act performed by an individual or a student which is socially not accepted. Behavioral problems are quite common among school children like late coming, truancy, lying, complaining on co students, talking during instruction and class hour, exhibition of over obedience, pinching, beating, fighting, quarreling for a seat, unable to sit quietly on the given seating, making noise during class.

Need for the Study

The Diagnostic Statistical Manual-III R explains that, the oppositional defiant disorder, conduct disorder and attention deficit hyperactivity disorders are the behavioral problems. The current estimate in school aged children is about 6% with a range of 2% to 14% and the prevalence of conduct disorder is greater in boys range from 6% to 16%, compared with a range of 2% to 9% in girls.⁶ The prevalence of behavioural problems in primary school student especially, at secondary level posed a serious threat to proper academic and personality development of the students, and inability to maintain satisfactory interpersonal relationship with parents, peers and teachers. It is important for parents and educators to understand that students do not misbehave to get attention and behavioral problems in students can be due to a combination of factors.

Statement of Problem

Effectiveness of a Planned Teaching Programme on Knowledge and Attitude of Teachers regarding Behavioural Problems of Primary School Students in a Selected School at Mulki, Mangalore.

Objectives of the study

- To determine the level of knowledge of teachers on identification, causes, and management of behavioral problems of primary school students using structured questionnaire.
- To assess the attitude of teachers regarding behavioral problems of primary school students using attitude scale.
- To find the effectiveness of planned teaching program in terms of gain in knowledge score and change in attitude score.
- To find the relationship between knowledge and attitude of school teachers regarding identification and management of behavioural problem.
- To find the association between knowledge and selected demographic variables (age, gender, educational qualification, year of experience, source of information and marital status)
- To find the association between attitude and selected demographic variables (age, gender, educational qualification, year of experience, source of information and marital status).

Hypotheses

All the hypotheses will be tested at 0.00 levels

H₁: There will be significant difference between the mean pretest and post test knowledge score of the subjects studied.

H₂: There will be significant difference between mean pretest and posttest attitude score of the subjects studied.

H₃: There will be a significant relationship between the knowledge and attitude score of school teachers on behavioural problems.

H₄: There will be a significant association between a). Knowledge and selected demographic variables b). Attitude and selected demographic variables.

Methods and Materials

Research Approach: Descriptive and evaluative approach was used in the study.

Research Design: A pre-experimental one group pretest post-test study design was adopted in the study.

Variables

Independent variables : planned teaching programme (PTP) on behavioural problems of primary school students.

Dependent variable : The dependent variable was the knowledge and attitude score of subjects under study.

Setting of the study: The study was conducted in (unaided) private schools in Mulki, Mangalore.

Sample and sampling technique:

Sample: The sample consisted of 40 teachers were working in selected primary schools who met the inclusion criteria.

Inclusion Criteria

Primary School Teachers;

1. who are willing to participate in the study.
2. who can understand English and Kannada language.
3. Available during data collection

Exclusion criteria

Primary school teacher who did not complete the Bachelor of Education (B.Ed) or Diploma in Education (D.Ed)

Sampling technique : Convenient sampling technique was used for the sample selection.

Description of the tool

The final tool comprises of tool I and tool II. Tool I consists of two parts.

Tool I- Part I: Demographic Characteristics

It consists of nine items, which include age, gender, educational qualification, years of teaching experiences, religion, monthly income, marital status, number of children and previous source of information for obtaining baseline information about the teachers.

Tool I- Part I; Structured knowledge questionnaire

Structured knowledge questionnaire consisted 36 questions covering four aspects of behavioural problems of primary school students. Each correct response carried weightage of one score and each wrong response carries '0' mark.

Tool II: Attitude scale

This comprised of 34 items, which reflects the attitude of teachers towards behavioural problems of primary school students. The statements were framed into likert type of attitude scale and were randomly distributed over the scale. There were 21 positive items and 13 negative items. The negatively stated items were reversibly score. The response of each item was measured on five point scale.

Development of planned teaching programme

The following steps were adopted for developing PTP

Criteria check list

A criteria check list was prepared as a first step towards the development of PTP, after reviewing of literature and consulting the experts. The areas included in the criteria checklist were objectives, Selection of content, Organization and presentation of content, Language and Feasibility. The criteria checklist included major criteria and sub-criteria for which experts were asked to give their rating 'agree', 'disagree' and 'remarks and suggestions'.

Preparation of the PTP

The investigator prepared the overall plan of PTP and used power point as an Audio Visual aid. The developed PTP was given to eleven experts to establish content validity and were asked to give their opinion and suggestion about the content of PTP. They were given the criteria checklist and asked to place a tick mark (✓) against ‘agree’ or ‘disagree’. There was 100% agreement on the content of the PTP. A few validators asked to modify and simplify the language. Their suggestions were incorporated into final draft.

Results

The data was analyzed by using descriptive and inferential statistics i.e. percentage, mean and standard deviation. The ‘t’ tests and chi-square was applied to test the hypotheses and to assess the effectiveness of PTP.

Major Findings: Findings of the study shows that the majority of teachers (90%) were female and 55% were in the age group of <30 years. In the pre-test phase majority of teachers (67.5%) had an average knowledge score, and the mean percentage was 48.63%, whereas in the post-test phase majority (42.5%) have a very good knowledge score, and the mean percentage increased to 77.76%.

Fig. 1: Diagram Showing Grading of Pre-test and Post-test Knowledge Scores.

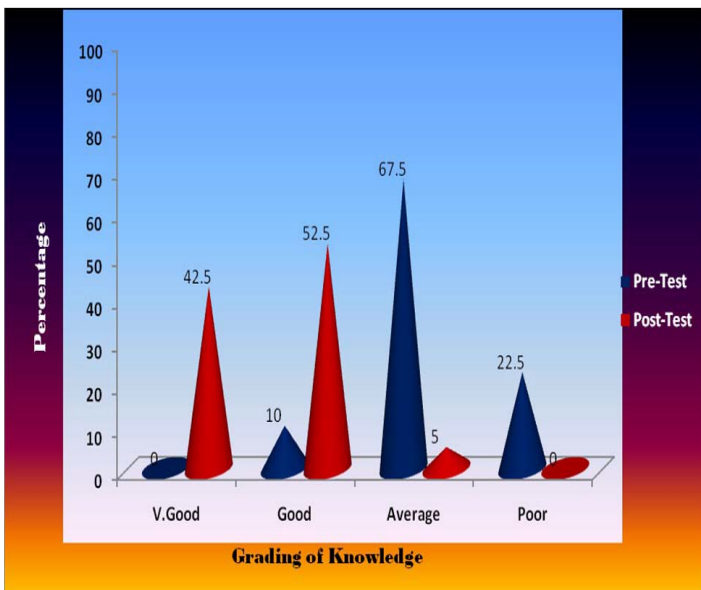


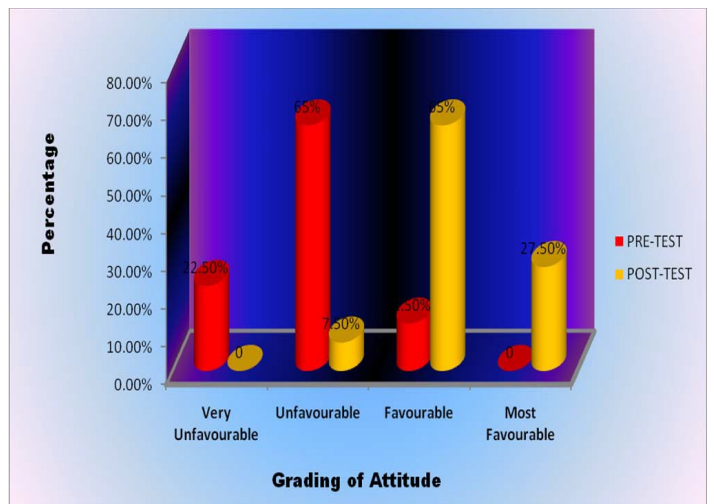
Figure depicts that in the pre-test most of the respondents (67.5%) comes in the category of average and, (10%) in the category of Good and (5%). None of the respondents were in very good category. In the post-test (42.5%) of the respondents fall in the category of very good, 52.5% were in the category of good, 5% were in the category of average and none of them fell in the category of poor.

Table -1 Range, Mean, Median and Standard deviation of Pre-Test and Post-Test knowledge Scores of the Teachers.
n= 40

Area	Range	Mean	Median	Standard deviation	Std. Error
Pre-test	08-28	17.4	18	4.22326	0.670
Post-test	19-34	27.9	28	3.53290	0.559

The mean post-test knowledge score ($\bar{X}_2 = 27.9$) is apparently higher than the mean pre-test score ($\bar{X}_1 = 17.4$). It indicates that there is an increase in post-test knowledge score and the standard deviation of post-test score (SD=3.53) showed that they more dispersed than the pre-test knowledge score (SD=4.22). It is due to the effectiveness of planned teaching programme.

Fig. 2 : Diagram Showing Grading of Pre-test and Post-test Attitude Scores.



In the pre-test phase only (12.5%) of teachers had a favourable attitude score, and the mean percentage was 70.13%, whereas in the post-test phase majority (65%) have a favourable attitude score, 27.5% had most favourable attitude score and the mean percentage increased to 84.6%.

Table -2 Range, Mean, Median and Standard Deviation of Pre-Test and Post-Test Attitude Scores of the Teachers.
n=40

Attitude score	Range	Mean	Median	Standard deviation	Std. Error
Pre-test	104-136	119.2	118.5	9.0	1.426
Post-test	121-161	143.5	142	9.8	1.584

Table 2 reveals that the subject’s attitude score (range 121-161) in the post – test is at a higher level as compared to their pre-test attitude score (range 104-136). It is also evident that the mean post-test attitude score (\bar{X} =143.5) was apparently higher than the pre-test score (\bar{X} =119.2). The standards deviation of post-test scores (SD =9.8) showed that they are more dispersed than the pre-test attitude score (SD=9.0)

It is observed from the above two tables that, the post test scores of respondents were significantly improved in the level of knowledge and change of attitude regarding behavioural problems of primary school students after PTP was administered.

Table -3 Mean, ‘t’ value and P value on Pre-test and Post-test Knowledge and Attitude Scores. n=40

Group	Area	Pre-test	Post-test	‘t’ Value	‘P’ Value
Primary school teachers	knowledge score	17.4	27.9	12.31*	.05
	Attitude score	119.2	143.5	11.47*	.05

Table 3 reveals that the Paired ‘t’ test values are 12.31 (Knowledge) and 11.41 (Attitude) which are statistically significant improvement at p< 0.05 level. This indicates that PTP was effective in improving the knowledge and change the attitude among primary school teachers regarding behavioural problems of primary school students.

There was a statistical significant relationship between Knowledge and Attitude scores on behavioural problems r=0.681. There was no significant association between the demographic variables and knowledge and Attitude.

Discussion

Age wise distribution of teachers revealed that the majority of the respondents (55%) were <30 years, 35% were 31-40 years and in relation to gender most of the respondents (90%) were females and (10%) were males. Highest percentage of i.e 67.5% were completed B.Ed and 32.5% were completed D.Ed. On the basis of years of experience revealed that majority of the teachers (40%) had 1-3 years

of experience, 32.5% of the teachers are having more than five years of teaching experience Data collected prior to the administration of PTP reflected that most of the Teachers (67.5%) had an average knowledge on behavioural problems and its management. The pre-test mean scores of knowledge and attitude were found to be 17.2, 119.2 with the enhancement of 27.9, 143.5 in the post-test. Paired ‘t’ value 12.31, and 11.47 are statistically found significant at p<0.05 level. The study findings clearly shows that the planned teaching programme was effective in increasing the knowledge and changing the attitude of teachers and this will help them to early identification of the problems among the students and provide an quality teaching and have a good attitude towards students.

Conclusion

Behavior problems among primary school students have the potential to have very serious consequences for individuals and for society as a whole. Nurses, with their unique knowledge, skills, and effective nursing interventions like guiding the teachers regarding the behavioural problems and managing the students in schools are great. Relate with the study, it concludes that the PTP on Behavioural Problems was effective in enhancing the knowledge and changing the attitude of primary school teachers.

Nursing Implications of the study

Based on the findings of the present study measures can be taken at various levels to improve the knowledge and attitude of school teachers. The implications of this study were discussed under the following headings: nursing education, nursing administration, nursing research, community health practice and general education.

References:

- Clunn P. Child psychiatric nursing. Philadelphia: Mosby year book; 1991.
- Polit DF, Hungler BP. Nursing Research Principles and Method. 3rd ed. Philadelphia: J.B.Lippincott Company; 1999.
- Best JN, Khan J. Research in Education. 7ed. New Delhi: 1994.
- Rabbani MG, Hossain MM. Behaviour disorder in urban primary school children. Dhaka: J of Social Psychology.1999; 133 (5).
- Brown J. Comparison of diagnostic criteria for ADHD in a countrywide sample. J Am Acad Child Adolesc Psychiatry. 1996; 35(3): 319-324.

RESEARCH ARTICLE

ASSESSMENT OF THE EFFECTIVENESS OF IEC PACKAGE ON KNOWLEDGE REGARDING THE RISK FACTORS AND MANAGEMENT OF OBESITY AMONG ADULTS IN A SELECTED RURAL COMMUNITY, BANGALORE

Ms. Suchismita Bhowmik, MBNC, Bardoli, Gujarat.

ARTICLE INFO

Article History:*Received 24th April, 2018**Received in revised form 4th May 2018**Accepted on 15th May 2018**Published online 24th May 2018***Key Words:**

IEC, Knowledge, Risk, Management, Obesity, Adults

ABSTRACT

Obesity is the second leading cause of preventable deaths; smoking is the first. Obesity is associated with many significant health problems, including high blood pressure, heart disease, diabetes, stroke, osteoarthritis, sleep apnea, premature death, and decreased quality of life. An experimental study was conducted to assess the effectiveness of IEC package (Information, Education and Communication) on knowledge regarding the risk factors and management of obesity among obese adults in selected Sulekere rural community, Bangalore (2013-14). The study was intended on Pre experimental: - one group pretest –posttest design. Simple random sampling technique was adopted to select the 60 number of sample for this research study. The study was performed on four different phases by collection of data on 6 week of duration. Phase I: Assessment of the prevalence of obesity among adults using BMI. Phase II: Assessment of the existing knowledge regarding the risk factors and management of obesity, among the adults with the help of structured interview schedule. Phase III: IEC package has given to the adults through pamphlets; Phase IV: After a period of one week of IEC posttest knowledge assessment done within the same group using same structured interview schedule.. The data collected and analyzed by using descriptive and inferential statistics. The result shows that after administration of IEC package there is remarkable improvement of knowledge (post test- 86.7%) of adults on risk factors and management of obesity. It was evident that the IEC package was significantly effective imparting knowledge regarding risk factors of obesity among obese adults.

Copyright © UTUJAH I 2018. Ms. Suchismita Bhowmik. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Obesity is a medical condition in which excess body fat has accumulated to the extent that it may have an adverse effect on health, leading to reduced life expectancy and/or increased health problems. Body Mass Index (BMI), a measurement which compares weight and height, defines people as overweight (pre-obese) if their BMI is between 25 and 30 kg/m², and obese when it is greater than 30 kg/m².

In India urbanization and modernization has been associated with obesity. In Northern India obesity was most prevalent in urban populations (male = 5.5%, female = 12.6%), followed by the urban slums (male = 1.9%,

female = 7.2%). Obesity rates in rural populations (male = 1.6%, female = 3.8%). Socioeconomic class also had an effect on the rate of obesity.

Women of high socioeconomic class had rates of 10.4% as opposed to 0.9% in women of low socioeconomic class. Obesity is associated with many significant health problems, including high blood pressure, heart disease, diabetes, stroke, osteoarthritis, sleep apnea, premature death, and decreased quality of life. Even modest weight loss can reduce an individual's risk for these diseases and outcomes. In adult: Any BMI <18.5 is underweight, BMI= 18.5 to 24.9 is normal weight, BMI = 25-29.9 is pre obese, BMI= 30-34.9 is obese class I, BMI=35-39.9 is obese class II, BMI ≥ 40 is obese class III⁴.

Obesity occurs when eating and drinking is more calories than the burn through exercise and normal daily activities. The body stores these extra calories as fat. Obesity usually results from a combination of causes and contributing factors, including: genetics, inactivity, unhealthy diet and eating habits, family lifestyle, pregnancy, lack of sleep, certain medications, age, social and economic factors, medical problems. Obesity is the second leading cause of preventable deaths.

Management of obesity include; 1. Dieting 2. Exercise 3. Weight loss programs, 4. Medication 5. Surgery^{5,6}. According to WHO Expert Committee, 1995 the weight control is widely defined as approaches to maintaining weight within the 'health' (i.e. normal or acceptable) range of body mass index of 18.5 to 24.9 kg/m² throughout adulthood. It should also include prevention of weight gain of more than 5 kg in all people. In those who are already over-weight, a reduction of 5-10% of weight is recommended as an initial goal. Health education has an important role in play to teaching the people how to reduce overweight and prevent obesity.

Need for the study

Prevalence of obesity in India (BMI > 30 kg/m²) according to state wise are: Delhi urban female 33.4; population of Hyderabad urban female 36.3%;, so much so that in 1997 the World Health Organization (WHO) formally recognized obesity as a global epidemic. As of 2005 the WHO estimates that at least 400 million adults (9.8%) are obese, with higher rates among women than men.

As of 2008, The World Health Organization claimed that 1.5 billion adults, 20 and older, were overweight and of these over 200 million men and nearly 300 million women were obese. The rate of obesity also increases with age at least up to 50 or 60 years old.⁹ As per the current definition for Asian Indians (BMI >23-25Kg/m²), the prevalence of overweight was higher among males (18.1 %) than females (21.3 %) and obesity (BMI >25 Kg/m²) was higher among females (21.3%) than males (18.3%) and by the international criteria for obesity (BMI>30kg/m²) the prevalence rate was 7.9 percent among males and 12.48 percent among females. A recent study led by the Organization for Economic Co-operation and Development (OECD), published in the Lancet, has ranked India in the forefront of an obesity epidemic. Statistics point to an increase in overweight or obese citizens by 20% between 1998 and 2005. Presently, one in 6 women and one in 5 men are overweight in India. Indeed, there is a dire need to trim, as obesity figures are bulging dangerously at a staggering 70 million in India. According to the World Health Organization (WHO), 1.2 billion people worldwide are officially classified as overweight.

Statement of the problem

A study to assess the effectiveness of IEC package on knowledge regarding the risk factors and management of obesity among obese adults in selected rural community, Bangalore.

Objectives

1. To assess the prevalence of obesity among adults in selected rural community.
2. To assess the pretest knowledge regarding the risk factors and management of obesity among obese adults.
3. To assess the posttest knowledge regarding the risk factors and management of obesity among obese adults.
4. To compare the pre-test and post-test level of knowledge regarding the risk factors and management of obesity among obese adults.
5. To associate the pretest knowledge regarding the risk factors and management of obesity among obese adults with their selected demographic variables.

Hypotheses

H₁: There will be no significant difference between the mean pretest and posttest knowledge regarding risk factors and management of obesity, among obese adults.

H₂: There will be no significant association between pre-test knowledge, regarding the risk factors and management of obesity among obese adults with their selected demographic variables.

Materials and Methods

Research design: Pre experimental: - one group pretest –posttest design.

Variables:

Dependent variables: Knowledge regarding the risk factors and management of obesity among obese adults.

Independent variables: IEC package on knowledge regarding the risk factors and management of obesity.

Demographic variables: Demographic data of adults includes base line information of the adults such as age, sex, marital status, religion, educational status, occupation, income, habits, dietary pattern, BMI (Body Mass Index), family history.

Setting: The study will be conducted at Sulekere rural community, Bangalore.

Population: All the adults of Sulekere rural community, Bangalore.

Sample: The adults who fulfill the inclusion and exclusion criteria for the study, sample size is 60.

Criteria for sample selection

Inclusion criteria:

The study includes the adults:-

1. Both male and female adults.
2. Between the age group of 40-60 and with BMI \geq 30kg/m².
3. Who are able to understand Kannada.

Exclusion criteria:

The study excludes the adults:

1. Who are not willing to participate in study.
2. Who are not available at the time of study.

Sampling technique: Simple random sampling technique.

Tool for data collection

The tool consists of the following sections:

Section A:

Demographic data which gives base line information of the adults such as age , sex, marital status, religion , educational status ,occupation, income , habits, dietary pattern, BMI, family history.

Section B:

Structured interview schedule to assess the knowledge of adults regarding risk factors and management of obesity in selected community.

Methods of data collection

After obtaining the official permission from the PHC, community leaders of Sulekere and informed consent from the samples, the investigator will personally collect the data in the following phases.

Phase I: Assessment of the prevalence of obesity among adults using BMI.

Phase II: Assessment of the existing knowledge regarding the risk factors and management of obesity, among the adults with the help of structured interview schedule.

Phase III: IEC package will be given to the adults through;

Providing information by distributing pamphlet, regarding the risk factors and management of obesity, educating them by using flashcards on individualized basis for 45 minutes and communicating by conversation through local language regarding the risk factors and management of obesity among obese adults in the rural community.

Phase IV: After a period of one week of IEC posttest knowledge will be assessed within the same group using same structured interview schedule.

Duration of data collection: 4-6 weeks.

Plan for data analysis

The data collected will be analyzed by using descriptive and inferential statistics.

Descriptive statistics

Frequency, percentage distribution, mean and standard deviation will be used to analyze the knowledge regarding the risk factors and management of obesity among the adults.

Inferential statistics

- Paired ‘t’ test will be used to compare the pre-test and post-test knowledge of adults.
- Chi square test will be used to analyze the association between knowledge on risk factors and management of obesity among obese adults with their selected Demographic variables.

Results

Table No. 1: Prevalence of obesity of adults in Sulekere

Sl. No	Area	Population	Number of obese adults	Prevalence
1.	Sulekere	2880	128	4.44%

Table-1 Shows that in Sulekere, the total adults of 2880 among which 128 were assessed to be obese and hence the prevalence rate was 4.44%.

Table No. 2: Distribution of obese adults in selected rural community according to their level of knowledge regarding the risk factors and management of obesity before administration of IEC package.

n=60

Sl. No	Pre-test level of knowledge	No.	Percentage
1.	Inadequate	60	100
2.	Moderately adequate	-	-
3.	Adequate	-	-

Table-2 Shows in the pre-test all the adults 60(100%) had inadequate knowledge regarding risk factor and management of obesity.

Table No. 3: Distribution of obese adults in selected rural community according to their level of knowledge regarding the risk factors and management of obesity after administration of IEC package.

n=60

Sl.no	Post-test level of knowledge	No.	Percentage
1.	Inadequate	2	3.3
2.	Moderately adequate	6	10.0
3.	Adequate	52	86.7
4.	Total	60	100

Table-3 Shows that in pre-test, 2(3.3%) of them had adequate knowledge, 6(10.0%) had moderately adequate knowledge and 52(86.7%) had adequate knowledge regarding risk factor and management of obesity.

Table No. 4: Comparison of range,mean,means percentage, standard deviation and statistical significance of pre-test and post-test knowledge regarding the risk factors and management of obesity among obese adults.

n=60

Assessment	Range	Mean	Mean %	SD	t-value	p-value
Pre Test	8-14	11.93	37.7	1.40	32.82*	P<0.05
Post Test	13-28	23.83	79.4	2.57		

Table-4 shows the difference between the ranges, mean, mean%, standard deviation of pre and post-test knowledge regarding risk factor and management of obesity among obese adults. In pre-test mean (11.93) was less than the post-test mean(23.83), pre-test percentage (37.7%) was lower than the post test mean percentage (79.4) and pre-test SD 1.40 was lower than the post-test SD2.57 and the t-value was found to be 32.82 which was highly significant at $p < 0.05$ level.

The study also shows the chi-square value at the level of $p = 0.05$ for knowledge and proves that there is association between pre-test knowledge regarding risk factor and management of obesity among obese adults with their selected demographic variables, such as family history of obesity and age, hence research hypotheses is accepted and the null hypothesis was rejected.

Discussion:

The finding of the study revealed that among adults out of age ,6(60%) of the obese adults belong to 40-50 years;4 (40%) of them belong to 51-60years; with regard to sex of adults,4(40%) of them are male and 6(60%) of them are females with regard to religion 6(60%) were Hindu,2 (20%) were Muslim,2(20%) were Christian. With regard to marital Status 6(60%) were married,1(10%) were unmarried,3(30%) were widows. Studies up to primary education;4(40%) of them studied up to secondary education 4(40%), 1(10%) was up to degree and 1(10%) has no formal education. With regard to occupation of adults,2 (20%) of them were skilled worker; 5(50%) belong to semi-skilled worker and 3(30%) were housewife. With regard to family history 6(60%) of them has and 4(40%) of them don't have family history of obesity. Sources of information 8(80%) has no information about the risk factor and management of obesity. In post test 86.7% has Adequate knowledge, 6% has moderately adequate knowledge and 3.3% has inadequate knowledge regarding risk factor and management of obesity.

Summary

An extensive review of literature was done which enabled the investigator to study the selected problem in depth, to develop conceptual framework, to construct the tool, analyse and interpret the data. The study was design to assess the knowledge regarding risk factor and management of obesity among obese adults. 60 obese adults were selected through simple random sampling technique. After administration of IEC package (post-test) majority of adults 52 (86.7%) had adequate knowledge and pre-test mean (11.93) was less than the post-test mean (23.83), pre-test mean Percentage (39.7) was lower than the post-test mean percentage (79.4%) and pre-test standard deviation 1.40

was lower than post test standard deviation 2.57. The paired t-test was carried out and it was found to be invariably significant at $P < 0.05$ level, hence null hypotheses (H_{01}) was rejected and research hypotheses H_1 was accepted. It was evident that the IEC package was significantly effective on improving the knowledge regarding risk factors and management of obesity among obese adults.

Conclusion

This present study assessed the knowledge regarding risk factors and management of obesity among obese adults. In the pre test to assess the level of knowledge, all the obese adults 60 (100%) had inadequate knowledge and in post test majority of adults 52(86.7%) of them had adequate knowledge. The study concluded that IEC package is significantly effective on improving the knowledge regarding risk factors and management of obesity among obese adults.

Nursing implications

The results of the study have implication on nursing service, nursing education, nursing administration and nursing research. The community health nurse can identify the various risk factors and teach the adults about the management to prevent obesity.

Recommendation

1. The study may be replicated using larger populations of the adults.
2. A similar kind of study can be undertaken in different in different settings
3. A similar study can be replicated ,but the interval between the pre-test and post-test should be more than 15-30 days.
4. A study can be conducted using other dependent variables.

Limitation

The study was limited to rural adults . The study was limited to adults who are obese .

LIST OF REFERENCES

- World Health Organization. Obesity: Preventing and Managing the Global Epidemic. Technical Report Series 894: Geneva: World Health Organization; 2000.
- Yadav K, Krishnan A, "Changing patterns of diet, physical activity and obesity among urban, rural and slum populations in north India". *Obese Rev*9 (5): 400 –8.
- Epidemiology of obesity http://en.wikipedia.org/wiki/-cite_note-India2008-15#cite_note-India2008-15.

RESEARCH ARTICLE

EFFECTIVENESS OF TRAINING PROGRAMME ON KNOWLEDGE AND PRACTICE OF STAFF NURSES REGARDING HANDING OVER AND TAKING OVER OF PATIENTS DURING CHANGE OF SHIFT

Mr. Muhammad Koyiliodath, Prof. Marry Sham Bhat, Mrs. Poongudi U, Mrs. Florine Clara Fernandes Lourde
College of Nursing, Taliparamba

ARTICLE INFO

Article History:

Received 24th April, 2018

Received in revised form 28th May 2018

Accepted on 31st May 2018

Published online on 2nd June 2018

ABSTRACT

Handing over and taking over is seen as an important part of each nurse's shift, not only for information sharing, but from the resource management aspect of both the time and the subsequent financial cost of nurses being involved. Non-experimental one group pre and post test study was conducted to evaluate the effect of a training programme on handing over and taking over of patients during change of shift among the staff nurses at Unity Hospital, Unity care and health services, Mangalore at different wards. A total number of 30 staff nurses working in a selected wards of mentioned hospital by a non-probability purposive sampling technique. The data was collected by base line proforma, a structured knowledge questionnaire and observation check list. The finding of the study revealed that there is significant difference in mean pre test and post test knowledge and practice scores after the intervention of training programme. The Calculated overall "r" value of pre test knowledge to pre test practice was 0.305 which is not more than the table value of 0.362 which suggests that there was no co-relation from pre test knowledge to pre test practice scores, whereas over all post test knowledge to practice calculated "r" value was 0.500 which was more than that of table value of 0.362 at 28 d.f which suggests that there is a positive co-relation from post test knowledge to practice scores. Since there is only one category in the areas of Age and Marital status so there is no association to pre test knowledge and practice scores.

Key Words:

Effectiveness, Teaching, Programme, Handing, patient, Shift.

Copyright © UTUJAH I 2018. Mr. Muhammad Koyiliodath. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

A good nursing handover process is a crucial part of providing quality nursing care in a modern healthcare environment. The conversation of patient data during the handover process is vital to ensure good continuity of care and safe practice. Any errors or omissions made during the handover process may have dangerous consequences. Bedside handovers offer an immediate solution to the many problems that are associated with the traditional handover. Bed-side reporting makes it possible for nurses starting their shift to obtain a better insight into the care each patient. A study was carried out with a purpose of identifying the effect of a training programme on handing over and taking over of patients during change of shift

among the staff nurses who are working in selected areas of hospital at Mangalore.

Statement of the problem

A study to Effectiveness of Training Programme on Knowledge and Practice of Staff Nurses regarding handing over and taking over of Patients during change of Shift in a selected hospital at Mangalore.

Objectives

- Assess the knowledge of staff nurses regarding handing over and taking over of patients using a structured knowledge questionnaire

- Assess the practice of staff nurses regarding handing over and taking over of patients using an observation check list.
- Evaluate the effectiveness of training programme regarding handing over and taking over of patients during change of shifts among staff nurses
- Correlate the knowledge and practice regarding handing over and taking over of patients during change of shift among staff nurses
- Find the association between the pre intervention knowledge and practice score on handing over and taking over of patient during change of shifts and selected baseline variables.

Hypotheses

All hypotheses will be tested at 0.05 level of significance

H1: The mean post test knowledge score regarding handing over and taking over of patients during change of shift will be significantly higher than mean pre test knowledge scores.

H2: The mean post test practice score regarding handing over and taking over of patients during change of shift will be significantly higher than mean pre test practice scores.

H3: There will be a significant association between pre test knowledge and practice scores and selected baseline variables

Methods and materials

Research approach: An evaluative approach was considered for the present study as the objective is to evaluate the Effectiveness of training programme on Knowledge and practice of staff nurses Regarding handing over and taking Over of patients during change of Shift.

Research design: Non- experimental one group pre and post test design was used for this study.

O₁ X O₂ O₃

O₁- Assessment of Pre intervention practice and knowledge scores.

X- Training programme on knowledge and practice of staff nurses regarding handing over and taking over of patients during change of shifts.

O₂- first time assessment of Post intervention knowledge and practice scores.

O₃-second time assessment of Post intervention practice score.

Variables under study

Independent variable

Training programme on handing over and taking over of patients during change of shifts.

Dependent variable

Knowledge and practice of staff nurses on handing over and taking over of patients during change of shifts working in selected wards of Unity Hospital, hospital at Mangalore.

Extraneous variable

The extraneous variables in this study are Age in completed years, Gender, Professional qualification, Duration of clinical experience in the current area of work; Specify your previous area of working and year of experience, Marital status, Distance from the hospital to home/hostel and Mode of transportation.

Setting of the study

The study was conducted in Unity hospital, a premier unit of Unity health complex, Mangalore. It is an ultra modern, fully equipped multi-specialty hospital with 250 number of bed strength. The present study was conducted among staff nurses working in selected areas of wards in mentioned hospital.

Sample and Sampling Technique

Sample comprised of 30 staff nurses working in a selected wards of Unity Hospital, at Mangalore, and who fulfilled the sampling criteria.

Sampling Technique

The sample for the present study was selected by a non-probability purposive sampling technique. The samples were selected according to the inclusion and exclusion criteria.

Sample Size

The study consisted of 30 staff nurses working in selected wards of Unity hospital at Mangalore

Inclusion criteria

In the present study the inclusion criteria includes:

1. Registered nurses who worked in a selected wards of Unity hospital at Mangalore.
2. Registered nurses who are able to understand English.
3. Registered nurses who present during the period of data collection

Exclusion Criteria for Sampling

In the present study exclusion criteria includes:

1. Registered nurses who were not willing to participate.
2. Registered nurses who were absent while conducting training programme.

Description of the final tool

The tool consisted of a self administered questionnaire and observation check list. It was used to elicit the knowledge and practice of registered nurse on handing over and taking over of patients during change of shift.

The tool was consisted of two sections.

Tool 1: Part A) Baseline proforma

Part B) Structured Knowledge questionnaire on handing over and taking over of patients during change of shift

Tool 2: Observation check list on Handing over and taking over of patients during change of shift.

Part A) Baseline proforma:

It is composed of 8 items in relation to the basic information of the sample. It consists of identification data such as are Age in completed years, Gender, Professional qualification, Duration of clinical experience in the current area of work, Specify your previous area of working and year of experience, Marital status, Distance from the hospital to home/hostel and Mode of transportation.

Part B) Structured Knowledge questionnaire on handing over and taking over of Patients during change of shift

It consists of 25 multiple choice questions covering all the aspects of knowledge on handing over and taking over of patients during change of shifts.

Scale Percentage Level of knowledge

- 0-10 0-40% Poor
- 11-15. 41-60% Moderate/Average
- 16-20 61-80% Good
- 21-25 81-100% Very good

A score of very good and good knowledge was considered as adequate knowledge; moderate and poor knowledge was considered as inadequate knowledge.

Tool 2: Observation check list on Handing over and taking over of patients during change of shift.

The observational check list used to assess the practice of staff nurses on handing over and taking over of patients during change of shift working in selected hospital at Mangalore. The tool consisted of 59 items in four areas: Preparation for handing over, Process of handing over and taking over, Documentation of handing over and taking over, Handing over and taking over of special care clients. The investigator observes the nursing care activities on handing over and taking over of patients during change of shift and places a tick (✓) mark in the appropriate column. The maximum possible score was 59 including special care settings clients. The score obtained by the staff nurses were arbitrarily classified into four levels.

Scale Percentage Level of practice

- 0 – 21 0 - 50% Poor
- 22 – 30 51 - 70% Moderate/Average
- 31 – 38 71 - 90% Good
- 39 – 43 91 - 100% Very good

Handing over and taking over of special care clients- it was not applicable to all the patients. Whenever it was applicable to any patient the nurse had to mention it. This area included 16 items regarding special care of the patient.

Pre-intervention assessment of practice scores of staff nurses on handing over and taking over of patients during change of shift was assessed. Then training programme on handing over and taking over was implemented and after that, first post test intervention done on 7th day. Second post intervention practice score only assessed after 7 days of first post test.

Results or interpretation

Table 1: Overall pre-test knowledge of mean, median, standard deviation and % mean of knowledge scores of samples. N=30

Pre-test knowledge Score	Mean	Median	SD	Mean %
	8.27	9	2.803	33.07%

Data presented in table 1 show that the mean of the knowledge scores obtained\ by the samples was 8.27 ± 2.803 and the percentage mean was 33.07%.

Table 2: Over all pre-test practice of mean, median and standard deviation and % mean of practice of samples N=30

Pre-test practice Score	Mean	Median	SD	Mean %
	23.80	24	2.203	55.35%

Data presented in table 2 shows that the mean of the practice scores obtained by the samples were 23.80 ± 2.203 and the percentage mean was 55.35%. In addition to overall pre interventional assessment of knowledge and practice, area wise pre interventional assessment of knowledge and practice of samples was

Table 3: Area-wise pre-test knowledge of mean, standard deviation, standard error, and percentage mean of samples

Areas of knowledge	Mean	SD	SE	Mean %
Introduction	3.07	1.112	0.203	61.33
Definition	0.47	0.507	0.093	46.67
Change of shift report	0.90	0.712	0.130	30.00
Elements of handover	2.57	1.478	0.270	25.67
Do's and don'ts during handing	0.23	0.430	0.079	23.33
Problems of handing over	0.23	0.430	0.079	11.67
Improvement of handovers	0.17	0.379	0.069	16.67
Techniques of handovers	0.27	0.450	0.082	26.67
Barriers of handovers and taking over	0.37	0.490	0.089	36.67

The data presented in the table 3 shows that the pre-test knowledge scores was highest in the area of “Introduction of handing over and taking over” with the mean percentage of 61.33% ± 1.112. The mean percentage level of knowledge scores was found to be lower in the area of “problems of handing over and taking over” with the mean percentage of 11.67% ±0.430.

Table 4: Frequency and percentage distribution of knowledge of samples undergone training programme on handing over and taking over of patients during change of shift. N=30

Level of knowledge scores	Pre test		Post test	
	f	%	f	%
Poor	23	76.7	0	0
Moderate	7	23.3	1	3.3
Good	0	0	9	30
Very good	0	0	20	66.7

The data presented in Table 4 shows that majority of the samples (76.7%) were poor level of knowledge score in the pre-test and 23.3% were moderate level of knowledge score. In the post-test 66.7% of the samples were very good level of knowledge score, and 30% of the samples were good level of knowledge score, only 3.3% of the samples were moderate level of knowledge score.

Fig. No. 1: Frequency and percentage distribution of knowledge of samples undergone training programme on handing over and taking over of patients during change of shift.

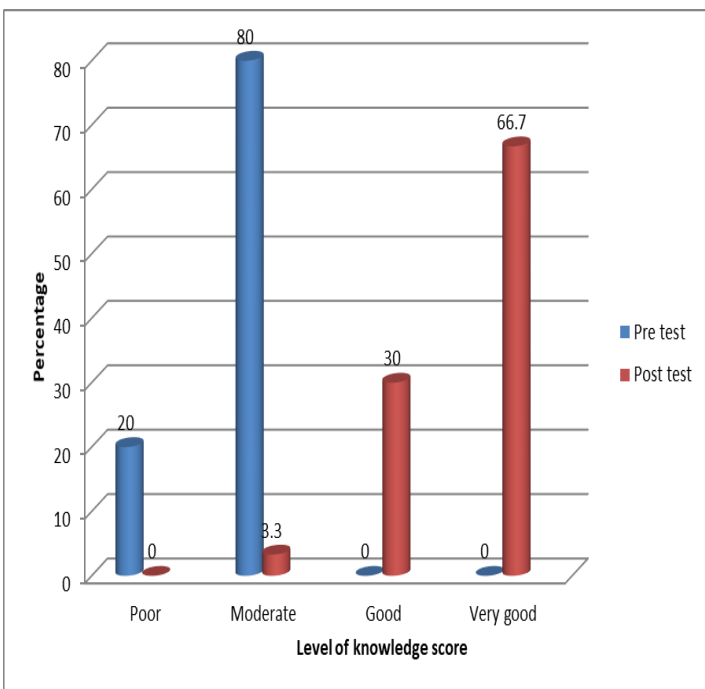
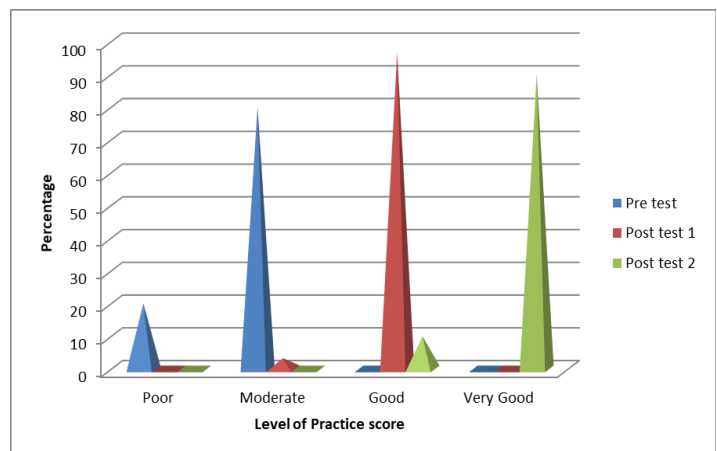


Table 5: Frequency and percentage distribution of practice of samples undergone training programme on handing over and taking over of patients during change of shift. N=30

Level of practice	Pre-test		Post test intervention Observations			
			Post-test -1		Post-test -2	
	f	%	f	%	f	%
Poor	0	20	0	0	0	0
Moderate	24	80	1	3.3	0	0
Good	0	0	29	96.7	3	10
Very good	0	0	0	0	27	90

The data presented in Table 5 represents the distribution of samples in different levels on first and second time practice observation interventions. On pretest 20% of the samples were poor level of practice and 80% samples were moderate level of practice. On first post test observation, 96.7% of the samples were good level of practice. On second time post test observation a 90% of samples were on very good level of practice scores.

Fig. 2: Frequency and percentage distribution of practice of samples undergone training programme on handing over and taking over of patients during change of shift.



Section I: Effectiveness of training programme in improving the knowledge and practice of samples on handing over and taking over of patients during change of shift.

Table 6: Over all mean, standard deviation, standard error, percentage mean and “t” value of pre- test and post-test knowledge scores of samples on handing over and taking over of patients during change of shift.

N=30

Knowledge scores	Mean	SD	Standard Error	Percentage mean	“t” value
Pre test	8.27	2.803	0.512	33.07	20.37
Post test	21.33	2.564	0.468	85.33	

“t29” =1.70, at 0.05 level. Highly significant (P<0.05).

Data in table 6 depicts that the mean post-test knowledge score (21.33±2.564) is higher than the mean pre-test knowledge score (8.27±2.803). The obtained “t” value (t 29=20.37, p<0.05) was found to be greater than the tabled value (t 29=1.70) at 0.05 level of significance. Hence the null hypothesis was rejected and the research hypothesis was accepted. Hence it concluded that the training programme on handing over and taking over of patients during change of shifts was effective in improving the knowledge score of samples on handing over and taking over of patients during change of shifts.

Table 7: Over all Mean, SD, percentage mean and ANOVA values of practice of effectiveness of administration of training programme on handing over and taking over of patients during change of shift. N=30

Pre test and post test intervention	Mean	SD	Percentage mean	ANOVA F Value
Pre-intervention (o1)	23.80	2.203	55.35	963.241
Post –intervention first time(o2)	33.97	2.059	78.99	
Post intervention second time (o3)	39.93	1.311	92.87	

p<0.05,*= significant, d.f=2, 58 table value=3.155

Data presented in table 7 shows that the calculated ANOVA, F value is 963.241 which is greater than that of the table value 3.155 at a degree of freedom 2, 58. It shows that the training programme on handing over and taking over of patients during change of shift was effective in improving the practices of the samples on handing over and taking over of patients during change of shift. Hence, the null hypothesis is rejected and research hypothesis is accepted, stating that the post intervention practice scores being significantly higher than the mean pre intervention practice scores, which shows that the training programme was effective in improving the practices of the samples.

Section II: correlate the knowledge and practice regarding handing over and taking over of patients during change of shift among staff nurses

Table 8: Over all “r” value of pre- test knowledge to pre-test practice, post-test knowledge to post test practice scores of samples on handing over and taking over of patients during change of shift. N=30

Pre- test and post-test knowledge scores	r value	d.f	Table value
Pre –Knowledge to Pre-Practice	0.305	28	0.362
Post –knowledge to Post-practice	0.500	28	0.362

The data presented in the table 8 shows the calculated overall “r” value of pre test knowledge to pre test practice was 0.305 which is not more than the table value of 0.362 at 28 degree of freedom which suggests that there was no co-relation from pre test knowledge to pre test practice scores, whereas over all post test knowledge to practice calculated “r” value was 0.500 which was more than that of table value of 0.362 at 28 d.f which suggests that there is a positive co-relation from post test knowledge to post test practice scores.

Nursing implications

The finding of the study has shown that staff nurses have inadequate knowledge and practice on handing over and taking over of patients during change of shift. The training programme could be used as an illustrative informational aid to staff, student nurses, nurse educators and patients. Although today’s nursing curriculum includes course on communication skills, it needs to lay further emphasis on information as a process. Continuing nursing education should be conducted for need awareness, effective training material and AV aids to express the content area clearly for staff nurses should be utilized.

Nursing practice

The present study revealed that the training programme on handing over and taking over of patients during change of shift was an effective method to improve the knowledge and practice of staff nurses. The nurse can take the role of a facilitator and educator and can educate the patients they care for, during their practice. Health care providers should have a sound understanding of the factors that improves the staff nurses knowledge and practice who are taking care of the patients during the time of shift.

Nurses should be trained to assess the knowledge and practice of handing over and taking over of patients and should be in such a position to improve their skills by using simple, practicable methods. The findings of the study highlights the effectiveness of training programme in improving the knowledge and practice of staff nurses that are undergoing training programme. Thus nurses understand the method of improving the skills and documentation of their patient's condition. Nurses can also teach the importance of handing over and taking over as an effective measure of improving the knowledge and practice.

Nursing Administration

Nurse administrators are the backbone of providing effective nursing care. They should make provision for nurses to devote time for planning and organizing nursing care activities for the improvement of knowledge and practice of staff nurses while taking care of the patients during change of shift who are undergoing training programme. The findings of the study can be used by the nurse administrator to assess the need for educating the staff nurses regarding handing over and taking over of patients during change of shift. The administrator, based on the felt needs, can plan the education program and also encourage staff nurses to do their duties in a better way.

Nursing education

The nurse educator can prepare and teach various measures for improving the knowledge and practice of staff nurses on handing over and taking over of patients during change of shift who are undergoing training programme. Administration of training programme is an easy, simple and the best method to improve the knowledge and practice of these aspects. The nurse as well as the nursing students should be taught about the importance of nursing care delivered to the patients as well as in day to day nursing care activities.

As a nurse educator, there are ample opportunities, for the nursing professional to educate the staff nurses on handing over and taking over of patients during change of shift and provide care in the clinical setting. The study emphasizes the significance of the short term courses or in-service education for nurses in advanced knowledge and practice on handing over and taking over during change of shift and in making use of facilities available in the management of patients in day to day care activities.

Nursing research

The study helps the nurse researcher to develop insight into the development of training module and materials for handing over and taking over of patients during change of shift towards promotion of quality of life.

Nurse researcher can investigate various aspects of handing over and can add to the knowledge and practice base. Nurses play a key role in providing health care to patients and being close to the patients they can conduct projects and research studies in the hospital. The present study also gives various recommendations, which can be considered and taken up as researches or project in different settings and population. The findings of this study can be used by the future researchers and it can be disseminated as to improve the knowledge and practice level of staff nurses who are undergoing training programme and add to their overall quality of life.

Recommendations

On the basis of findings of the study, the following recommendations are being made.

1. A similar study can be replicated on a large sample to generalize the findings
2. A similar study can be conducted amongst all the staff nurses who are working in all areas of hospital
3. An experimental study can be undertaken with control group for effective comparison.
4. A comparative study can be conducted between staff nurses and student nurses.
5. A comparative study can be undertaken to compare the knowledge and practice of staff nurses

Bibliography:

- McLean K. Report to Victorian Quality Council Clinical Handover: The next steps [PhD thesis]. VQC Report, university of Victoria; 2008.
- Jorn CM, White S, Kaneen T. Clinical handover: critical communications: MJA 2009; 190(11):108-9.
- Streeter A CR. What nurses say: communication behaviors associated with the competent nursing handoff. (Doctoral dissertations). The graduate school University of Kentucky; 2010.
- Bhabra G , Mackeith S, Monteiro P, Potheir DD. An experimental comparison of handover methods. Ann R Coll Surg Engl. 2007 Apr; 89(3): 298-300.

RESEARCH ARTICLE

EFFECTIVENESS OF PLANNED TEACHING PROGRAM ON LEGAL ASPECTS WHILE CARING MENTALLY ILL PATIENT IN TERMS OF KNOWLEDGE FOR STAFF NURSES WORKING IN PSYCHIATRIC UNITS

Mrs. B.N Sanadia, Ms. M.B.Panchal, Ms. Mistry Hiral

ARTICLE INFO

Article History:*Received 12th May, 2018**Received in revised form 21th May, 2018**Accepted on 8th June 2018**Published online 13th June 2018***Key Words:**

Legal, Mental, Knowledge, Staff Nurse, Psychiatriy

ABSTRACT

Mental health is not merely absence of mental illness. Most recently mental health has been defined as “a state of harmony between oneself & others, a co existence between the realities of self & that of other people & that of the environment”. Pre experimental study was conducted to assess the effectiveness of planned teaching programme on legal aspects while caring the mentally ill patient among the staff nurses. The main objective of the study was to assess the effectiveness of planned teaching program on knowledge regarding legal aspects among staff nurses. 30 samples were selected by non probability sampling method-purposive sampling technique. The data were collected by self administered structured knowledge questionnaire composed of two sections- section A: demographic data and section B: questionnaire for legal aspects while caring the mentally ill patients. The main finding of the study reveals that majority of the sample are female in the age group of 31-40 years with RNRM as their professional education. None of them had the opportunity to attend in service education on legal aspects in mental health nursing. The significant finding of the study was mean pre test knowledge score of the sample were 13.45 and mean post test knowledge score of sample were 25.62 which shows the effectiveness of planned teaching program.

Copyright © UTUJAH 2018. Ms. Hiral Mistry. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Health is one of those terms which most people find it difficult to define although they are confident of its meaning. The widely accepted definition of health given by WHO is “health is a complete state of physical, mental, social & spiritual well being & not merely absence of any diseases. Mental health is not merely absence of mental illness. Most recently mental health has been defined as “a state of harmony between oneself & others, a co existence between the realities of self & that of other people & that of the environment”. Any imbalance, disturbance in physical, mental, social & spiritual well being give rise to mental illness. Mental illness is maladjustment in living. It produces disharmony in the person’s ability to meet human needs comfortably or effectively & function within a

culture. Ethical and legal aspects are not that much crucial in other fields of nursing as in Mental health nursing. A nurse is responsible for 24 hours ward management of mentally ill patient. So she should be well versed in legal aspects of care & mentally ill patient. Thus, the knowledge of legal aspects regarding mental health is equally important to provide the best nursing services to the mentally ill patients.

Need for the study

Recent decades have seen a rapid expansion in the development & use of psychiatry in day to day life. It is estimated that about 18-20% people suffer from some sort of mental problem. Including those of 35 lakh people suffer from serious mental problem like schizophrenia, epilepsy,

depression, drug dependence etc. Keeping this in mind, the government of India has launched the National Mental Health program during seventh five year plan. Mental health services envisaged to include three components: treatment, rehabilitation & prevention. Sally Clayton, (1994), includes ethical & legal aspects in psychiatry & clinical use of legal standards for the nurses working in psychiatric units & hospital. The following data shows the mental health problems and its incidence.

Table No. 1: Mental health problems and its incidence.

Sr No	Mental health problems	Incidence
1	Severe mental illness	10-20/ 1000
2	Neurosis & psychosomatic disorder	2-3%
3	Mentally retarded person	0.5-1 % of all children
4	OPD attendance in government hospital	3.63 million/year
5	OPD attendance in private hospital	2.63 million/year
6	Total OPD attendance	6.29 million/year

(Source: Kamalam S, “Essentials in community health nursing practice”)

Statement of the problem

A study to assess the effectiveness of planned teaching program on legal aspects while caring mentally ill patient in terms of knowledge for staff nurses working in psychiatric units of selected government mental health hospital of Gujarat.

Objectives:

To assess the knowledge of staff nurses regarding legal aspects of caring patient with mental illness before & after exposure to planned teaching program.

Hypothesis:

H₀₁: There is no significant difference between mean pre test & mean post test knowledge score of samples regarding legal aspects while caring mentally ill patient exposed to PTP at 0.05 level of significance.

Delimitation:

- The study is delimited to the staff nurses caring mentally ill patient working in selective psychiatric unit of government mental hospital.
- The staff nurses should have previous working experience in caring mentally ill patient at least for 1 year.
- The study is delimited to selected psychiatric units of government mental hospital.

Materials and methodology:

- Research Approach** : Quantitative
- Research Design** : Pre experimental design
- Research method** : One group pre test post test design
- Research setting** : Mental health ward, Hospital for mental health, Delhi Chakla, Ahmedabad.
- Sample** : Staff nurses working in psychiatric units of selected government mental health hospital of Gujarat
- Sample size** : 30
- Sampling Technique** : Non probability sampling- Purposive sampling method.

Inclusion criteria:

- Staff nurses working in hospitals for mental health.
- Staff nurses willing to participate in study.

Description of tool:

Section:1- personal information regarding the staff nurses (name, age, education, qualification, any special training & professional experience)

Section:2- questionnaire to assess the knowledge regarding the legal aspects for caring mentally ill patient.

Plan for data analysis:

- Frequency & percentage computed for describing sampling characteristics.
- Mean & standard deviation of the pre test & post test knowledge score & performance of sample computed.
- Area wise mean, mean percentage of pre test & post test knowledge scores.

Results:

Socio demographic variable:

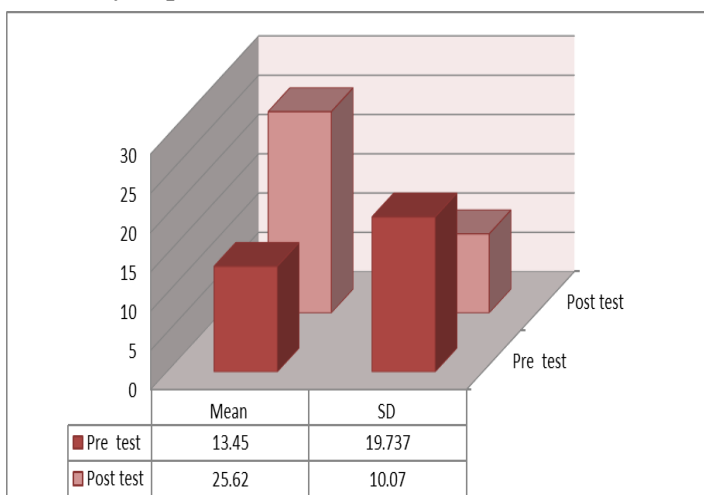
- 02 (6.66%) sample belongs to the age group of 21-30 years, 17 (56.66%) belongs to the age group of 31-40 years, 06 (16.6%) belongs to the age group of 41-50 years and 05 (20%) belongs to the age group of above 50 years.
- 03 (10%) sample were male & 27 (90%) were female.
- 29 (96.66%) sample have GNM qualification & 1 (3.33%) have DPNA qualification.
- 04 (13.33%) sample have attended special training in mental health, 07 (23.33%) have attended training in OT, 02 (6.66%) have attended training in ophthalmic, 02 (6.66%) have attended training in AIDS, 01 (3.33%) have attended training in cardiac & 14 (46.66%) have not attended any training.
- 08 (26.66%) sample were having professional experience of < 1 year, 11 (36.66%) were having professional experience of 1-5 years, 08 (26.66%) were having professional experience of 6-10 years & 03 (10%) were having professional experience of > 10 years.

Table No. 2: Area wise Mean, mean percentage, standard deviation knowledge score of sample regarding legal aspects & percentage gain of pre test & post test

Sr no	Legal aspects in mental health nursing	Max score	Pretest knowledge score			Post test knowledge score			‘t’ value	% gain
			Mean	%	SD	Mean	%	SD		
1	Introduction	8	3.3	41.65	2.8	6.7	83.75	2.1	42.1	
2	Admission	3	0.7	23.33	0.70	1.96	65.55	0.63	42.22	
3	Discharge, parole & transfer	4	1.43	35.83	2.82	3.13	78.33	2.42	42.5	
4	Informed & substituted consent	2	0.96	48.33	4.94	1.63	81.66	2.12	33.33	
5	Rights	12	4.9	40.83	5.65	9	75	0.70	34.17	
6	Nursing malpractice & record keeping	4	2.16	54.16	2.82	3.2	80	2.1	34.17	
Total		33	13.45		19.73	25.62		10.07	25.84	

Table No: 2 depicts that post test mean knowledge score (25.62) is higher than pre test mean knowledge score (13.45) and post test SD (10.07) is higher than the pre test SD (19.73).

Fig. No. 1: Bar graph shows Mean & SD of knowledge score of sample regarding legal aspects while caring mentally ill patient



Major findings:

1. 96.66% of samples are female with RNRM professional qualification.
2. 36.66% of samples were 1-5 year of professional experience in mental health department.
3. 13.33% of samples had special training in psychiatric nursing.
4. 46.66% had not attended any special training.
5. The mean pre test knowledge score of samples regarding legal aspects in all area was 41.21 whereas post test knowledge score was 77.41.

Conclusion:

- Knowledge deficit existed in all area of legal aspects among sample working in hospital for mental health.
- Sample gained knowledge after exposure to planned teaching program.

Recommendations:

Keeping in view the findings of the present project study, the following recommendation have been made for the study:

- A similar study can be replicated on a large sample covering entire nursing personnel working in psychiatric unit.
- A similar study can be conducted on nursing students either in B.Sc (N) or GNM.
- A study can be conducted by using other teaching strategies, teaching program, peer support, self monitoring to ensure the knowledge regarding the legal aspects.
- A comparative study by using two different strategies like self instructional module and video film can be conducted.

References:

1. Basavanthappa B.T. “Nursing research”, 1st edi; 2003, Jaypee brothers publication, New Delhi, pp-105-107.
2. Kapoor Bimla. “Textbook of psychiatric nursing”, 2nd edi; 2004, Kumar publication, New Delhi, pp-18-20.
3. Polite, D.F and Hungler. “Nursing research-principles and methods”, 4th edi;1991, J.B.Lippincott, Philadelphia, pp-67-70.

RESEARCH ARTICLE

The Effect of Information Booklet on The Knowledge of Mothers Regarding Complementary Feeding in Bagwada Community

Ms. Preeti S. Kamble and Ms. Meghana Goswami

ARTICLE INFO

Article History:

Received 5th May, 2018

Received in revised form 20th May, 2018

Accepted on 13th June, 2018

Published online on 18th June, 2018

Key Words:

Complementary, Feeding, Breast milk, Infant, Booklet, Mothers.

ABSTRACT

Complementary feeding is the process starting when breastmilk alone is no longer sufficient to meet the nutritional requirements of an infant and when other foods and liquids along with breastmilk are needed. The age range for complementary feeding is generally 6-24 months. Mothers lack the knowledge regarding introduction of complementary foods, types, amount, consistency of complementary feed may lead to under nutrition or over nutrition, food protein allergy or increase load on the kidneys. A pre experimental study was done at Bagwada community area on effect of information booklet on knowledge of mothers regarding complementary feeding. A total 50 samples who were in age group 18-35 years post natal mothers who have infants below 12 months were selected by non - probability convenient sampling technique. Data were collected by a valid and reliable self -administered knowledge questionnaire regarding complementary feeding. The result reveal that pre- test mean value is 8.24 and the post-test mean value is 13.6 so mean difference is 5.36, paired 't' test value is 18.54 which reveal that information booklet is effective for gain knowledge for post natal mothers regarding complementary feeding.

Copyright © UTUJAH1 2018. Ms. Meghana Goswami. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Complementary feeding is the process of gradual and progressive transfer of baby from breastfeeding to the usual family diet. During this process, the infant gets accustomed to food other than mother's milk. Complementary foods are essential for the proper growth and development of the child.

According to WHO, when breast milk is no longer sufficient enough to meet the needs of the infant, complementary foods should be added to the diet of the child. It usually covers the period from 6 to 18 months of age. It is a very vulnerable period. It is the time when malnutrition start in many infants, contributing significantly to the high prevalence of malnutrition in children under 5 years of age worldwide.

Need for the study

South Asian region has the highest global burden of child undernutrition, with almost 41% of children stunted, 16% wasted and 33% underweight. Improved feeding of children less than 2 years of age is particularly important be

cause they experience rapid growth and development, and are vulnerable to illnesses such as acute respiratory infections etc. The present supplement aimed to describe complementary feeding practices in five South Asian countries – Bangladesh, India, Nepal, Pakistan and Sri Lanka – using the new and updated global complementary feeding indicators and to identify determinants of inappropriate complementary feeding practices. (South Asia infant feeding research network. Dec 2011). The mother plays crucial role in avoiding commonly used malpractices regarding complementary feeding and improving the health status of children because child constitutes a critical group in every society. Mothers lack the knowledge regarding introduction of complementary foods, types, amount, consistency of complementary feed may lead to under nutrition or over nutrition, food protein allergy or increase load on the kidneys. Maternal education has direct association with improving the nutritional status of infants as it enlightens them about healthy eating practice.

Statement of the problem

A Study to Evaluate The Effect of Information Booklet on The Knowledge of Mothers Regarding Complementary Feeding in Bagwada Community.

Objective of the study

1. To assess the knowledge of postnatal mothers on complementary feeding.
2. To determine the gain of knowledge level of post natal mothers on complementary feeding after the administration of information booklet.

Assumptions

1. The researcher has the assumption that mothers have some previous knowledge regarding complementary feeding and the technique for the complementary feeding.
2. This information booklet will help in increasing the knowledge of the mothers regarding complementary feeding.
3. The research will help the mothers in promoting and improving the nutritional status of the baby.

Hypothesis

H₀: there is no effect of the information booklet on the knowledge on post natal mothers at Bagwada community.

Delimitation

The study is delimited to 50 post natal mothers age group between 18-35 years of age at Bagwada community.

Methodology:

Research Approach : Evaluative approach

Research Design : Experimental

Research Method : pre experimental one group pre test post test design

Setting : Dungar faliya, Ramnagar, Nanu faliyu at Bagwada community

Population : Post natal mothers

Variables : **Independent:** information booklet regarding complementary feeding

Dependent: Knowledge

Sample : Postnatal mothers age group between 18-35 years

Sample size : 50

Sampling Technique : Non-probability – convenient

Inclusion criteria

- Post natal mothers willing to participate.
- Post natal mothers within the age group 18-35 years.
- Post natal mothers who know to read and write Gujarati.

Exclusion criteria

- Post natal mothers who are not present during the time of study.
- Mothers whose child is above 12 months of age.

Results

At the end of analysis and interpretation of data, findings reveals that majority of the post natal mothers 16 (32%) belongs to age group of 21-23 years, 16 (32%) infants belongs to age group of 8-10 months, 33 (66%) had primary education, 17 (34%) were having monthly income of Rs. 3100-4100, 26 (52%) had previous sources of knowledge from parents.

Table 1: Comparison of knowledge level of the group and percentage based on pre and post test.

Sr. No	Question	Pre-test knowledge	Post-test knowledge
1.	Concept (2 questions)	82.5%	93.5%
2.	Importance of complementary feeding (2 questions)	37%	90%
3.	Diet for complementary feeding (5 questions)	35%	73.6%
4.	Frequency of complementary food (5 questions)	28.4%	92%
5.	Instructions about complementary feeding (6 questions)	32.6%	58%

Table no.1 depicts that pre-test knowledge of concept was 82.5% and post test score was 93.5%, pre-test knowledge of importance of complementary feeding was 37% and post test score was 90%, pre-test knowledge for diet for complementary feeding was 35% and post test score was 73.6%, pre-test knowledge for frequency of complementary food was 28.4% and post test score was 92% and pre-test knowledge regarding instructions about complementary feeding was 32.6% and post test score was 58%. So this table reveal that post test score is increase after administration of information booklet.

Graph-1: Comparison of pre-test post-test knowledge score

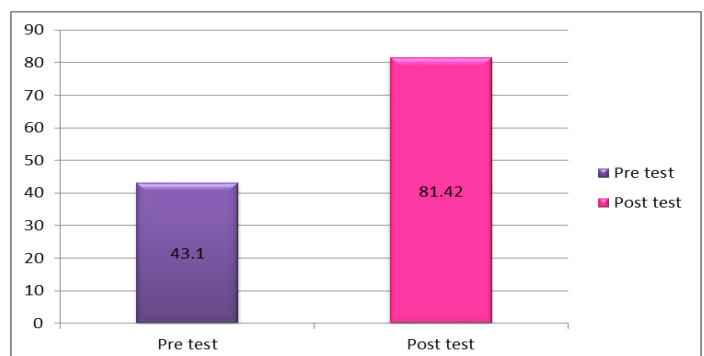


Table 2: Evaluation of group of the effect of information booklet in terms of pre -test and post test conducted.

Know ledge	Sampl e size (n)	Me an of pre test and pos t test	Me an	Me an D	SD	SE M D	‘t’	Level of signif- ican ce
Pre test	50	8.2 4	10. 92	5.3 6	2.2 3	0.2 89	18 .5 4	At 0.05 level Sig- nifica nt
Post test	50	13. 6						

Table 2 depict that paired ‘t’ value is 18.54 which is more at 0.05 level of significance which revealed that information booklet is effective for increase knowledge for selected postnatal mothers of Bagawada community.

Discussion

Seema hasnain,Muhmmad Asraf,Rana Anjum(2012):

A cross – sectional study was conducted in Pediatrics OPD Jinnah Hospital Lahore from march – september, 2012. A total 250 mothers of the babies aged 6 – 12 months were selected by non-probability purposive sampling technique. Their knowledge and practices regarding complementary feeding was assessed by using a close ended pre-tested questionnaire. About 79.6% mothers exclusively breastfed their babies and 84% continued breastfeeding along with complementary feeding. The correct knowledge of initiation of complementary feeding was found in 54% of mothers but it was practiced by only 43%. The overall knowledge of 24% mothers was good and 28% had poor knowledge of complementary feeding whereas only 7% women had good overall practices. There is statistically significant association of education of the parents with the practices of complementary feeding.

Uzman Eram(2017), a review article on myths, belief and malpractice realted to complementary feeding practice reviewed that In a study in Karnataka,the common reason for delayed weaning was the mothers perception that breast milk is still sufficient for the baby followed by belief that weaning foods are indigestible. A study conducted in Baroda revealed that most mothers avoided dal (pulses) because it was considered difficult to digest and produce gas in the child’s stomach. So it is concluded that most of the women are aware about exclusive breastfeeding although they do not practice 100%.

This is because of the customs and traditions prevailing in our society. The role of elderly female is also very important in the family. Health education regarding EBF should be given to pregnant females when they come for check-up. Health education among the women especially the elderly women can improve the knowledge. So according to above study mothers have some knowledge regarding complementary feeding but they are not implementing it. It also suggests that at proper time information should be given through proper channel.

Conclusion

After analysis it interpret that there was an increase in knowledge, that is ‘t’ value (18.54) was found to be highly significant, (at 0.05 level of significant) after the distribution of information booklet. This indicates that the complementary feeding practices and the growth and development of infants can be improved by providing information booklet to improve the knowledge of the mothers of infants below 12 months of age at Bagwada community, Valsad

Recommendation

1. The research would have been more effective if audio visual aids were used.
2. The study can be conducted on large group.
3. More detail education regarding complementary feeding can be imparted.
4. The practice of the mothers can also be assessed.

Bibliography

1. Lucida Coventry,Martin Nixon, “Baillier’s Nurses dictionary”,5th edition,oxford university,pres UK,p.p no. 67.
2. Complementary feeding.[online].;[cited on 5th june2010]. Available from URL: <https://www.who.in/nutrition/topics/complementaryfeeding/en/index.html>
3. Need of the study related to complementary feeding. [online].;[cited on 3rd june 2010]. Available from URL: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1740-8709.2011.00371.x>
4. Review literature related to complementary feeding. [online].;[cited on 18th march 2018]. Available from URL: <http://thebiomedicapk.com/articles/348.pdf>
5. Complementary feeding literature.[online].;[cited on 18th march 2018]. Available from URL: [http://www.ijpsi.org/Papers/Vol6\(1\)/C06011416.pdf](http://www.ijpsi.org/Papers/Vol6(1)/C06011416.pdf)

RESEARCH ARTICLE

PREVALENCE OF MALNUTRITION AMONG THE PRIMARY SCHOOL CHILDREN STUDYING IN SELECTED GOVERNMENT PRIMARY SCHOOLS

L. Diva Chanu, Gibin Thomas, Mehta Shivani, Dafda Manish, Surati Dixita, Barad Rinal, Linda Thongbam MBNC, Maliba Campus, Tarsadi, Bardoli

ARTICLE INFO

Article History:

Received 5th June, 2018

Received in revised form 20th June, 2018

Accepted on 25th June, 2018

Published online on 1st July, 2018

Key Words:

Prevalence, Malnutrition, Children, Primary, School,

ABSTRACT

The importance of nutrition in school age children has been emphasized because malnutrition during this period can decelerate not only physical and mental development but also the learning ability of children. This is because of lacking knowledge in nutrition among the children of particular stage of growth and development. On this background survey approach was used to assess the prevalence of malnutrition among the primary school children of Tarbhon village, Bardoli. A total number of 150 school children were selected by using purposive sampling technique and physical examination tool with anthropometric measurements were used to collect the data. The results of the study showed that out of 150 children, majority of children 76 (50.67%) having moderate malnutrition, 02 (1.33%) were having severe malnutrition, 64(42.67%) were having mild nutrition and 8(5.33%) children were found to be normal. The study summarize that Out of 150 students, majority of children were suffering with malnutrition 142(94.66%). So the study conclude that education towards the nutrition may improve health status of school children.

Copyright © UTUJAH1 2018. Ms. Rinal Bard and et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

School age is the active growing phase of childhood, it represent dynamic period of growth and development because children under go physical, mental, social and emotional changes. The importance of nutrition in school age children has been emphasized because malnutrition during this period can decrease not only physical and mental development but also the learning ability of children. Malnutrition can be defined as a lack of proper nutrition. Malnutrition in India can be termed as a burning social problem due to the impact of socio cultural influence on nutrition. Malnutrition is more due to lack of knowledge and awareness about proper nutrition at a particular stage of growth and development. The reasons for malnutrition are myriad and include poverty, lack of



nutritious food, inadequate food, improper infant and child feeding.

Need for the study

Inadequate nutrition of these children leads to retarded growth and development and may cripple the child the child for life long. In India about 2/3 portion of the under five children of our country is malnourished among them 5-8% is severely malnourished whole rest fall in the group of mild or moderate malnutrition so it can be said that malnutrition one of the most wide spread conditions affecting child health. The 2015 Global Hunger Index (GHI) report India ranked on 20th position amongst leading countries with a serious hunger situation. The Rapid Survey on Children(RSOC) in India performed between the year 2013-2014, it's report that 38.7% are consider as stunted children, 29.4% are underweight and 15% are wasted children.

Statement of the problem

A Study to Assess the Prevalence of Malnutrition among the Primary School Children Studying in Selected Government Primary School of , Bardoli tehsil, Surat, Gujarat With A View to Develop Information Booklet.

Objective of the study

1. To assess the socio-demographic variables.
2. To assess the prevalence of malnutrition among the primary school children
3. To find out association between prevalence of malnutrition with their selected socio demographic variables.
4. To develop an information booklet regarding the preventive measures of malnutrition among the primary school children.

Assumptions

1. A government primary school children have some degree of malnutrition.
2. The BMI of an individual is affected by socio- demographic factor.
3. The lifestyle of children’s may varies according to their religious and socio economic status.

Hypothesis

H₀. There is no significant association between prevalence of malnutrition among primary school children with their selected demographic variables.

Delimitation

The study findings will be delimited to only primary school children’s who are studying in the selected government school of Tarbhon.

Methodology:

- Research Approach** : Survey approach
- Research Design** : Descriptive
- Research Method** : survey methods (assessment)
- Setting** : Torbhon Village
- Population** : Primary school children
- Sample** : Primary School Children aged between 5 to 15 years.
- Sample size** : 150
- Sampling Technique** : Non-probability – convenient
- Variables** : Growth parameters such as height and weight

Inclusion criteria

- Children who are willing to participate.
- All the children including male and female.

Exclusion Criteria

Children absent during time of data collection and are sick.

Results

The findings of the study showed that out of 150 children, majority 80 (53.33%) of the children belonged to the age group between 11- 13 year, 76 (50.66%) subjects were female children. The majority of children 81(54%) were residing in joint family and 69(46%) were residing in nuclear family. The majority of the children 80(53.34%) were having history of mixed diet pattern and 70(46.66%) were having vegetarian diet pattern. The majority of parents 100(66.66%) were literate and 50 (33.33%) were illiterate.

Table No. 1 : Distribution of school children according to their BMI Status

BMI Status	No, of Male Children	%	No, of Female Children	%	Total (M+ F)	F%
No malnutrition (> 18)	06	4	02	1.33	08	5.33
Mild Malnutrition (15-18)	32	21.34	32	21.33	64	42.67
Moderate Malnutrition (12-14)	36	24	40	26.67	76	50.67
Severe Malnutrition (<12)	00	0	02	1.33	02	1.33

Table No. 1 reveals that majority 76 (50.67%) of children having moderate malnutrition, 02(1.33%) minimum number of them were having severe malnutrition, 64(42.67%) mild nutrition and rest of them having no malnutrition 8 (5.33%) children were found to be normal.

Graph 1 : Distribution of school children on analysis of BMI score value mean, median, mode, range and standard deviation.

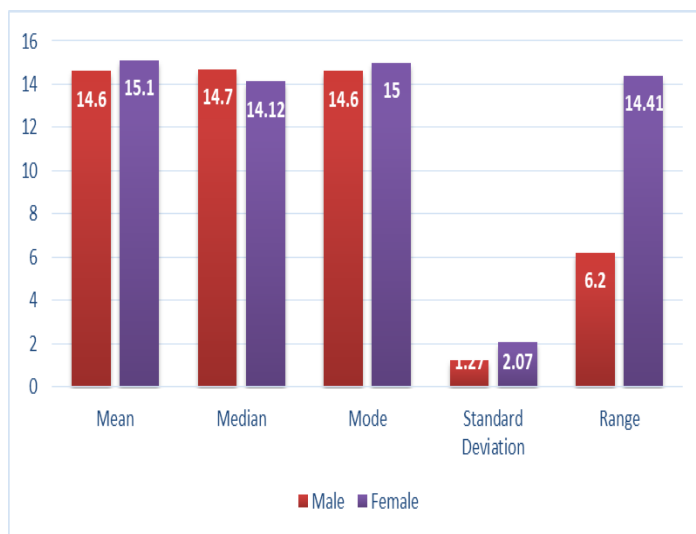


Table No.2: Association between BMI scores of school children and their socio demographic variables.

S l. No.	Demographic variables	Mild MN	Moderate MN	Severe MN	Chi Sq Cal.V	Tab Value	df	Significance
1	Age				14.73	12.59	6	Yes (<p=0.05)
	05-07 years	04	16	0				
	08-10 years	16	22	0				
	11-13 years	37	36	02				
	14-16 years	07	01	01				
2	Gender				1.65	5.99	2	No (<p=0.05)
	Male	32	36	00				
	Female	33	38	03				
3	Family Structure				7.16	5.99	2	Yes (<p=0.05)
	Joint family	30	28	04				
	Nuclear Family	32	48	00				
4	Dietary Pattern				2.53	5.99	2	No (<p=0.05)
	Vegetarian	34	36	00				
	Mixed	29	39	4				

Table No. 2 reveals that there is a significant relationship between age and family structure with status of malnutrition. Hence the Ho is rejected in these two cases as the Cal. Chi sq. value is greater than the tabulated value at 0.05 level of significance. There is no significant relationship between gender and dietary structure with status of malnutrition. Hence the Ho is accepted in these two cases as the Cal.Chi square value is lesser than the tabulated value at 0.05 level of significance.

Discussion

The present study was undertaken to assess the malnutrition among school children and it conclude that majority of children 142(94.66%) were suffering with malnutrition. Among that majority of children having moderate malnutrition 76(50.67%), minimum number of them were having severe malnutrition 02(1.33%), and rest were having mild malnutrition 64(42.67%) status only 8(5.33%) children were found to be a normal. The same findings we found from one study was conducted by Sachin Sing Yadav in 2016 which shows that Eighty percent of the world’s undernourished children live in 20 countries, with India being home to nearly 60 million children who are underweight . At present in India 48% children < 5 years age are chronically malnourished and 43% are under

weight (NFHS-3). More than half (54 percent) of all deaths before age five years in India are related to malnutrition. By comparing these findings study concludes that malnutrition may be because of inadequate knowledge of parents, health problems of children like anaemia, worm infestation, poor economical status, insufficient nutrient supplements in food from school.

Conclusion

The present study was conducted to assess the prevailing nutritional among the school children studying at Tarbhorn primary school. We came to conclusion that, around 142 children having the problem of malnutrition and nearly 08 children’s are healthy. We understood that the children in between the age of 5- 16 years are not meeting the adequate nutritional requirement. Hence we conclude that, in India the malnutrition rates are still high as compare to the global statistics. So there is an urgent need to educate the children and family members in both knowledge and practice related to nutrition.

Recommendations

On the basis of finding of the project it is recommended that,

1. Community health nurse should organize health education camps to facilitate the adequate information and encourage the school children on proper balance diet.
2. In school, the nurses should insist and provide information prevent malnutrition.
3. The community health nurse should enhance the co-operation of local charity group like rotary club to educate the school children about balance diet.

References

1. Gupta, A., Maathur G.P, and Jagdish C., (2002), World Health Assembly recommends exclusive breastfeeding for the first six months
2. Dewey, K G. Cohen, R.J.Brown, K.H. Vera, L.I (1999) Age of introduction of
3. Complementary foods and Growth and Low-Birth-Weight, Breastfed Infants. *American Journal of Clinical Nutrition (1)* 2 pp 32-45.
4. Child Malnutrition in Karnataka - A Report by Adv Clifton.D.Rozario Advisor to Commissioners of Hon’ble Supreme Court in the Case P.U.C.L vs UoI & Ors. (W.P no 196 of 2001) page no 4
5. Veena Algur et al., “Assessment of Nutritional Status of under five children in urban field practice area”, *International Journal of current Research Revised [IJCRR]* 2012. Vol-4, issue-22 Pp- 122-123
6. FABER, M. & WENHOLD, F. 2007. Nutrition in contemporary South Africa. *Water South Africa*, 33 (3):393-399. (Special Edition) 2007.

RESEARCH ARTICLE

KNOWLEDGE AND ATTITUDE REGARDING THE COPING STRATEGIES AMONG THE INFERTILE WOMEN OF SELECTED PRIVATE HOSPITALS

Dr. Kavitha Narayanan and Ms. Hiral Mistry. MBNC, Maliba Campus, Tarsadi, Bardoli

ARTICLE INFO

Article History:

Received 25th July, 2018

Received in revised form 28th July, 2018

Accepted on 30th July, 2018

Published online on 6th Aug, 2018

Key Words:

Infertility, Coping Strategies, Women, Hospital.

ABSTRACT

Infertility is not a disease, but is a health problem with physiological, psychological and social implications. The World Health Organization (WHO) estimates that 60 to 80 million couples worldwide currently suffer from infertility. The main objective of the study was assessment of knowledge and attitude regarding coping strategies among infertile women. 90 samples were selected from three different private hospitals of Surat district. Samples were selected by non-probability sampling-convenient sampling method. Data were collected from 25-01-2018 to 28-02-2018. Data were collected by self-administered knowledge questionnaire and three point Likert scale. Main findings of the study represented that 46(51.11%) had moderately adequate knowledge and 46(51.11%) had favourable attitude regarding coping strategies. It also revealed that there was significant association between knowledge with selected socio demographic variables like education of women, education of women's husband, women's occupation, monthly income, duration of married life, duration of trying for conception and time undergone with Assisted Reproductive Techniques. Present study reported that there was significant association between attitude with selected socio demographic variables like women's education, education of women's husband, occupation of women and monthly income. Findings also depicted that there was correlation between knowledge and attitude regarding coping strategies.

Copyright © UTUJAH I 2018. Dr. Kavitha Narayanan. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

It is commonly said that the longer you wait for something, the more you will appreciate it when you get it. It is the dream of every woman to get married and to be a mother. Infertility is not a disease, but is a health problem with physiological, psychological and social implications. The data available from the demographics of India reported that Total Fertility Rate (TFR) of India is estimated 3.14 in 2000-2005, 2.80 in 2005-2010 and 2.48 in 2010-2015. Infertility can threaten a woman's identity, status and economic security and consequently, be a major source of anxiety leading to lowered self-esteem and a sense of powerlessness. To overcome with the emotional disturbances of infertility and treatment choices, women use different coping strategies.

Statement of the problem

“A Study to Assess the Knowledge and Attitude Regarding the Coping Strategies Among the Infertile Women of Selected Private Hospitals in Surat District of Gujarat state With A View To Develop an Information Booklet on Coping Strategies Among Infertile Women.”

Objectives

1. To assess the socio-demographic variables of infertile women.
2. To assess the knowledge and attitude regarding the coping strategies among infertile women.
3. To find out the association between knowledge regarding coping strategies among infertile women with selected socio-demographic variables.

4. To find out the association between attitude regarding coping strategies among infertile women with selected socio-demographic variables.
5. To find the correlation between knowledge and attitude regarding coping strategies among infertile women at selected private hospitals of Surat district.
6. To develop an information booklet on coping strategies among infertile women.

Assumptions

- Infertile women may not have adequate knowledge regarding coping strategies to overcome the stress and mental disturbances of infertility.
- Infertile women may not have favorable attitude regarding coping strategies.
- Information booklet may enhance knowledge regarding coping strategies and build favorable attitude regarding coping strategies among infertile women.

Hypothesis

H₀₁: there is no significant association between knowledge regarding coping strategies among infertile women with selected socio-demographic variables.

H₀₂: there is no significant association between attitude regarding the coping strategies among infertile women with selected socio-demographic variables.

H₀₃: there is no correlation between knowledge and attitude regarding the coping strategies among infertile women at selected private hospitals of Surat district.

Conceptual framework

Conceptual framework adopted for the research was based on modified Roy's adaptation model which is given by Sister Callista Roy (1976).

Research methodology:

- Research Approach** : Quantitative
Research Design : Non experimental design
Research method : Descriptive method
Research setting : Sharda hospital and Miracle test tube baby centre, Surat, Bliss IVF centre, Surat and 21st Century IVF centre, Surat
Research population : Infertile women.
Target population : Infertile women of selected private hospitals in Surat district of Gujarat state.
Accessible population : Infertile women who fulfill the inclusion criteria of sampling.
Sample : Selected infertile women of selected private hospitals in Surat district of Gujarat state.
Sample size : 90
Sampling Technique : Non probability sampling- Convenient sampling method.

Selection criteria for the sample

Inclusion criteria:

- Infertile women with primary and secondary infertility.
- Infertile women irrespective of treatment modalities.
- Infertile women who are between the age group of 20-45 years.
- Infertile women, who are able to understand Gujarati and Hindi.

Exclusion criteria:

- Infertile women who are not willing to participate in the study.
- Infertile women who are not available at the time of data collection.

Variables

Independent variables: knowledge and attitude regarding coping strategies among infertile women

Dependent variables: outcome of assessment

Description of tool:

Section 1: Background information of sample which consists of items such as age of women, age of husband, religion, education of women, education of husband, occupation of women, occupation of husband, type of the family, monthly income, duration of married life, type of infertility, past history of abortion, duration of trying for conception, family history of infertility, duration of diagnosis of infertility, duration of infertility treatment, use of assisted reproductive techniques, bad habits of women, bad habits of husband and source of getting information of infertility.

Section 2: Structured knowledge questionnaire on coping strategies; Total 30 items are included in this section. Each right answer carries 1 score and wrong answer carries 0 score. Total score of structured knowledge questionnaire is 30.

Section 3: Attitude scale for coping strategies comprises of 15 items; Three point (agree, neutral and disagree) Likert scale is prepared for assessment of attitude regarding coping strategies among infertile women.

Results

Major findings of the study were as below:

Section 1: Socio-demographic variables

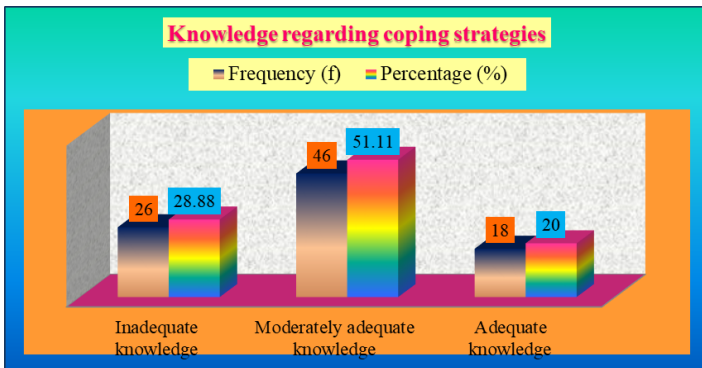
The findings revealed that out of 90 infertile women, 31 (34.44%) women were in the age group of 20-25 years, 30 (33.33%) women's husband were in the age group of 26-30 years, 54 (60%) women were belonged to Hindu religion, 36 (40%) women were having primary education, 31 (34.44%) women's husband were having secondary & higher secondary education, 54 (60%) women were housewives, 71 (77.78%) women's husband were belonged to non medical field, 45 (50%) women were

having nuclear family, 42 (46.66%) women were having monthly income of Rs. 10,001-15000/-, 31 (34.44%) women were having 3-6 years of married life, 70 (77.77%) women were having primary infertility, 70 (77.77%) women were not having past history of abortion, 67 (74.77%) women were trying for the conception for more than 2 years, 76 (84.44%) women were not having family history of infertility, 61 (67.77%) women were having medical diagnosis of infertility for more than 12 months, 45 (50%) women were taking treatment for more than 18 months, 70 (77.77%) women were not undergone assisted reproductive techniques, 88 (97.77%) women were having no any bad habits, 70 (77.77%) women's husband were not having any bad habits and 27 (30%) women were getting information regarding infertility from any other sources.

Section 2-A: Knowledge regarding coping strategies:

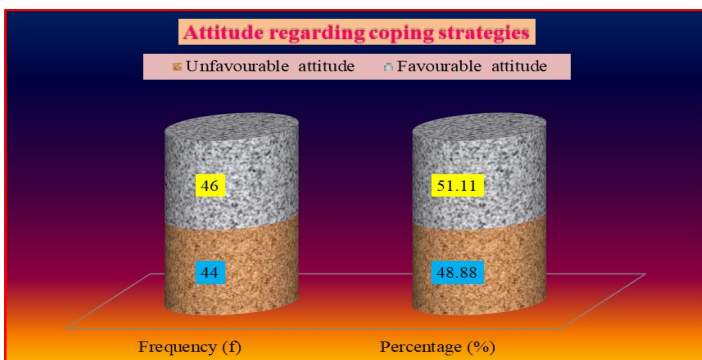
Study findings reveals that 46 (51.11%) women had moderately adequate knowledge, 26 (28.88%) had inadequate knowledge and 18 (20%) had adequate knowledge regarding coping strategies.

Graph 1: Knowledge regarding coping strategies among infertile women



Section 2-B: Attitude regarding coping strategies among infertile women: Present study depicted that 46 (51.11%) women had favourable attitude and 44 (48.88%) had unfavourable attitude regarding coping strategies among infertile women.

Graph.2: Attitude regarding coping strategies among infertile women



Section.3: Association between knowledge regarding coping strategies with selected socio-demographic variables:

Study findings reported that the calculated chi-square value was less than tabulated chi-square value in most of demographic variables; whereas, in case of education of women, education of women's husband, women's occupation, monthly income, duration of married life, duration of trying for conception and time undergone with Assisted Reproductive Techniques, the calculated chi-square value was greater than the tabulated value. Hence, there was significant association between knowledge and selected socio demographic variables.

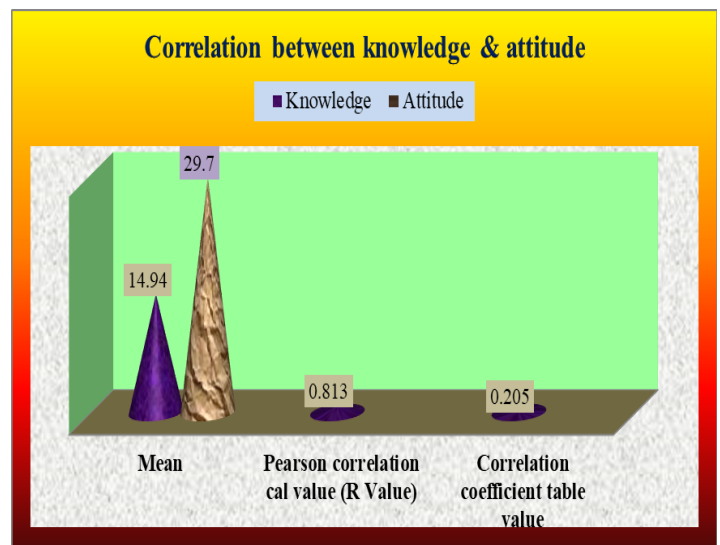
Section.4: Association between attitude regarding coping strategies with selected socio-demographic variables:

Present study findings focused that the calculated chi-square value was less than tabulated chi-square value in most of demographic variables; whereas, in case of women's education, education of women's husband, occupation of women and monthly income, the calculated chi-square value was greater than the tabulated value. Hence, there was significant association between attitude and selected socio demographic variables.

Section.5: Correlation between knowledge and attitude regarding coping strategies:

The present study Pearson correlation calculated value (0.813) was greater than correlation tabulated value (0.205) at df=89 at 0.05 level of significance. Hence, there was significant correlation between knowledge and attitude regarding coping strategies.

Graph 3: Correlation between knowledge and attitude regarding coping strategies among infertile women



Section 6: Development of information booklet on coping strategies

The findings of study unveiled that out of 90 infertile women, 46 (51.11%) women had moderately adequate knowledge regarding coping strategies and 46 (51.11%) had favorable attitude regarding coping strategies. Based on these findings, information booklet on coping strategies was developed and distributed to all the participants of the study which will be beneficial to enhance their knowledge and construct favorable attitude regarding coping strategies.

Nursing implications

The findings of the present study have implication in the field of nursing education, nursing practice, nursing administration and nursing research which are discussed as follows:

Nursing Practice: As the infertile women will be free to reveal their problems to nurses, nurses are in the best position to provide the information regarding infertility and coping strategies. Infertility, relationship of stress and different coping strategies among infertile women are beneficial to the nurses to deliver congruent and qualitative care to the infertile women coming for the further treatment. Realizing the health care needs of people, nurses must incorporate scientific based knowledge.

Nursing Administration: The finding of the study gives the idea about the present scenario and views of people regarding infertility and coping strategies. As nurses play multidimensional role, nurses should participate in public awareness programs through mass media and different educational aids. Furthermore, as infertility treatment cost is significant, administrative authority should take certain initiative to formulate certain programs and policy which can be favorable to infertile couple. It can be also promoted that inventiveness to organize educational programs for health personnel and community regarding infertility and coping strategies are equally required. It will offer the strategy to think about the proceedings for reproductive health endorsement and positive outcome for improvement of fertility rates.

Nursing Education: The main aim of health care system is promotion of health and prevention of illness. The findings of the study designate that more emphasize should be given in nursing curriculum on relationship of stress and infertility and different coping strategies to conquer with stress. Different educational schedules and awareness sessions should be arranged for the nursing students to update their knowledge on infertility and coping strategies.

Nursing Research: The findings of the study serve as the basis for the profession and the student to conduct the further study. The better generalization of the study results can be made by replication of the study. Dissemination of the study findings through conference, poster presentation, paper presentation, article publication will make application of research to be effective which will be a guide for the community to understand and expand their knowledge regarding coping strategies, rectify their misconception and develop positive attitude. It will also encourage other researchers to conduct furthermore similar studies on large samples.

Limitations

The results of the study can not be generalized due to less samples and small setting area.

Recommendations:

1. A similar study can be replicated on large samples.
2. A comparative study can be conducted between fertile and infertile women.
3. A qualitative study can be conducted to assess the emotional impacts and coping mechanisms of infertile women.
4. A study can be conducted to assess the impact of coping strategies on physical, mental, social and economical aspects of life.

Conclusion: Infertility can have a devastating effect on women's mental health. With regard to the fact that certain coping strategies have different impacts on individuals' mental health, it is important to understand whether the infertile women possess knowledge regarding the coping strategies with favourable attitude or not. Thus, the aim of this study is to examine the knowledge and attitude regarding the coping strategies among infertile women. It helps to understand the adjustment of the women with infertility and build positive attitude towards the life.

References:

1. Dutta.D. C. Textbook of gynecology, 6th edi; 2001, New central book agency publication, Kolkata, Pp-227, 229, 232-233, 235-236, 251.
2. Demo graphics of India, Available from URL-<https://en.wikipedia.org/wiki/Demographics-of-India>
3. Coping strategies for infertility, Available from URL-<http://www.parents.com/getting-pregnant/infertility/causes/coping-with-the-stress-of-infertility/>
4. National family health survey, Available from URL-<http://rchiips.org/NFHS/pdf/NFHS4/India.pdf>
5. Dr Charlotte Warren-Gash. Worldwide infertility rates unchanged in 20 years says World Health Organisation. Appeared in BioNews, 07 January 2013, pp: 687. Available from URL-http://www.bionews.org.uk/page_232839.asp.

RESEARCH ARTICLE

LEADING CAUSES AND SYMPTOMS OF END STAGE RENAL DISEASE[ESRD] AMONG HEMODIALYSIS PATIENTS IN DIALYSIS UNIT

Ms. Mamta Patel, Ms. Khushbu Bhavsar, Ms, Meghana Goswami, Mr. Ashish Chaudhari, Ms. Ekta Pandaya, Ms. Freny Solanki. MBNC, Maliba Campus, Tarsadi, Bardoli

ARTICLE INFO

Article History:

Received 25th July, 2018

Received in revised form 28th July, 2018

Accepted on 30th July, 2018

Published online on 9th Aug, 2018

Key Words:

Leading causes, Symptoms, End stage renal disease, Hemodialysis, patients

ABSTRACT

Kidney is the vital organ of our body which helps for purification of blood and removes waste material from the body. Kidneys uphold the homeostatic balance in the body. End stage renal disease is the most common and impaired physical activity of the other kidney disease. End stage renal disease is now a day growing worldwide. Descriptive study is conducted with the main objectives is to assess the leading causes of ESRD and to assess the symptoms of ESRD. Total 25 samples were selected by purposive sampling technique. The data was collected with the help of open ended structure questionnaire interview method. The data is analyzed with the help of descriptive statistics. The main findings of the study reveals that majority 64% of samples have symptom of swelling over the body, 60% of samples have symptom of nausea and vomiting, 24 % of samples have symptoms of oliguria, 16% of samples have symptom of fever, 12% of samples have symptoms of urination, weakness, dizziness, breathing difficulty, 8% of samples have symptom of weight loss. Majority 80% of samples were having Hypertension, 64% of samples were having Diabetes, 28% of samples were having hereditary disease and 16% of samples were having bad habits like smoking, tobacco chewing and alcoholism. Majority 52% samples have duration of 4-6 year for dialysis and majority 80% of samples undergoing dialysis twice in a week.

Copyright © UTUJAH I 2018. Ms. Khushbhu Bhavsar et.al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Kidney is a most important organ of human body which has major role to purify the blood. The number of patients with end stage renal disease is growing worldwide. There are various types of kidney diseases, among them end stage renal disease is highly progressive and not curable. The only treatment for this disease condition is either Hemodialysis or kidney transplantation. End stage renal disease is a world-wide health problem. According to World Health organization (WHO) Global Burden of Disease project, diseases of the kidney and urinary tract contribute to global burden with approximately 850,000 deaths every year and 115,010,107 disability adjusted life years. CKD 12th leading cause of death and 17th cause of disability. This global prevalence, however, may be grossly underestimated for a number of reasons. Patients with CKD are at high risk for cardiovascular disease (CVD) and Cerebro-vascular disease (CBVD), and they are more likely to die of CVD than to develop end-stage renal failure.¹

Need for the Study

In India, younger people do not go for preventive check-ups. This results in delayed diagnosis. In this study, 64.5% of the patients suffering from CKD also suffered from hypertension, 4.7% from anaemia and 31.6% from diabetes," said one of the authors, Dr Sham Sunder, head of the nephrology department at Ram Manohar Lohia hospital in New Delhi.³

Statement of the problem

"A study to assess the leading causes and symptoms of end stage renal disease[ESRD] among hemodialysis patients in hemodialysis unit at Shree Sardar Smark Hospital, Bardoli ."

Objectives

1. To assess the leading causes of ESRD
2. To assess the symptoms of ESRD

Assumptions

- Diabetes mellitus and hypertension have major implication on ESRD rather than other kidney disease.
- Swelling over the body has major symptom of ESRD rather than other symptom

Conceptual framework

Conceptual framework adopted for the study was based on modified General System Theory Ludwing Von Bartalanffy (1968).

Research methodology:

- Research Approach** : Quantitative
- Research Design** : Non experimental design
- Research method** : Descriptive method
- Research setting** : The study was conducted at dialysis unit; at Shree Sardar Smarak hospital, Bardoli.
- Research population** : Patient undergoing dialysis.
- Target population** : Sample who were fulfil the inclusion criteria
- Sample**: ESRD Patient on hemo-dialysis
- Sample size** : 25
- Sampling Technique** : Non probability sampling– purposive sampling method.

Selection criteria for the sample

Inclusion criteria

1. Patients who are willing to participate in study.
2. Patients having ESRD an undergoing haemodialysis a Shree SardarSmarak Hospital Bardoli.
3. Patients who came for the haemodialysis in morning session at Shree SardarSmarak Hospital Bardoli.

Exclusion Criteria

1. Patients who are diagnosed other than ESRD.
2. Patients who came for the haemodialysis in evening session at Shree SardarSmarak Hospital Bardoli.

Variables

Independent variables: Patient

Dependent variables: Cause and symptoms of ESRD

Description of the Tool

Open ended structure questionnaire interview method the for data collection process. It includes two parts.

Section I- Demographic data

This section contained 06 items for obtaining the information regarding age of the patient, sex of the patient, education of the patient, occupation of the patient, religion of the patient, family monthly income.

Section II- Symptoms identify by the patient before diagnosis of ESRD

This section contain open ended question for obtaining the information regarding symptoms of the ESRD.

- What were the complaints diagnosed at the time of admission which leads you for dialysis treatment?

Section III- Assess the leading causes of ESRD

This section consisted of 05 items of open ended questions on following areas:

- Do you have hypertension?
- Do you have diabetes mellitus?
- Do you have any hereditary disease?
- Do you have other kidney disease?
- Do you have any bad habits?

Section IV - Duration and frequency of Hemodialysis.

This section consists of 02 items of open ended question on following areas:

- How long have you been undergoing for dialysis?
- How many times you are going for dialysis in a week?

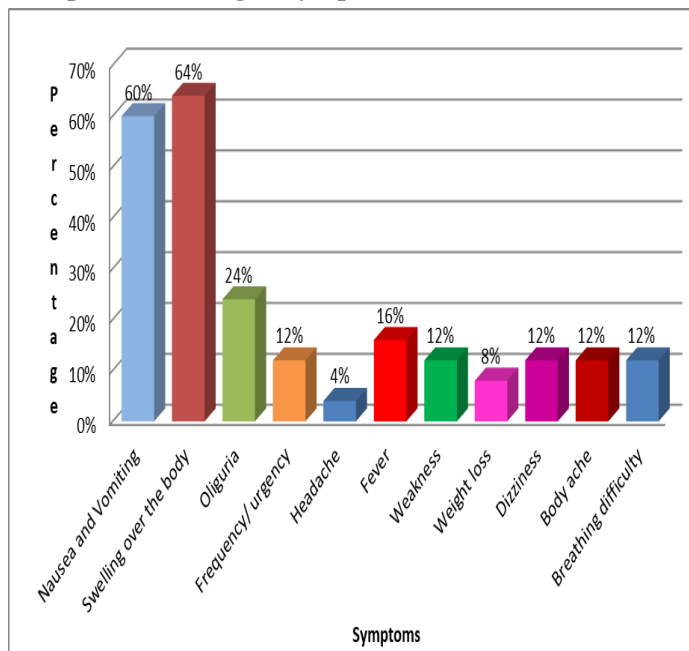
Results :

Section – I: Description of demographic variables.

Most of the samples 11 (44%) were between the age group of 40 to 60 years, most of the samples 11(68%) were Male, most of the samples 11 (44%) were having education till Higher Secondary and above, most of the samples 9(36%) were retired / unemployed and doing own business, most of the samples 24(96%) were Hindu, majority of the samples 10 (40%) were having income of < 15,000 Rs.

Section II- Symptoms identify by the patient before diagnosis of ESRD

Graph 1 Bar diagram showing the distributions of samples according to symptoms



Section III:- Assess the leading cause of end stage renal disease

Table: 1 Frequency and percentage distribution of the patients leading causes of ESRD

Sr. No.	Question	Yes	%	No	%
1.	Do you have hypertension?	20	80	5	20
2.	Do you have diabetes mellitus?	16	64	9	36
3	Do you have any hereditary diseases?	7	28	18	72
4	Do you have other kidney disease?	5	20	20	80
5.	Do you have any bad habit?	4	16	21	84

Section-IV Duration and frequency of Hemodialysis

Findings of this sections showed that out of 25, 13(52%) had undergone for dialysis from 4 to 6 years and 20(80%) had undergone for dialysis twice in a week.

Discussion:

Section 1: Data on demographic variable among ESRD patients with HD

Majority of patient in the age group of 40-60 years, 96% of patients were following Hindu religion, 44% of educational status of patient up to higher secondary and above, 68% of males were affected with this disease, 36% of patient were retired/ unemployed and 36% of patients were have their own business , 40% of patients were having income less than 15,000Rs/- per month.

Section 2: Data on symptoms identified by the patient before ESRD

Majority 64% of patients have symptom of swelling over the body, 60% of patients have symptom of nausea and vomiting, 24 % of patients have symptoms of oliguria, 16% patients have symptom of fever,12% of patients have symptoms of urination, weakness, dizziness, breathing difficulty, 8% patients have symptom of weight loss.

Section3: Data on leading causes of ESRD

80% of patients were having Hypertension, 64% of patients were having Diabetes, 28% of patients were having hereditary disease and 16% of patients were having bad habits like smoking, tobacco chewing and alcoholism.

Section4: Data on Duration and frequency of dialysis procedure.

52% patients have duration of 4-6 yrs., 28% patients have duration of 1-3 yrs., 16% patients have duration of 7-9 yrs., 4% patients have duration of 10-12 yrs.,

80% of patients undergoing dialysis twice in a week and 20% of samples undergoing dialysis thrice in a week.

Nursing implications:

The present project study was concluded to assess the leading causes of patient of ESRD undergoing haemodialysis. The findings of the present project study have implication in the field of nursing education, nursing practice, nursing administration and nursing research.

Nursing education:

The Health care delivery system at presence is giving more emphasis on preventive aspects and health promotion. The study also implies that health personal have to tried to impart knowledge regarding End Stage Renal Disease, its leading causes and its treatment in that most important hemo-dialysis procedure.

Nursing practice:

Nurses are the key person of the health care who plays a major role in the health promotion and maintenance. Nursing research study is usually not interested in pursuing knowledge simply for the sake of knowledge. It is practicing profession so the researcher generally integrates findings into practice.

Nursing research:

The essence of research is to build a body of knowledge in nursing as it is an evolving profession the findings of the present study serves as the basis for the profession and the student to conduct further study .teacher can direct and motivate the nursing researcher, so that self-instruction materials in the same different specialties can be developed there by achieving independence.

CONCLUSION

The findings of the study showed that 100% sample were patients with ESRD on HD, highest percentage 80% sample were having Hypertension. The study findings concluded that Patient with ESRD had more common leading causes which include Hypertension, Diabetes, disease and bad habits.

References:

1. Smeltzer CS, Bare GB , Hinkle L J, Cheever HK. Brunner and Suddarth's "Text book of Medical Surgical Nursing" 11th Edition, Lippincott;page no-1493-1495.
2. Ford J C,Pope J F,Hunt AE, Gerald B.Laboratory values and knowledge of hemodialysis patients with hyperphosphatemia.Journal of renal nutrition(2004 jan); 14(1);36-44.
3. Kugler C, Vlamicnek H et al.Non adherence with diet and fluid restriction among adults having hemodialysis.journal of nursing scholarch 2005;37(1):25-29.



UKA TARSADIA
UNIVERSITY

MANIBA BHULA NURSING COLLEGE

(A Constituent Institution of Uka Tarsadia University)



The Journey Towards
**BRIGHT
FUTURE**

Begins here.....



ADMISSION OPEN

M.Sc. NURSING: All Specialties - 02 Years

Eligibility Criteria: B.Sc. Nursing/Post Basic B.Sc. Nursing with Minimum 55% aggregate marks with 1 year of work experience

B.Sc. NURSING- 04 Years

Eligibility Criteria: Passed Std 12th with physics, chemistry, biology and English with minimum of 45% aggregate marks (PCBE) and as per the INC norms

POST BASIC B.Sc. NURSING - 02 Years

Eligibility Criteria: Passed GNM with state nursing council registration

GNM - 03 Years

Eligibility Criteria: 10+2 class passed preferably Science (PCB) & English with aggregate of 40% marks

FOR ADMISSIONS

Ms. Nilam Rathod - +91 9726984043

Ms. Mayuri Rabari - +91 8758368466

Ms. Krushi Shah - +91 8140340405

Ph. (02625) 254141 | www.mbnc.edu.in | www.utu.ac.in



UKA TARSADIA
UNIVERSITY

MANIBA BHULA NURSING COLLEGE

(A Constituent Institution of Uka Tarsadia University)



Admissions
Open

We redefine not just education
But also excellence.....

M.Sc. Nursing: 02 Years

Eligibility Criteria: B.Sc. Nursing/Post Basic B.Sc. Nursing with Minimum 55% aggregate marks with 1 year of work experience (Eligible students get scholarship from Govt of Gujarat)

Medical & Surgical Nursing	- 05 Seats
Child Health Nursing	- 05 Seats
Mental Health Nursing	- 05 Seats
Obstetrics & Gynecological Nursing	- 05 Seats
Community Health Nursing	- 05 Seats



FOR ADMISSIONS

Ms. Divya Chaudhari - +91 8141067704

Ms. Nilam Rathod - +91 9726984043

Ms. Mayuri Rabari - +91 8758368466

Ms. Krushi Shah - +91 8140340405



Ph.:(02625) 254141 | email: director.mbnc@utu.ac.in | www.mbnc.edu.in | www.utu.ac.in