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Editorial

Short Communication

Quality Control in the Process of Journal Publication: The Art, Logic, Ethics & Pains Taking Effort Network of Peer Reviewer & Editor

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Histories of publishing articles mesmerize us with the fact that nearly 300 hundred years before (18th century) this art of peer review started. Evaluation of scientific, academic or professional work by others working in the same field[1]: a form of self control or self regulation or ethics of publishing. Reviewer stand central point of a very scholarly publication where a patient editor's perseverance and owe, work as an electrical force, which in turn bring many more citation for the journal. Editors plan of process and determination of publishing a scholarly article is the magical wand. Time is ticking always like a persistent old pricking pain; helplessly bother editorial team due to the contribution speed of the reviewers. Mercilessly reviewer taking away editors time yet editor keep it in mind always that artists are artists, and their contributions are timeless: limiting time kills quality of a paper. Saga of an editorial team one side and an awaiting author another side mostly unwritten in the peer reviewed published article where the quality of paper is unbeatable and flawless.

There are double blind, single blind, open review or much more transparent review improves reading experience and create a commendable originality, validity and quality of a peer reviewed scholarly article. Many article suggested new model of peer review when this system is under stress.[2] When peer review is a professional responsibility yet there is question of network peer review to speed up the process.

We must think otherwise, is there some of the demographic factors of reviewer affect the process? How long is too long in peer review? Some studies suggested that "Classical peer review always slow down the publication process".[3]

Ironically network review depends upon availability of software, internet speed, email or cell phone communications. Peer review status faces extreme challenges when there is a question of classical peer review model and dissemination of scholarly information to the health professionals including nursing researches. So today, in order to minimizes art and logic of peer review process of biomedical journals or exclusively nursing journals when there are questions of time, patient treatment and evidence. Future of facilitating scientific progress must not be an obstruction for ideal peer review when an unblind peer review mostly faced a number of biases.[4]

Journal policy on ethics in scientific publication less often shared with a reader. Degree of peer review reflects various portion of a research publication. Methodological errors, plagiarism, criteria of misconduct can spoil reputation of the journal and also may damage most of the time by an investigators personal judgment the integrity of author and journal. So editors' responsibility is to promulgate standards and enforce highest ethical etiquette in biomedical publications.

Ethical and quasi ethical issues in nursing journals are authorship, authorship is a credit for author but it is the responsibility of editors. Conflict of interest is a financial issue for editor .including if an author try to publish same paper twice, it argue the credibility of the journal. Journal cannot take the responsibility of such issues where the research institution or hospitals may take such issues through ethical clearance,

trial registration by authorities or protecting their patients through informed consents practice.[5]

In this personal rat race of paper publications by the Indian nurses we must keep in mind certain nursing factors, safety of ourb patients and reputation of the institutions where they conducted research work also their supervisors, research guides and fellow researchers.

Journal selection is not only the choice of researcher for publication but also a serious kind of responsibility to assess quality of publication. Peer review process always a time constraint for paper publication. Even if a less impact factor journal might have a better review process or vice- versa.

In conclusion, Indian nurses or other biomedical researchers if understand main intention of this logic, ethics and owe of reviewers and editors, behind this time factor ,will surely consider the advantages of this long waiting time for journal publication is not an wastage of time!

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Original Research Article

Training Program on Identification of Arrhythmia and use of Defibrillator among Critical Care Nurses

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ABSTRACT

Arrhythmia are a disorder of the formation or conduction of the electrical impulse in the heart. Defibrillation is used in emergency situation as a treatment of choice for VF and pulse less VT. The main objective of the study was to assess the level of knowledge and the effectiveness of PTP on identification of arrhythmia and use of Defibrillator. The research design adopted was pre-experimental one group pre-test post-test design. The assessment of knowledge was done by using structured knowledge questionnaire and skill on use of defibrillator by skill checklist. The findings showed that the pre-test knowledge and skill score 5.633 and 3.166 were increased to 10.1 and 12.933 in the post-test knowledge and skill score. Thus, the study showed that the PTP was effective in increasing the knowledge and skill of the critical care nurses.

Keywords: Effectiveness, knowledge, critical care nurses, PTP (Planned Training Program) Defibrillator.

Background: Abnormal heart function results in disturbances of either electrical or mechanical activity or both abnormal and electrical activities may result in arrhythmia when the rate and rhythm of any of the individual wave of electrocardiogram (ECG) is abnormal, the disorder is called Arrhythmia. Development of arrhythmia is one of the most common complications in patients with acute myocardial infarction. Nearly half deaths from myocardial infarction are due to arrhythmia. Arrhythmia can lead to dramatic changes in circulatory dynamics such as hypotension, heart failure, and shock.[1]

The most common cause of Arrhythmia and sudden cardiac death in the US is coronary artery diseases approximately 3, 00,000 people suddenly die of this cause every year in the US. If arrhythmia treated at an early stage mortality rate can be prevented.[2]

Cardiovascular disease (CVD) is the leading cause of death in the India, taking a life every 30 seconds.[2]

Defibrillation was pioneered for internal use by Claude Beck in the 1940s and Paul Zoll in 1956 for external defibrillation. Defibrillation is used in emergency situations as the treatment of choice for ventricular fibrillation and pulseless ventricular tachycardia. Defibrillation depolarizes critical mass of myocardial cells at once. When they repolarize the sinus nodes usually recaptures its role as the pacemaker. The electrical voltage required to defibrillate the heart is usually greater than that required for cardio version.[3]

Out of global total of 52.2 million deaths; 15.3 millions were due to circulatory disease most deaths from circulatory disease were due to coronary heart disease 7.2 million. About 33,380 global deaths per year were due to cardiac arrhythmia with the weighted average of 31581 deaths prevalence of arrhythmia is 53 per 1000. In India, cardiac arrhythmia following myocardial infarction is more and increased day by day, the incidence of cardiac arrhythmia is more in male than in female. The clients who are over 60 years of age they are more prone to get with this and also it can occur in the age group between 30-60 changing life style including stress of everyday life.[4]

Since nurses cares for their patients round the clock, need to have higher level of knowledge and skill in interpretation and management of arrhythmia to promote the quality and appropriate care for patients with cordial elements. Hence it was decided to conduct a study to assess the effectiveness of planned training program on the identification of arrhythmia and the use of defibrillator among critical care nurses.

Objectives of the Study:

1. To assess the pre-test and post-test level of knowledge of critical care nurses regarding arrhythmia among the critical care nurses.
2. To assess the pre-test and post-test skill regarding the use of defibrillator among the critical care nurses.
3. To evaluate the effectiveness of Planned Training Program on the identification of arrhythmia and the use of defibrillator among the critical care nurses.
4. To find out the correlation between the level of knowledge regarding identification of arrhythmia and the use of defibrillator and the skill regarding the use of defibrillator among the critical care nurses.
5. To find the association between the level of knowledge regarding identification of arrhythmia and the use of defibrillator and the skill regarding the use of defibrillator and the demographic variables such as educational qualification, sex, area of posting, years of experience and previous training on arrhythmia and defibrillator.

Hypotheses:

The study was based on the following hypotheses tested at 0.05 level of significance.

H_1: There will be significant difference in the pre-test and post-test level of knowledge regarding identification of arrhythmia and the use of defibrillator among the critical care nurses.

H_2: There will be significant difference between the pre-test and post-test level of skills on the use of defibrillator among the critical care nurses.

H_3: There will be significant co-relation between pretest knowledge and pretest skill on identification of arrhythmia and use of defibrillator among the critical care nurses.

H_4: There will be significant association between pre-test level of knowledge of critical care nurses regarding identification of arrhythmia and the use of defibrillator and selected demographic variables such as education, years of experience, and area of posting, exposure to any training related to arrhythmia or defibrillator.

Methodology:

Research design: Pre-experimental one group pre-test post-test research design.

Variables: The independent variable is the PTP, dependent variable is the knowledge and the skill of the critical care nurses regarding identification of arrhythmia and use of defibrillator.

Population:

The target population was the critical care nurses of Guwahati, Assam.

Inclusion Criteria : Staff nurses

1. Working in critical care area (ICU, SICU, A&E, OT, RECOVERY) in Downtown Hospital

Exclusion Criteria: The study excludes the

1. Who had previous exposure to training related to arrhythmia and defibrillator

Sample & Sample size:

The samples for the study were the critical care nurses of Downtown Hospital, Guwahati, Assam. The sampling techniques used for the study was purposive Sampling technique. A total of 30 critical care nurses were included in the study.

Setting: The study was conducted among the critical care nurses from the ICU, HDU/SICU, Accident& Emergency, Recovery Unit of Downtown Hospital, Guwahati.

Tools:

Tool–I: Demographic Performa: Educational qualification, sex, area of posting, years of experience, previous exposure to any training related to arrhythmia and defibrillator.

Tool–II: Knowledge Questionnaire: It was used to assess the level of knowledge regarding identification of arrhythmia among the critical care nurses. Tool consisted with a total of 14 items. . For each correct answer a score of one and for each wrong answer a score of zero was given. The total maximum score was 14. The score was categorized as: Adequate (8-14) and inadequate (1-7).

Tool–III: Skill checklist: It was used to assess the critical care nurse's performance level on use of defibrillator. It comprised a total of 16 steps. For each correct step performed a score of 1 and for each wrong step a score of 0 was given. The total maximum score was 16. The score was categorized as: Adequate (9-16) & inadequate (1-8).

Validity: The developed tools and PTP along with the objectives were sent to 5 experts in the field of Anesthesiology, Critical care Medicine, and Nursing and their valuable suggestions were incorporated.

Reliability: The tools were tested for reliability. For the knowledge questionnaire the reliability was computed using Spearman Brown Prophecy formula (Split Half method). The reliability of the tool-II is found to be 0.86 which indicated that the tool was reliable and for the Skill Checklist (tool-III) Karl Pearson Correlation Coefficient

(Inter-Rater method) was used. The reliability of the tool was found to be 0.91 which indicated that the tool was reliable.

Pilot Study: Pilot study was conducted in the month of September 2015 at GNRC Hospital, Dispur. The tool was administered to 5 staff nurses from the Cardiac Care Unit. After obtaining their consent, the tool was administered. The respondents were assured of the confidentiality of their identity. On the first day pretest was conducted using structured knowledge questionnaire to assess the knowledge and observation of skill using skill checklist on use of defibrillator. Duration of 5-10 minutes was spent by all the 5 nurses to complete the tool. On the same day planned training program was given regarding the identification of arrhythmia (shockable rhythms) and use of defibrillator. The post test was conducted on the 8th day using the same structured knowledge questionnaire and the observational skill checklist. After the pilot study, the researcher found that the PTP on identification of arrhythmia and use of defibrillator was beneficial for the critical care nurses.

Data Collection : Prior to the data collection the researcher obtained Ethical Clearance Certificate from the Ethical Clearance Committee of Assam Downtown University, Panikhaiti, Guwahati, Assam. A prior permission was also obtained from the higher authority of Downtown Hospital, Dispur, Assam. The data collection period was from 9thof October to 30thof November, 2015. The nurses from the institution were selected based on the inclusion criteria.

On the first day the purpose of the study was explained to the nurses and informed consent was taken from them before starting the study. The data collection was done in the following ways:-

The pretest was done on day one for assessing the demographic profile and level of knowledge on identification of arrhythmia. The planned training program was then given on the same day on identification of arrhythmia.

After the 7th day, post test was conducted to assess the gain in knowledge on the identification of arrhythmia and pre test for skill on use of defibrillator was conducted. The planned training program was then given on the same day on the use of defibrillator.

On day fifteenth, post test was conducted to assess the gain in skill on the use of defibrillator of the critical care nurses.

Findings :

Section - I – Sample characteristics

The sample consisted of 30 critical care nurses. In this section the data collected was analyzed by using descriptive statistics and presented in terms of frequency and percentage distribution. With regards to educational qualification of the critical care nurses, Majority (53.33%) were GNM. And (90%) were female. Majority (57%) had less than 1 years of experience. Majority of them (43%) were from ICU .With regards to previous exposure to the any training related to arrhythmia and defibrillator, none of the nurses (100%)had been exposed to any training program related to arrhythmia and defibrillator.

Section-II: Pre- test and Post- test knowledge on identification of arrhythmia (shockable rhythms) of the critical care nurses: The knowledge on identification of

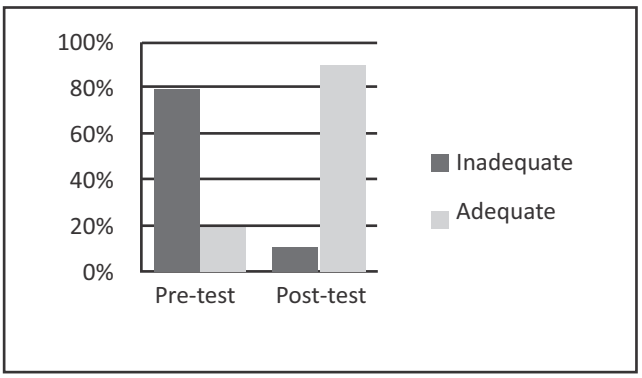

Fig 1: Diagram showing percentage distribution of pre - test and Post-test knowledge score on identification of arrhythmias (shockable rhythms) among critical care nurses.

arrhythmia (shockable rhythms) of the critical care nurses were assessed using knowledge questionnaire. In Pre-test (20%) of the critical care nurses were having adequate knowledge whereas in the Post-test (90%) of the critical care nurses have adequate knowledge on identification of arrhythmia (shockable rhythms).

Section III: Pre-test and Post-test skill on use of

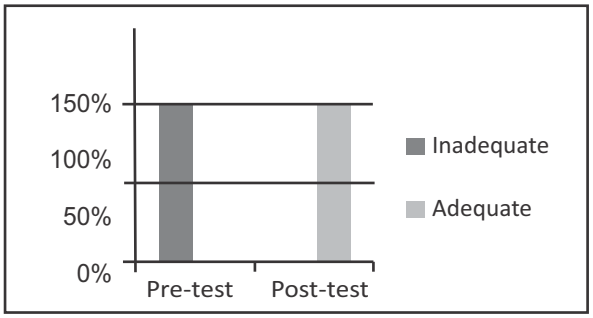

Fig 2: Percentage distribution of Pre-test and Post-test skill on use of defibrillator among the certical care nurse.

defibrillator among critical care nurses : The skill was observed by using the observational checklist developed separately for skill assessment on use of defibrillator. In Pre-test all (100%) of the critical care nurses had inadequate skill, whereas in Post-test all (100%) had adequate skill. Thus, indicating the effectiveness of planned training program on identification of arrhythmia and use of defibrillator among the critical care nurses.

Section IV: Effectiveness of planned training program on identification of arrhythmia and use of defibrillator.

The data showed that pretest knowledge mean was found to be (5.63), which was increased to (10.1) in post-test mean after the PTP.

The data showed that pre-test skill mean was (3.166), which was increased to (12.933) in the post-test skill mean after PTP was given.

To assess the significant difference between Pre-test and Post-test knowledge and by Pre-test skill and Post-test skill Paired t-test was computed.

H_1 There will be a no significance difference between the Pre-test and Post-test knowledge score.

Table 1(a): Mean, SD and t-value of pre-test and post-test knowledge score

Know-ledge Score	Mean	SD	df	t value	Tabulated value
Pre-test	5.63	202	29	8.7047 **S	2.05
Post-test	10.1	1.98	29		

The data indicated the calculated t-value (8.7047) was more than tabulated t-value (2.05) at 0.05 level of significance. Thus, the research hypothesis was accepted. This indicates that there was a significant difference between pre-test and post-test knowledge score and the planned training program was effective in improving the knowledge of critical care nurses.

H_2-There is a significant level of difference between the pre-test and post-test level of skills on the use of defibrillator among the critical care nurses.

Table 1(b): Mean, SD and t-value of pre-test and post-test Skill score.

Skill Score	Mean	SD	df	t value	Tabulated Value
Pre-test	3.16	0.77	29	35.21	2.05
Post-test	12.93	1.20	29	2**S	

The data indicated the calculated t-value(35.212) was more than tabulated t-value(2.05) at 0.05 level of significance. Thus, the research hypothesis was accepted. This indicates that there was a significant difference between Pre-test and Post-test skill score and the planned training program was effective in improving the skill of critical care nurses.

SECTION V: Correlation between knowledge on identification of arrhythmia (shockable rhythms) and skill on use of defibrillator.

To test the significant Correlation between pre-test knowledge and pre-test skill, a research hypothesis (H_3), which can be stated as- H_3 There will be a significant correlation between pre-test knowledge and Pre-test skill on identification of arrhythmia and use of defibrillator.

Table 2: Correlation between Pre-test knowledge and skill on identification of arrhythmia and use of defibrillator among the critical care nurses

Variables	Mean	SD	Correlation
Knowledge	5.63	2.02	
Skill	3.16	0.77	0.67

The data indicated that there was a positive correlation (r=0.6725) between the Pre-test knowledge and Pre-test skill regarding identification of arrhythmia and use of defibrillator among the critical care nurses at 0.05 level of significance. Thus, the researcher accepted the research hypothesis (H_3), which is there was a significant correlation between Pre-test knowledge and skill regarding identification of arrhythmia and use of defibrillator. Hence, it is concluded that knowledge and skill are dependent of each other, i.e as the knowledge level increases. the skill level also increases or become high.

Section VI: Association between Pre-test knowledge on identification of arrhythmia and skill on use of defibrillator of the critical care nurses according to demographic variables:

H_4: There will be a significant association between pretest knowledge and skill on identification of arrhythmia and use of defibrillator among the critical care nurses according to demographic variables such as educational qualification, sex, years of experience, are of posting and exposure to any training related to arrhythmia and defibrillator.

Thus, the research hypothesis was accepted, thus, it reveals that there is significant association between the knowledge on identification of arrhythmia and demographic variable. The data showed that the chi-square value was computed to determine the association between pre-test skill with selected demographic variables viz educational qualification, sex, years of experience, area of posting and previous training related to arrhythmia and defibrillator were found to be not significant at $p<0.05$. Thus, research hypothesis H_4 was rejected. Thus, it is concluded that the skill on use of defibrillator is independent of educational qualification, sex, years of experience, area of posting and previous training related to arrhythmia and defibrillator.

Discussion :

In this present study, the frequency and percentage distribution of selected demographic variables of the critical care nurses with regards to educational qualification showed that, majority (53.33%) of the critical care nurses were from GNM background, (37%) of critical care nurses were from BSN background , and (10%) of critical care nurses belongs to the PBBSN background. With regards to gender (10%) were male nurses and majority (90%) were female nurses. With regards to area of posting, majority (43.3%), from ICU (13.3%) were from HDU/SICU , (20%)were from accident &emergency and(23%)were from recovery unit, with regards to exposure to the any previous training related to arrhythmia and defibrillator, none of the critical care nurses (100%) had been exposed to any such training.

Effectiveness of Planned training program on identification of arrhythmia and use of defibrillator:

The mean of the post-test knowledge score (10.1) was higher than the mean of the pre-test knowledge score (5.633) with a mean difference of 4.467. There was a significant difference between the pre-test and the post-test knowledge score with the t-value of 8.7047 and found to be significant at $p<0.05$ level and the mean of post-test skill score (12.933) was higher than the mean of pre-test skill score (3.166) with a mean difference of 9.767. There was a significant difference between the pre-test and post-test skill score with the t-value of 35.212 and found to be significant at $p<0.05$ level.

This indicted that the planned training program on identification of arrhythmia and use of defibrillator among the critical care nurses was effective.

The present study findings were supported by study conducted on Effect of Cardiac Arrhythmia Simulation on Nursing Students' Knowledge Acquisition and Retention. A paired *t* test showed that the mean knowledge score at the post-test was significantly higher than at the pretest for both groups. However, participants in the experimental group demonstrated significantly increased knowledge of cardiac arrhythmia in the first and the second post-test compared with those in the control group. Thus, simulation is superior and significantly improves students' arrhythmia knowledge.[5]

An evaluative study conducted on Assessment of long-term impact of formal certified cardiopulmonary resuscitation training program among nurses. A series of certified BLS and ACLS training programs were conducted during 2010 and 2011. Written and practical performance tests were done. Formal certified CPR training program increases CPR knowledge and skill. However, significant long-term effects could not be found.[6]

Correlation between knowledge on identification of arrhythmia and skill on use of defibrillator :

To find out the correlation between Pre-test knowledge and skill score, Pearson's correlation coefficient was computed. There was a moderate positive correlation ($r=0.6725$) between the Pre-test knowledge and Pre-test skill regarding identification of arrhythmia and use of defibrillator.

A study on nurses knowledge and practice regarding implantable cardiac devices, the result of the study was that nurses had very low knowledge about implantable cardiac devices and no significant correlation between the gender, age, years of experience, and their level of knowledge and practice ,except negative correlation existed between practice and years of experience[7].

Association between Pre-test knowledge and skill on identification with demographic variable

- The pre-test knowledge score of the critical care nurses was found to be associated with years of experience.
- The pre-test knowledge and skill was found not to be associated with any of the selected demographic variables (educational qualification, sex, area of posting and previous exposure to any kind of training related to arrhythmia and defibrillator).
- Hence, it could be interpreted that there was association between the pre-test knowledge on identification of arrhythmia with the years of

experience of the critical care nurses but there was no association between the pre-test skill score regarding the use of defibrillator with the demographic variables.

A study on effectiveness of stimulated demonstration regarding defibrillation technique and practice among critical care nurses. The result showed that there was no significant association between the selected variables and knowledge of the subjects regarding defibrillation and practice of subjects regarding defibrillation[8]

Conclusion:

Present study was conducted to assess the level of knowledge on identification of arrhythmia and skill on the use of defibrillator and to assess the effectiveness of PTP. During the study it was observed that, all the subjects were very enthusiastic and interested to learn. One group pre-test post-test design was used to assess the effect of the PTP. Although the drawback for the study was, that the study could have been conducted on a larger sample, or the study could have been conducted using a control group. Above all, results indicated good positive response to the PTP. The subjects expressed that they were expecting more of such kind of PTP with demonstration.

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Original Research Article

Self-esteem therapy on Personality and Self-confidence among Adolescents

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ABSTRACT

Self-esteem is a universal need for every human being. It is a key component in restoring mental and physical health. Adolescent with low self-esteem is likely to be sensitive to any evidence in the experience of daily life which testifies to his inadequacy, incompetence or worthlessness. Therefore, a study was conducted on effectiveness of self-esteem therapy on personality and self-confidence among adolescents residing at selected homes, Chennai. A quasi – experimental research design was adopted for the study. Total sample size was 60 with 30 adolescent individual in experimental and control groups. The sampling technique used was non - probability convenience sampling. The Tool used in the study consists of two parts. Section – I consists of background variables. Section – II consists of Rejini's self-esteem scale which consists of two components (personality and self-confidence). The result showed that in the experimental group, after the intervention of self-esteem therapy 28(93.3%) had extrovert personality and high self-confidence and 2(6.7%) had introvert personality and low self-confidence. There is a statistically significant effect of self-esteem therapy on the personality and self-confidence among adolescents in the experimental group at the level of $p<0.001$

Key words: Self – esteem, Personality, Self- confidence , Adolescent

Background Self-esteem is a judgment of his or her own worth based on how well behavior matches with self deal. It is also referred to as the extent to which a person feels that he lives up to his own expectations and to the expectations of people who have an influence on him. The change in adolescence has important implications for understanding the kind of risk to which young people are exposed. The adolescents are commonly called as vulnerable group; during this period they get addicted to drug abuse and sexual abuse and this result in an increase in the criminal rate.[1]

WHO reported adolescence as a critical stage in life. The life style choices are established by including health related behavior which has an impact throughout their life. The health enhancing and risk taking behavior are found among them. Recent research has begun to focus on the role of protective factors in youth behavior, complementing the previous approaches that were concerned only with the problem and risk taking. They need to develop coping strategies and social support.[2]. Worldwide, the prevalence of clinically significant psychiatric disorder among adolescent is at least 9%. This rate rises in socially disadvantaged and densely populated urban areas. It also increases by 3%–4% after puberty. Boys are two or three times more likely than girls to be affected by disturbed and antisocial behavior. The ratio is more equal for emotional disturbances.[3]

Personality and self-confidence play a vital role in adolescent's self-esteem. It is one of the most significant keys to understand the behavior of a person. Personality development in adolescence takes place in a social and ecological context that influences the individuals. This developmental approach is a cumulative approach and it stresses the mutual influence between society, environment, and individuals. Self-confidence is an attitude which allows to have positive realistic view of themselves and their situations. It is considered as a central aspect of psychological functioning and is to be related to a host of variables including goal setting and attainment, sense of control, empower ability to respond, adjust to challenges and generate satisfaction with one's life. Self-confidence in adolescents trusts their own abilities and has general sense of control over their lives. Some lack in self- confidence and hold back in class. Others act out to gain attention. The worst part in lack of confidence is often linked to self-destructive behavior and habits such as smoking or drug or alcohol use.[4]

A program was designed to improve self-esteem by providing teenagers with social skill training and the

modeling of appropriate behavior to reduce drug use and other negative behavior, such as truancy. The effect of group work on adolescents with social competence difficulties also have been the focus of empirical research. It is useful in improving the overall social adjustment like shyness, increasing their assertiveness and self-esteem.[5]

Need for the Study

For adolescents, self-esteem is influenced by the feeling of positive identification, belongingness and sense of purpose. During adolescence, self-esteem is dependent on how the individual believes that he/she is seen by others. Self-esteem is important for orphanage individuals. Self-esteem embraces the concepts of ego or ego strength, inner self, identity, personality, self-concept, self-worth, self-respect and self-satisfaction. Self-acceptance which is fundamental to high self esteem may be challenged when previous aspirations, role & relationship have to be changed because of illness.[6]

A longitudinal study was conducted in high school adolescents. Samples were 120. Throughout their high schooling, he measured their level of self esteem by self-esteem inventory which was formulated and standardized by Bhatia. The periodical measurement was put into statistical analysis. The finding revealed that there was only a slight increase in self-esteem for majority of the youth; those who had negative self concept when entering adolescence entered adulthood with same negative feelings.[7]

Self-esteem is partly an inevitable trait. Environmental influence is very important. Low self-esteem among the adolescents increases the threat. Low self-esteem sometimes causes problems compared to those with high self-esteem. People with a sense of worth are happier, less neurotic, less troubled by ulcer and insomnia, less prone to drug and alcoholic addictions and more persistent after failure.[8]

An experimental study was conducted to find the effectiveness of self-esteem therapy. It was used either alone or along with an institutional intervention on participation in the group sessions and self-esteem. The study compared 3 groups of 7^{th,} 8th and 9th graders who received self-esteem therapy. The data was collected by using standard self esteem scale. The findings showed that the reality therapy group training had significant effect on the samples that participated.[9]

Program that enhance the self esteem should encompass task of growth and development in achieving a social role, achieving more natural relationships, achieving emotional independence and acquiring self-confidence and a philosophy of life. This program is designed to increase a sense of self worth. It ensures that individuals will be able to find their way in avoiding to be dependent, negative relationship and more dominant peers. The need for self-esteem can be satisfied through achievement, and achievement may be a means of building up self-esteem. So there will be a growing need for the development of such program that can enhance the adolescent's perception of effective living. Thus the study was conducted to effectiveness of self-esteem therapy on personality and self-confidence among adolescents.

Statement of the Problem

A study to assess the effectiveness of self-esteem therapy on personality and self-confidence among adolescents residing in selected homes at Chennai.

Objectives

1. Assess the personality and self-confidence among adolescents.
2. Determine the effectiveness of self-esteem therapy on personality and self-confidence among adolescents.
3. Associate the personality and self-confidence with selected background variables of adolescents.

Hypothesis

H_1: There will be a significant difference in the personality and self-confidence among adolescents who practice self-esteem therapy than those who do not.

Assumptions

1. Adolescence is a period of developmental challenge.
2. Positive self - affirmation strengthens self - esteem.

Methodology

Research Approach & Design: Quantitative research approach & Quasi – experimental research design was used for the study.

Setting: The study was conducted in the Faith Home and Christian Outreach Ministry orphanage homes located in Chennai.

Sample & Sampling Technique: Sample consists of adolescents who have fulfilled the inclusion criteria. A total of 60 samples with 30 samples in each group (experimental and control group). The sampling technique used was non - probability convenience sampling.

Description of the Tools: The Tool used for the study consists of two parts;

Section – I: Background Variables.

Section – II: Self – Esteem scale.

Part A - Personality
Part B - Self - confidence

Section – I

Consists of information related to adolescents such as age, sex, standard, medium of study, religion, family system, number of visits by parents/guardian, visit by whom, parenthood, mode of entry, monthly income of the family, leisure time, opportunity to socialize, and reason for joining.

Section – II

The self-esteem scale was developed by Rejini (1986) which consists of four components. The investigator utilized the two components, personality and self-confidence for the current study. These two components consist of 40 items, 20 in each. The items were scored on a five point Likert Scale with scores ranging from one to five for strongly disagree, disagree, undecided, agree, strongly agree respectively. For negative items reverse scoring was adopted.

Score Description: The modified self-esteem is a five point scale. It measures both positive and negative state of mind. The items that measure positive state of mind are coded as reverse scoring whereas negative state of mind has direct scoring. Maximum score is 200 and minimum score is 40

The score was interpreted as:

High self-esteem	-	160-200
Moderate self-esteem	-	121-159
Low self-esteem	-	40-120

Personality:

- It's a 5 point scale with 20 items
- Maximum score is 100

The score interpretation is done as follows:

Introvert - ≤50
Extrovert - ≥51

Self-confidence:

- It's a 5 point scale with 20 items
- Maximum score is 100

The score interpretation is done as follows:

High self-confidence - 75 - 100
Moderate self-confidence - 50 - 74
Low self-confidence - ≤49

Validity & Reliability: The tool was validated by the experts in the field of psychiatry, psychiatry nursing and clinical psychology. The personality and self-confidence assessment scale was found to be reliable with an 'r' value of 0. 86

Data Collection Procedure: Written permission was obtained from the concerned authorities of Faith Home and Christian Outreach Ministry orphanage home. The Christian Outreach Ministry orphanage home was assigned for control group and Faith home was assigned for experimental group randomly. The investigator identified and analyzed the number of adolescents residing in both the homes. Rapport was established and consent was obtained from samples. The personality and self-confidence level of the adolescents was assessed for both the groups using self-esteem scale and those who had low and moderate level of self-esteem were selected for the study. Then the Self-esteem therapy (personality and self-confidence) was administered for 30 minutes on each component to the participants. The investigator demonstrated the procedure. Return demonstration and self practice were done by the participants for seven days. On the eighth day, post-test was conducted for both the groups to assess the self-esteem level using the same self-esteem scale.

Findings

Section – I: Background Variables:

The study revealed in the experimental group, the majority of the adolescents 16 (53.3%) were in the age group of 12-14 years and in control group majority of the adolescents 14 (46.7%) were in the age group of 15-18 years. Regarding sex, all the adolescents were equally distributed 30 (50%) were male and 30 (50%) were female. With regard to the educational status six (20.0%) were in 6^{th} standard, eight (26.7%) were in 7^{th} standard, seven (23.3%) were in 8^{th} standard and five (16.7%), and four (13.3%) were in 9^{th} and 10^{th} standards respectively. In control group four (13.3%) were in 6^{th} standard, 10 (33.3%) were in 7^{th} standard, seven (23.3%) were in 8^{th} standard, five (16.7%) and four (13.3%) were in 9^{th} and 10^{th} standards respectively. Regarding medium of study, 20 (66.7%) in the experimental group were in English medium and 10 (33.3%) were in Tamil medium. In control group, 22 (73.3%) were in English medium and eight (26.7%) were in Tamil medium. With regard to the religion, in the experimental group, 17(56.7%) were Christians, 10(33.3%) were Hindus and 3(10.0%) were Muslims. In the control group, 15 (50.0%) were Christians, 11 (36.7%) were Hindus and 4 (13.3%) were Muslims. Analysis of family system showed that all the 30 (100%) adolescents in both the groups were in nuclear family. With respect to the number of visits made by parents or guardians, in experimental group, seven (23%) were visited bimonthly and 23 (76.7%) were not visited by parents or guardians. In control group, 23 (76.7%) were visited bimonthly and seven (23%) were not visited by parents or guardians. Regarding who

visited the adolescents, in the experimental group, six (20.0%) adolescents were visited by their father and 24(80.0%) were visited by their mother. In control group, 11(36.7%) adolescents were visited by their father and 19(63.3%) were visited by their mother. With respect to parenthood all the 30 (100%) adolescents in both the groups had single parent. Regarding the mode of entry, all the 30 (100%) adolescents in both the groups were brought by any one parent. Analysis of monthly family income revealed that, in the experimental group 24 (80.0%) adolescent's monthly family income was less than Rs.5000 and six (20.0%) adolescent's monthly family income was between Rs.5000 - 10,000. In control group six (20.0%) adolescent's monthly family income was less than Rs.5000 and 11(36.7%) adolescent's monthly family income was between Rs.5000 – Rs.10,000.

Section – II: Analysis of Pre test and post test level of personality and self-confidence in experimental and control group.

Table – 1: Percentage distribution of personality among adolescents in the experimental and control groups.

Types of Personality	Experimental group n=30				Control group n=30			
	Pretest		Posttest		Pretest		Posttest	
	(n=30)	%	(n=30)	%	(n=30)	%	(n=30)	%
Introvert	19	63.33	3	10	20	66.67	19	63.33
Extrovert	11	36.67	27	90	10	33.33	11	36.67

Table 1 depicts that in the experimental group 19 (63.33%) were introvert and 11(36.67%) were extrovert before installation of the self-esteem therapy. In the posttest 27(90%) were extrovert and three (10%) were introvert. The personality in the control group tend to remain with introvert at 20 (66.67%) in pretest and 19 (63.33%) in the posttest.

Table – 2: Percentage distribution of self-confidence among adolescents in the study and the control groups.

level of self-confidence	Experimental group n=30				Control group n=30			
	Pretest		Posttest		Pretest		Posttest	
	(n=30)	%	(n=30)	%	(n=30)	%	(n=30)	%
Low	18	60	-	-	17	56.67	19	63.33
Moderate	10	33.33	23	76.66	11	36.67	11	36.67
High	2	6.67	7	23.34	2	6.66	-	-

This table depicts that in the experimental group 18(60%) had low self-confidence and 2(6.67%) had high self-confidence before installation of the self-esteem therapy. In the posttest 23 (76.66%) had moderate self-confidence and 7 (23.34%) had high self-confidence. The self-confidence in the control group tend to remain with low level at 17 (56.67%) in pretest and 19 (63.33%) in the posttest.

Table – 3: Overall frequency and percentage distribution of the self esteem of the adolescents in the study and the control groups (N = 60)

level of self-esteem	Experimental group n=30				Control group n=30			
	Pretest		Posttest		Pretest		Posttest	
	(n=30)	%	(n=30)	%	(n=30)	%	(n=30)	%
Low	20	66.7	-	-	19	63.3	19	63.3
Moderate	10	33.3	20	66.7	11	36.7	11	36.7
High	-	-	10	33.3	-	-	-	-

Table 3 shows the level of self esteem among adolescents in both the study and control groups. In the experimental group 20 (66.7%) adolescents had low self esteem and 10 (33.3%) had moderate self esteem in the pretest and 20 (66.7%) adolescents had moderate self esteem and 10 (33.3%) had high self esteem in the posttest. In the control group 19 (63.3%) adolescents had low self esteem and 11 (36.7%) had moderate self esteem in both pretest and posttest.

Section – III: Determine the effectiveness of self-esteem therapy on personality and self-confidence among adolescents.

Table - 4: Mean comparison of the effect of self-esteem therapy among adolescents in the study and control groups (N=60)

Group	Pretest		Posttest		t test	p value
	Mean	SD	Mean	SD		
Experimental Group	105.80	14.45	150.67	14.06	47.10	.000**
Control Group	107.10	14.80	108.40	14.00	4.39 N.S.	0.436

N.S: Not significant***p < .001

Table 4 Illustrates the comparison of self esteem scores between pre and post-test among adolescents in both experimental group and control group. Analysis reveals that there was a significant difference between pretest and post-test in experimental group and no significant difference for the control group. The mean value of self esteem among adolescents in experimental group was 105.80 in pretest with SD of 14.45 and post-test mean value was 150.67 with standard deviation of 14.06. The calculated paired 't' value was 47.10 and it was statistically significant at $p < .001$ which showed that there was a significant increase in self esteem value from low to moderate. In contrast, the mean value of self esteem among adolescents in control group was 107.10 in pretest with SD of 14.80 and post-test mean value was 108.40 with standard deviation of 14.00. The calculated paired 't' value was 4.39 and it was not statistically significant.

Section–IV: Associate the personality and self-confidence with selected background variables of adolescents.

There is no statistically significant association between the background variables with the effect of self esteem therapy on the quality of life of the adolescent in the experimental group.

DISCUSSION

Effectiveness of self-esteem therapy on personality and self-confidence.

After installing self-esteem therapy in the experimental group, after which the personality was assessed. The results shows that 3(10%) had introvert personality and 27(90%) had extrovert personality, whereas in self-confidence the results shows that 23(76.66%) had moderate self-confidence and 7(23.34%) had high self-confidence. The calculated paired 't' value for pretest and post test score was 47.10 and it was statistically significant at $p < .001$ which showed that there was a significant increase in self esteem value from low to moderate.

These values showed that there was a marked improvement in personality and self-confidence. On the basis of above finding there is a statistically significant effect of self-esteem therapy on the personality and self-confidence among adolescents in the experimental group at the level of $p<0.001$. Therefore the hypothesis is accepted.

The above findings are supported by the study conducted to evaluate the effectiveness of self-esteem therapy on orthopedically handicapped adolescents. The thirty students were selected at the age of 12, 13, 14, and 15 years by convenience sampling technique. The modified version of self-esteem scale developed by Rejini (1986) was used for data collection. The data were analyzed and the value showed significant difference between pre and post test scores. The finding showed that the self-esteem therapy was effective in enhancing the self-esteem of the students. [10]

Similar findings were found in the study conducted to assess the effectiveness of self-esteem therapy to improve self -esteem and prevent depression. A total of 50 children from middle and high school participated in the treatment group as compared to 50 children in control group. The result showed that depressive symptoms significantly reduced and the classroom behavior significantly improved in the treatment group. The students had significantly higher self-esteem and some career goals in the control group. Girls were better in the emotional, social and educational areas as well as in the total level of adjustment than the boys. [11]

CONCLUSION

On accumulation of the findings in the above mentioned studies and the present study it was evident that self-esteem therapy on personality and self-confidence can bring an impact on status of an adolescent. This will improve their well being, behavior and prevent the difficulties in the social competence. This self-esteem therapy is tested and found to be effective in developing the personality and self-confidence. The nurse who focuses on the psychiatric rehabilitation in the community should know about self-esteem therapy. In the family, the members can be encouraged to practice and prevent the maladaptive behavior and also to strengthen the coping mechanism. Community psychiatric nurse can also formulate intervention programs with self-esteem therapy for various age groups, which will have a cost beneficial effect and results in good self-esteem.

Ethical Clearance: This study was conducted after getting approval from the members of the Institutional ethical committee and written consent was obtained from all the subjects.

Acknowledgment: The researcher wishes to thank all the adolescents who participated in the study and administrative authorities who granted permission to conduct the study.

Conflict of Interest: Nil

Source of Funding: Self

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Original Research Article

Knowledge about Safety Measures regarding handling of Chemotherapeutic Agents

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ABSTRACT

Chemotherapy is the use of cytotoxic drugs in the treatment of cancer that provides cure, control and palliation. The normal cell will be damaged by chemotherapy along with cancer cells which results in side effects such as rashes, itching, disponea etc. The study was conducted with the aim of assessing knowledge about safety measures among staff nurses regarding handling of chemotherapeutic agents. Descriptive research approach used with one point of data collection. Through convenience sampling with random assignment 40 subjects were selected. Structured knowledge questionnaires were used to collect and study result revealed that 60% staff nurses had adequate knowledge and 40% had inadequate knowledge regarding handling of chemotherapeutic agents. The chi-square test value was found to be statistically significant at p value <0.05 regarding knowledge of chemotherapeutic agents with working experience.

Key Words: Knowledge, staff nurses, chemotherapeutic agents, safety measures.

Background:

Chemotherapy is a systematic treatment rather than localized therapy. The toxicity of chemotherapeutic agents has been well known since 1940s because these agents are non-selective in their mechanism of action, effect noncancerous as well as cancerous cells, resulting in chromosomal damage, necrosis of comprised skin, rashes, itching, and dispnoea. According to WHO, 7.56 lakh Indian died with cancer by 2014-15 and mostly patients dies without medical attention, 2015 data shows that India has one of the highest cancer rates in world. Proper training and the use of personal protective equipments are critical to ensure the safety of health workers who handles chemotherapeutic agents.[1] Following study showed that liver damage was reported in three consecutive head nurses on a particular oncology unit who worked with chemotherapeutic agents for several years.[2] Another study revealed that health care workers exposed to chemotherapeutic agents reported acute symptoms such as skin irritation, sore throat, cough, dizziness, headache, allergic reaction, diarrhea, nausea and vomiting.[3] A study published that the patients who received chemotherapy as well as nurses who administered chemotherapy found positive mutagenic activity (as measured by Ames test) in their urine. The Ames test measures genetic mutations in bacteria after exposure to compounds. Ninety percent of known carcinogens test positive in this test. The test is reliable during drug excretion in urine.[4] A descriptive co-relational study and showed that nurse's knowledge scores were low regarding chemotherapy and were not highly confident in their ability to assess the patient with advance directives. More education related to advance directives is needed and could be administered through in-service classes or continuing education.[5] A study in Turkey, to determine the safety measures on personal and environmental protection taken by nurses during chemotherapy preparation and administration. 73 nurses were included in the study group. Data were obtained via questionnaire form. The

finding showed that nurses notwithstanding the rules and regulation pertaining to chemotherapeutics. The result clearly pointed out the importance of need for regular education program and this study also revealed the necessity for improvement of the working environment because only staff nurses are always present with patient during administration of drug therapy.[6]

Objectives:

1. To assess the knowledge about safety measures regarding handling chemotherapy agents among staff nurses.
2. To find out the relationship of knowledge with selected socio demographic measures among staff nurses.

Assumptions:

1. Staff nurse working at SGRD Rotary cancer hospital, Vallah, Amritsar had adequate knowledge regarding handling of chemotherapeutic agents.
2. Staff nurses actively participate in this planned teaching program.

Methodology:

Quantitative research approach with descriptive design was used with one point data collection. The study was conducted at SGRD Rotary cancer hospital, Vallah, Amritsar. Convenience sampling with random assignment were used to select 40 study subjects. Self administered questionnaire was used to assess the knowledge of staff nurses regarding handling of chemotherapy agents. After maintaining rapport with staff nurses, structured knowledge questionnaire was distributed to staff nurses. Test was conducted for a period of 20-30 minutes. Data were analyzed by descriptive and inferential statistics.

Ethical Consideration:

This study had been approved by the ethical committee of Sri Guru Ram Das Institute of Medical Sciences and Research, Vallah, Sri Amritsar. Written informed consent was taken from each study subject after informing them about study. The confidentiality was maintained throughout the study.

Data Anylasis:

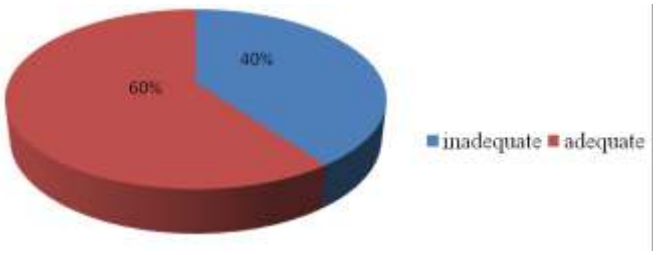

Fig 1: Percentage distribution of the knowledge score among staff nurses regarding handling of chemotherapeutic agent

Fig 1 showed that 24 (60%) staff nurses had adequate knowledge and 16 (40%) had inadequate knowledge about safety measures regarding handling of chemotherapeutic agents.

Table 1: Association of working experience with knowledge score among staff nurses regarding handling of chemotherapeutic agent:

Socio demographic variable	Chi- square	d.f	p< 0.05
Working experience	60.45	39	0.01*

Table 1: shows that as per working experience, there is significant relationship of knowledge score with working experience at p value 0.01* which means that as the working experience increases there is significant increase in the knowledge score regarding handling of chemotherapeutic agent among staff nurses.

Discussion:

As the study result showed that 24 (60%) staff nurses had adequate knowledge and 16 (40%) had inadequate knowledge about safety measures regarding handling of chemotherapeutic agents which revealed that exposure knowledge about safety measures regarding, self-efficacy for using personal protective equipment and perceived risk of harm from hazardous drug were high; total precaution use was low.[4] A prospective study to assess the value of oncology nursing certification. Certification increasing institutional reorganization and financial support could improve nurse's certification rate and ultimately result in improved patient care.[7]

Conclusion:

As the study result concluded that there should be;

1. Health talks, in service educations, seminar and workshop programs conducted for staff nurses, working in cancer hospital about safe handling and health hazards of chemotherapeutic agents.
2. Topic should be included in curriculum of nursing program.

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Original Research Article

Barriers for Breast and Cervical Screening and Association with Demographic Variables

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ABSTRACT

Cancer is predicted to be an increasingly important cause of morbidity and mortality in the next few decades, in all regions of the world. Objectives of the study is to assess the Barriers for undergoing breast & cervical screening and to identify the association of barriers with selected demographic factors. Using purposive sampling technique, a pre tested and structured interview schedule was administered to 426 women in gynaecologist out patient department of Lok Nayak Hospital. Major barriers identified were 1) health professional do not devote enough time 2) don't have any problem (78.64%) and fear of tools (60.56%) 3) lack of awareness 4)financial constraints (75%) 5)preference for female staff (55.4%) 6) high cost (77 %). Education, employment status and own income of study subjects were significantly associated with barriers. In Conclusion majority of study subjects experienced moderate barriers to screening (77%).Barriers need to be reduced to improve study subjects' participation in screening for breast and cervical cancer.

Keywords : Barriers, Awareness, Financial Constraints, High Cost.

Introduction

Cancer is predicted to be an increasingly important cause of morbidity and mortality in the next few decades, in all regions of the world.[1] There were approximately 12.7 million new cancer cases worldwide in 2008, 5.6 million of which occurred in economically developed countries and 7.1 million in economically developing countries. By 2030, the global cancer burden is expected to nearly double, growing to 21.4 million cases and 13.2 million deaths.[2]

In India twelve Population Based Cancer Registries (PBCRs) showed that cancer breast was the most common followed by cancer of cervix. Amongst female cancers, relative proportion of cancer breast varied between 21-24 percent whereas that of cancer cervix was between 14 and 24 percent. In India an overall incidence of 23.5/100,000 has been observed [WHO 2008]. [3]

In general, breast cancer has been reported to occur a decade earlier in Indian patients compared to their western counterparts**.** While the majority of the breast cancer patients in western countries are post-menopausal and in their sixties and seventies, the picture is quite different in India with pre-menopausal patients constituting about 50% of all patients. More than 80% of Indian patients are younger than 60 years of age. A significant proportion of Indian breast cancer patients are younger than 35 years of age. This proportion varies between 11% Tata Memorial Hospital (TMH) Mumbai to 26% (SGPGIMS Lucknow). Young age has been associated with larger tumor size, higher number of metastatic lymph nodes, poorer tumor grade, low rates of hormone receptor-positive status, earlier and more frequent loco regional recurrences, and poorer overall survival.[4] In another study Lump in the breast was the dominant symptom (nearly 70% of breast

lump of size <5 cms and 30% were >5 cms) in majority of breast cancer cases. Majority of the female breast cancer cases were presented in advanced stages of disease (49% in stage III, 39% in stage II and 12% in stage I). [5]The same reproductive factors that protect against one form of cancer increase the risk of the other form. Women who have early and frequent pregnancies and who breast feed their children have a lower risk of getting breast cancer but are at increased risk of developing cervical cancer. The time is right to focus on breast and cervical cancer and to support critical interventions for reducing the incidence of these two diseases and their case-fatality rates. [6] Further studies should explore factors that affect quality of the screening experience, including facility characteristics and interactions with medical staff.[7]

Early detection and prompt treatment of early cancer and precancerous conditions provide the best possible protection against cancer for the individual and the community. Cancer screening is possible because: (a) in many instances, malignant disease is preceded for a period of months or years by a premalignant lesion, removal of which prevents subsequent development of cancer; (b) most cancers begin as localized lesions and if found at this stage a high rate of cure is obtainable; and (c) as much as 75 per cent of all cancers occur in body sites that are accessible. [8]

Various barriers are leading to delayed treatment, increased morbidity and mortality in women from breast and cervical cancer reducing their overall survival. There is a dire need to identify barriers to undergo screening in women to understand reasons of women's reluctance for breast and cervix screening and delay in seeking early interventions, which is hindering our goal of primary prevention. Also association of the barriers and demographic factors need to be examined, which prevent women from taking active interest in the screening. Therefore the investigator planned to conduct a study, which is a part of PhD study, to assess barriers to undergo breast and cervical cancer screening in women and its association with the selected demographic variables.

Conceptual framework of the study -The conceptual framework of this study is based on Health Belief Model by Rosentock (1974) & Becker & Mauman (1975) which addresses the relationship between a person's belief and behavior. It is a way of understanding and predicting how clients will behave in relation to their health & how they will comply with health care policies.

Research approach - quantitative research approach is used

Research design - Exploratory and descriptive survey design has been used to identify, explore and describe the existing phenomenon and its related factors.

Variables in the study

Independent Variables- Selected demographic factors **(**age, education, marital status, religion, employment, occupation, family income, own income and type of family)

Dependent Variable- Barriers in women Setting for the study – Gynae out patient department (O.P.D.) of Lok Nayak Hospital of Delhi was selected as setting for final data collection of the present study due to its varied and vast clientele and familiarity with the investigator.

Sampling Technique and Sample Size - The sample size for the study was 426 Women from Gynae O.P.D. of the hospital using purposive Sampling technique who meet the laid criteria.

Inclusion Criteria

1. Women who are attending Gynae O.P.D for the first time (new registrations).
2. Women who are married and have intact uterus.
3. Women in the age group of 20- 60 years of age.

Exclusion Criteria

1 Diagnosed cases of carcinoma breast and cervix, women with prolapsed uterus, who have undergone hysterectomy, women on treatment for infertility and pregnant women.

2. Unmarried women and those who are below 20 years and above 60 years of age.

3. Women who are menstruating/cases of bleeding per vagina.

4. Women who are not interested to participate in study.

Description of the Tools- Interview Schedule, developed by the investigator, was used for data collection which consisted of following parts:

- Demographic data containing items on age, education, religion, marital status, occupation, income, menstrual history, obstetrical history, type of family and type of diet(13 items with sub headings).
- Opinionaire on barriers to breast and cervical screening which has following parts**:** a)Accessibility of health services (7 items with sub parts) b) Knowledge about cancer screening program (5 items with sub parts) c) Family support (7 items), d) Financial constraints (3 items with subparts), e) Importance given to health maintenance/ health behaviors (10 items).

Scoring of the opinionaire on Barriers

- Barriers were measured on a three point scale (yes, no, can't say).
- Presence of each barrier was given 0 marks and absence of it was given 1 mark. If women is unsure /can't say it was considered as barrier and given 0 marks. Thus the more score woman gets, the less barriers she has. Maximum score was 76.
- Barrier scores were divided in three categories by the investigator to represent mild, moderate and severe barriers.

Content Validity -The content validity of interview schedule was established with the help of 14 experts in the field of Gynaecology, oncology and preventive& social medicine. A Hindi translation of the tool was prepared which was validated by a bi-lingual expert.

Reliability of the Tool- Cronbach's alpha = 0.93.

Ethical Clearance- Ethical clearance was obtained. Permission for data collection was granted by IEC, MAMC ON 25/1/2015 for one year.

Procedure for data Collection -After permission from HOD, Gynae O.P.D. and consultation with unit in charge doctors three days i.e. Tuesday, Wednesday and Friday were selected for data collection. On an average 4- 5 patients fulfilling the inclusion criteria were enrolled for data collection per day. Time taken to collect data was 20-25 minutes per patient. Data collection was started in February 2015 and continued till August 2015. Total 431 patients were enrolled in the study out of which 5 patients left the study without completing it. Final data collection was done on 426 patients. A pretested-structured interview schedule was administered.

Results

1. Demographic data

The demographic data revealed that that maximum number of the study subjects were aged between 30-39 years (33.8%) and illiterate (33.57%) followed by education upto 5th class were (19.95%).Majority of study subjects were married and living with husband (96.71%). About 56.34% of study subjects were Hindu followed by Muslim (41.78%) by religion. The employment status of study subjects depicts that majority of them (87.32%) were unemployed housewives. Only 54 (12.68%) study subjects were employed. Out of the employed study subjects maximum number i.e. 22 (40.74%) were in private job. The monthly income of the majority of employed study subjects(40.38%) was upto Rs.5000. The monthly family income of most of the study subjects (41.31%) was Rs.5001-10000.

With regard to the menstrual cycle majority of study subjects (59.86%) were aged between 14-15 years at the

time of menarche and most of them (85.92%) had not achieved menopause. Maximum number of study subjects (61.97%) had normal menstrual cycle. As many as 24.65% study subjects had been pregnant five times or more. Most of the study subjects had 2-3 children (25.82% and 26.06% respectively).

Almost equal number of study subjects were living in joint family (50%) and nuclear family (48.83%) and most of the study subjects were non-vegetarian(59.62%) .The place of residence of maximum number of study subjects (80%) was Delhi. 20% of study subjects were from outside Delhi region.

2. Frequency and percentage wise distribution of barrier scores

2.1) Accessibility of health services -Majority of study subjects have health facility in their area like government health center (53.29%), government hospital (73.47%), private clinics (80.28%) and private hospitals (74.88%).The health services provided in their area are: a)immunization (68.31%), b)normal delivery (63.62%), c)caesarean section (50.70%), d)treatment of minor ailments (88.50%), e)treatment of diseases (65.26%), f) blood examination (53.52%), g) emergency services (76.53%) and e) physical examination (62.91%). The study subjects expressed that they don't have facilities Ultrasound (56.57%), X-rays (55.16%) and Pap smear (71.60%).

Regarding health personnel in their area most of the study subjects expressed that there are adequately trained doctors (81.69%) and nurses (67.84%) in their area. **Study subjects expressed that health professional do not devote enough time to examine them (59.62%), clear their doubts (63.15%) and educate them about health matters (55.16%).**

Among the health professionals the study subjects opined that doctors provide them health related information (73.94%) followed by nurses (57.75%), **the source of health information on regular basis is media like radio, television etc. (63.38%) and advices by doctors change their behavior to a more healthy one (83.33%).**

2.2) Knowledge about breast and cervical screening program - Majority of study subjects expressed that they don't know about breast and cervical screening program which includes: a) self examination (86.62%), b) reporting of unusual symptoms (81.46%), c) breast examination by health professional (57.51%), d) vaginal examination by health professional (57.98), e) pap smear test (51.64%), f) mammography (68.31%) and g) FNAC (68.08%).

The maximum number of study subjects also expressed that they don't have screening facilities in their area (80.52%), they have never undergone breast and cervical cancer screening (92.02%) in health agency, they have never performed self breast examination (89.67%),they have not undergone pap smear test (91.08%) within last three year, or more than three years ago (57.04%).

Regarding reason for not undergoing pap smear test majority of study subjects expressed that **they feel they don't have any problem (78.64%) followed by fear of tools used during examination (60.56%).**the other reasons like presence of male doctors in the clinic, feeling embarrassment and fear of results were not the barriers for majority of study subjects (61.27%,58.69% and 57.04% respectively).

The data depicts that study subjects are not aware of breast and cervical screening program and they have never performed breast self examination or undergone pap smear test as they feel that they don't have any problem. **This shows that study subjects have barriers in the area of knowledge regarding breast and cervical screening program**.

2.3) Family Support - Majority of study subjects expressed that :1) they are unsure whether their family members are aware of cancer screening program

(52%),2) family members encourage them to go to hospital/health center for routine check up (76%), 3)family members spend money on health check up (78%), 4)family members spend on other things other than health matters(69%), 5)family members give equal preference to health of all the family members (78%),6) study subjects are not neglected in health matters (77%), and 7) family encourages delivery in well equipped hospital by well trained personnel (77%).

The data depicts that though family members are not aware about cancer screening which is a barrier for breast and cervical cancer screening but the majority of study subjects have family support for maintaining their health.

2.4) Financial constraints- majority of study subjects expressed that they are not covered by health insurance policy (92%), don't have enough funds to spend on health (75.59%),they receive free investigation (61.97%), free medicine (68.08%) and free treatment of diseases (64.32%) from health centers in their area.

The data depicts that though study subjects have financial constraints which is a barrier, they are able to get their treatment done due to health facilities given by government free of cost.

2.5) Importance given to health matters – Majority of subjects expressed that they maintain normal body weight (51.41%),don't exercise regularly (75.35%),don't undergo yearly medical checkup(73.47%),seek immediate treatment for illness(87.32%),take healthy diet (74.65%), and don't consume alcohol, cigarette, tobacco etc. (83.33%),

Maximum number of study subjects also expressed that they don't feel reluctant to undergo breast examination (59.62%), feel reluctant to undergo vaginal examination (50.70%),would not go to male health professional for physical examination even if it is necessary (55.40%),they can afford a healthy lifestyle (73%) and it is very costly to adopt healthy behavior (77%).

The data depicts that study subjects give some importance to health matters but they do not exercise regularly, don't undergo yearly medical check up, feel reluctant to undergo vaginal examination, prefer female health personnel for treatment of the gynaecological disorders and find it costly to maintain health which seems to be barriers for study subjects. **Preference for female health personnel may be due to the socio-cultural factors**. Study subjects may feel more comfortable with female health personnel for sharing their menstrual, obstetrical and sexual history and undergoing physical and gynecological examination.

The total score obtained by study subjects for barriers to breast and cervical screening are the aggregate of score 2.1, 2.2. 2.3. 2.4. and 2.5.these aggregate scores are divided in three categories which are 1) mild barriers, 2)moderate barriers and 3) severe barriers. The better the score, the less are the barriers to screening. So the subjects with more scores denote less barriers and vice versa as shown in table1.

Table 1 - Category wise Distribution of barrier scores of study subjects

(N=426)

Category	Range of Score	Frequency (f)	Percentage (%)
Mild Barriers	53-76	39	9
Moderate Barriers	**26-52**	**327**	**77**
Severe barriers	0-25	60	14

Table 1 regarding barrier scores depicts that majority of study subjects experience moderate barriers to screening. This implies that barriers need to be reduced to improve study subjects' participation in screening for breast and cervical cancer.

Association of barrier scores with selected demographic variables **(**age, education, marital status, religion, employment, occupation, family income, own income and type of family) as found using chi square (X^2) test(p=0.05)

Age and Barriers - No significant relationship was found between age and barrier scores, $X^2(6,N=426) =7.643$, p=.265.

3.2 education and barriers – A highly significant relationship was found between education and barrier scores,$X^2(12,N=426) =41.118$, p=.000. majority of women who faced moderate (32.1%), and severe (58.3%) barriers were illiterate followed by primary educated (21.4%) in moderate barriers category.

3.3 marital status and barriers - No significant relationship was found between education and barrier scores ,$X^2(6,N=426) =11.485$, p=.075

3.4 religion and barriers - No significant relationship was found between religion and barrier scores, $X^2(8,N=426) =10.067$, p=.026.

3.5 employment status and barriers – A highly significant relationship was found between employment status and barrier scores ,$X^2(2,N=426) =9.432$, p=.009. Majority of women under mild (71.8%), moderate(88.7%) and severe (90%) barrier groups were unemployed.

3.6 occupation and barriers - No significant relationship was found between occupation and barrier scores ,$X^2(6,N=426) =16.937$, p=.010.

3.7 family income and barriers - No significant relationship was found between family income and barrier scores ,$X^2(10,N=426) =14.277$, p=.161.

3.8 **own income and barriers** – A highly significant relationship was found between own income and barrier scores ,$X^2(4,N=426) =27.044$, p=.003. Majority of women in mid (71.8%), moderate (89.3%), and severe (90%) barriers category were having no own income.

3.9 family type and barriers - No significant relationship was found between family type and barrier scores ,$X^2(4,N=426) =1.234$ p=.872.

Table 2 - Summary of findings of Pearson chi square test for association of barriers with selected variables. (N=426)

Variables	Value	df	P
Age and Barriers	7.643	6	.265
Education and Barriers	41.118	12	.000*
Marital status and Barriers	11.485	6	.075
Religion and Barriers	10.067	8	.026
Employment Status and barriers	9.432	2	.009*
Occupation & Barriers	16.937	6	.010
Family income & Barriers	14.277	10	.161
Own income and Barriers	27.044	4	.003*
Family type and Barriers	1.234	4	.872

* Significant

Discussion

Study subjects expressed that health professional do not devote enough time to examine them(59.62%), clear their doubts (63.15%) and educate them about health matters(55.16%). This implies that health professionals not spending enough time with patient and educating them is a barrier in screening. Similar views have been echoed in following three studies as difficulty making an appointment, lack of patient-friendly health services and unhelpful attitudes of health professionals to be important barriers respectively.[9,10, 11] Another study by Indicates the barriers that include lack of health education from any one in her community, doctor or health volunteer, no trust because health care providers are not there when needed.[12]

Among the health professionals the study subjects opined that doctors provide them health related information (73.94%) followed by nurses (57.75%), the source of health information on regular basis is media like radio, television etc.(63.38%) and advices by doctors change their behavior to a more healthy one (83.33%). A study found that of the women those who were aware

of cervical cancer screening, most reported receiving information through television (33%) or a healthcare provider (28.6%).[13]

Regarding knowledge about breast and cervical screening program, majority of study subjects expressed that they don't know about breast and cervical screening program which includes: a) self examination (86.62%), b) reporting of unusual symptoms (81.46%), c) breast examination by health professional (57.51%), d) vaginal examination by health professional (57.98), e) pap smear test (51.64%), f) mammography (68.31%) and g) FNAC.[14](68.08%). Study found main barrier for screening was cognitive, that is, 'don't know' answer by 83.99% women for cancer cervix, 84.93%, for cancer breast, and 67.26% for oral cancer. [15]

The maximum number of study subjects also expressed that they don't have screening facilities in their area (80.52%), they have never undergone breast and cervical cancer screening (92.02%) in health agency, they have never performed self breast examination (89.67%),they have not undergone pap smear test (91.08%) within last three year, or more than three years ago (57.04%).

Regarding reason for not undergoing pap smear test majority of study subjects expressed that they feel they don't have any problem (78.64%) followed by fear of tools used during examination (60.56%) the other reasons like presence of male doctors in the clinic, feeling embarrassment and fear of results were not the barriers for majority of study subjects (61.27%, 58.69% and 57.04% respectively). A study highlighted factors like lack of knowledge denial and fear as barriers to screening.[15,16,17] Whereas this findings indicate a strong sense of fatalism and embarrassment with positive beliefs about screening among women. [18] The data shows that study subjects have barriers in the area of knowledge regarding breast and cervical screening program. Another study reveals that low awareness is the main barrier for undergoing cancer screening and early detection.[19]

Regarding family support majority of study subjects expressed that : 1) they are unsure whether their family members are aware of cancer screening program (52%), 2) family members encourage them to go to hospital/health center for routine check up (76%), 3)family members spend money on health check up (78%), 4)family members spend on other things other than health matters(69%), 5)family members give equal preference to health of all the family members (78%), 6) study subjects are not neglected in health matters (77%), and 7) family encourages delivery in well equipped hospital by well trained personnel (77%).

The above mentioned data depicts that though family members are not aware about cancer screening which is a barrier for breast and cervical cancer screening but the majority of study subjects have family support for maintaining their health. This study indicates that family and friends' support is found to be the major enabling factor toward seeking treatment.[20]

Majority of study subjects (75.59%) have financial constraints which is a barrier. Following study report also identified lack of health insurance and making co-payments as barriers to screening.[21]

Regarding importance given to health matters, majority of the study subjects expressed that they maintain normal body weight (51.41%), don't exercise regularly (75.35%), don't undergo yearly medical checkup (73.47%), seek immediate treatment for illness (87.32%), take healthy diet (74.65%), and don't consume alcohol, cigarette, tobacco etc. (83.33%). Maximum number of study subjects also expressed that they don't feel reluctant to undergo breast examination (59.62%) but feel reluctant to undergo vaginal examination (50.70%), would not go to male health professional for

physical examination even if it is necessary (55.40%),they can afford a healthy lifestyle (73%) and it is very costly to adopt healthy behavior (77%). Following study also indicate preference for female doctors by women.[22] Another study by reported that feeling of shyness during examination by a male doctor, need of male to escort them to the healthcare facilities, purdah system, cultural beliefs, and custom barriers debar women from accessing the screening facility.[23] This study reported most commonly endorsed barriers like embarrassment (29%), intending to go but not getting round to it (21%), fear of pain (14%) and worry about what the test might find (12%)(9). The study reported that health maintenance is described as having a ''high price''.[24]

Following study stated that **p**articipants mentioned religious and cultural obligations of modesty, gender of healthcare providers, fear of disclosure of results, fear of nosocomial infections, lack of awareness, discrimination at hospitals, and need for approval of spouse as barriers to uptake of screening.[25] Preference for female health personnel may be due to the socio-cultural factors. Study subjects may feel more comfortable with female health personnel's for sharing their menstrual, obstetrical and sexual history and undergoing physical and gynaecological examination.[25,26,27,28,2930,31,32]

Conclusion: The mean scores of barriers is in moderate barrier category. The mean barrier scores of study subjects elicit the average scores of study population which are found to be in the same category for as the category wise scores of majority of study subjects. This depicts that the mean scores are truly representing the study population. Majority of study subjects (77%) experienced moderate barriers to screening. This implies that barriers need to be reduced to improve study subjects' participation in screening for breast and cervical cancer.

Recommendations: The study recommends that more efforts are needed to alter demographic factors that are significantly associated with barriers to screening.

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Original Research Article

Effectiveness of Drumstick Leaves Juice among Adolescent Girls with Anaemia in a selected homes at Madurai District

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ABSTRACT

Aim of the study: To evaluate the effectiveness of drumstick leaves juice to increase the hemoglobin level among adolescent girls with anemia in a selected homes at Madurai district.

Materials and Methods: A Quasi experimental research using one group pre- test post-test design was conducted on purposive sampling for 40 adolescent girls from the home at CSI girls higher secondary school, Pasumalai, Madurai. A pre estimation of hemoglobin was assessed and the anemic girls were selected for the study and as an intervention, 100 ml of drumstick leaves juice was given in the early morning at empty stomach for 15 days and post estimation of hemoglobin was assessed. The prevalence and existing level of knowledge on anemia was assessed for all the adolescent girls and a health awareness program was given.

Results: The majority73 (89%) of the adolescent were having the problem of hair loss, 59 (71.9%) of them having fatigue and 55 (67%) of them having problem in thinking and concentration in the prevalence of anemia. Among adolescent girls with anemia , in the pre-test 23 (57.5 %) had mild level of anemia and 17 (42.5 %) had moderate level of anemia and in the post-test 24 (60 %) had mild level of anemia and 16 (40 %) had no anemia (10±1.08 to 11.7±0.62) and the obtained paired t- test is 9.44 at the level of $p < 0.01$.All the adolescent girls 82 (100%) were in inadequate knowledge before the need based awareness program.

Conclusion: The outcome of the research suggested that the level of hemoglobin among adolescent girls was in moderate and mild level and it effectively improved by the intervention which in turn might increase their hemoglobin level and most of them reported that after intervention, they feel active and their level of appetite was increased and feels healthy. Along with intervention, sufficient knowledge was imparted to the adolescent girls on anemia through health awareness program with appropriate Av aids such as documentary and pamphlet. This took a part in the future health of the adolescent girls.

Key words: Anemia, Drumstick leaves juice, level of hemoglobin, adolescent girls

Background of the Study

Adolescence is a journey from the world of child to the world of adult. It is a time of physical and emotional change as the body matures. Anemia is one of the most important health problems throughout the world among adolescent. In the world, half billion adolescent girls were affected with anemia. The survey of Indian national family welfare states that, in India 56% and in Tamilnadu 49.2% of adolescents girls affected with anemia.

Statement of the Problem

"A study to evaluate the effectiveness of drumstick leaves juice to increase the haemoglobin level among adolescent girls with anemia in a selected homes at Madurai district"

Objectives

1. To assess the prevalence of anemia among adolescent girls.
2. To determine the effectiveness of drumstick leaves juice on levels of haemoglobin among adolescent girls with anemia.

3. To find the association between, the post test level of haemoglobin among adolescent girls with anemia with selected demographic variables
4. To implement the need based awareness program on anemia among adolescent girls in selected home at Madurai district.

Conceptual Framework

A Conceptual framework used for the present study is Widenbach's Helping Art Theory (1964).

Methodology

A Quasi experimental design was adopted for this study. Purposive sampling technique was used to select samples. The sample size was 40. The samples were the adolescent girls from home at CSI girls higher secondary school, Pasumalai. A pre estimation of haemoglobin was assessed and the anemic girls were selected for the study. The intervention of 100 ml drumstick leaves juice was given for 15 days and post estimation of haemoglobin was assessed. Prevalence among the adolescent girls with anemia were assessed and the structured knowledge questionnaire was applied for 82 adolescent girls to assess their knowledge and a health awareness program was given. The tool was validated by experts and found to be valid for this study. The reliability was established through the test- re test method. The Karl Pearson's coefficient of correlation was computed and the reliability was found to be 0.96.

Summary Of The Study Findings Regarding the prevalence among the adolescent girls with anemia, the finding shows that all the adolescent girls were having minimum 2 to maximum 13 signs and symptoms, most of them 73 (89%) had the complaint of hair loss, 59 (71.9%)of them had fatigue, 55 (67%)of them had problems in concentrating and thinking, 52 (63.4%) of them had shortness of breath and headache,51 (62.1%) of them had numbness or coldness in hand and feet. Few number of adolescent girls had the least complaints (i.e) 13 (15.5%) of them had Koilonychia (spoon-shaped nails) and 18 (21.9%) of them had Angular cheilitis (inflammatory lesions at the mouth corners) as well as pale skin.

Regarding the level of haemoglobin among adolescent girls with anemia, 23 (57.5 %) had mild level of anemia and 17 (42.5 %) had moderate level of anemia in the pre-test and 24 (60 %) had mild level of anemia and 16 (40 %) had no anemia in the post-test.It shows that there is a difference between the pre & post level of haemoglobin.

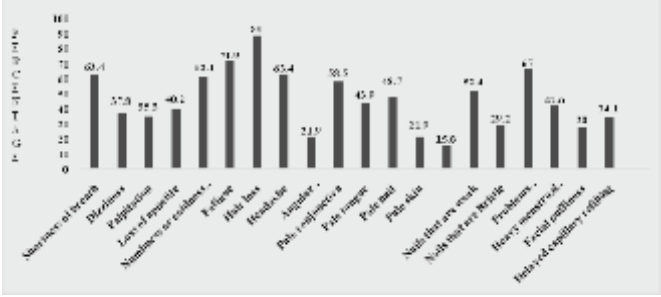

Fig. 1 Prevalence of Anemia Among Adolescent Girls With Anemia

Regarding level of haemoglobin before administration of drumstick leaves juice (Mean = 10, SD = 1.08) and the level of haemoglobin after administration of drumstick juice (Mean = 11.7, SD = 0.62), This shows that there is a significant difference between the mean score after the intervention. The obtained "t"value 9.44 was found to

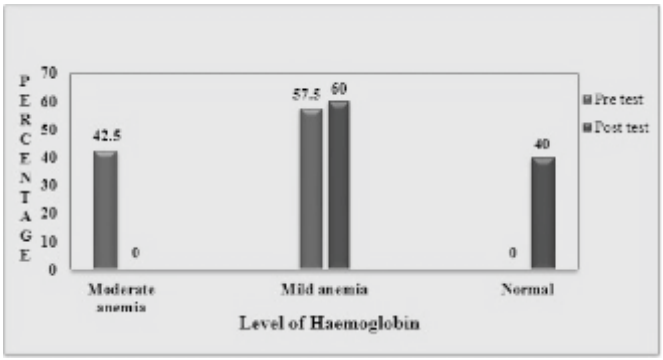

Fig 2 Distribution of pretest and posttest level of haemoglobin level among adolescent girls with anemia.

be extremely significant at the level of $p < 0.01$.

It was observed that the administration of the drumstick leaves juice for an adolescent girls with anemia had a significant increase in posttest estimation of haemoglobin.

Regarding the association there was no significant association between the level of haemoglobin with their selected demographic variables, it shows that the level of haemoglobin is not constrained by any of the demographic variables and it was due to lifestyle modification of a person. Regarding the existing knowledge on anemia among all the adolescent girls, 82 (100%)of them were in inadequate knowledge.

Conclusion

The main study concludes that in the prevalence of anemia, all the adolescent girls were having from 2 to 18 signs and symptoms, in that the major complaints was hair loss, fatigue and problems in concentration and

thinking. There is an improvement in the post estimation level of haemoglobin after the intervention of drumstick leaves juice and most of reported that after intervention, they feel active and their level of appetite was increased and feels healthy. Along with intervention, importing sufficient knowledge to the adolescent girls on anemia through the health awareness program in the home among the adolescent girls with appropriate Av aids such as documentary and pamphlet which was prepared by the investigator to increase their knowledge. This tool will took a part in the future health of the adolescent girl.

Implications

1. The study findings will help the nursing personnel to implement the effective use of drumstick leaves juice at the community level to improve haemoglobin level among adolescent girls with anemia.
2. Nurse educators can impart the sources of various iron rich foods especially drumstick leaves juice to nursing students.
3. Nursing administrator provide in- service education to improve their knowledge in various aspects of detection and management of anemia.
4. This study motivate the investigators to conduct further studies related to this study.

Recommendations

1. The same study can be conducted as a comparative design with other nutritional interventions.
2. The study can be conducted with true experimental research design.
3. A similar study can be undertaken with large number of samples which might lead to generalization.
4. This study can be done as a qualitative method of research.
5. This study can followed in a home and can applied for the other settings.

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Original Research Article

Pedagogical Strategies used in Clinical Teaching of Undergraduate Nursing Students

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ABSTRACT

Nursing being a practical profession, practical and theoretical knowledge needs to be integrated to clinical teaching so that a fine blending of students learning takes place in the pursuit of preparation of qualified nurses. For this an individualized teaching strategy that adapt to each student need to be used by clinical teachers. Few empirical studies have been conducted in order to explore how clinical teaching and supervision is carried out in India especially in the field of nursing education. The purpose of the study was to explore how clinical teaching is carried out in a clinical environment with undergraduate nursing students.

Method : An ethnographic approach looking for meaning of patterns, similarities and differences in how clinical teachers manage clinical teaching was done using non participatory observations and informal interviews. The setting was Malabar Institute of Medical Sciences Hospital, Kozhikode, Kerala. This is a 700 bedded teaching hospital. The participants were nurse educators who are doing theoretical class room teaching as well as clinical teaching during clinical blocks. They were observed for a period of 3 months from January to March 2015.

Results : It was found that nine pedagogical strategies were found to be applied namely, Questions and answers, mini-lecturing, probing, prompting, care analysis and discussion, supplementing, demonstrating, intervening and invisible presence.

Conclusion : This study contributes to the previous repository of teaching strategies used in clinical teaching. The study findings showed that the teachers are using patient assignment and questioning as the major ways of teaching. 100% clinical teachers used these methods. Case discussion, care analysis, prompting were also used by majority of clinical teachers.

Key words:
Pedagogical strategies, Ethnography, Novice, Expert, Prompting, Probing, Mini-lecturing, Supplementing, Invisible presence.

Introduction

Clinical teachers face multiple challenges. The effect of clinical teaching outcome is based on multiple factors like the learning content, the setting and the participant's actions and interactions. This is also influenced by the different challenges faced by the clinical teachers like multiple demands, heavy workload, balancing teaching with activities of personal importance, pressure to maintain clinical competence or a practice, no time, balancing demands of students, clinical staff, others and teaching inadequately prepared students. Clinical Teaching is an interactional process that establish climate for student learning, student assessment and evaluation[1]. Student in clinical setting is a learner, not a nurse, and need time to learn before evaluated. Students make mistakes; learn how to prevent those mistakes next time. One cannot expect perfection[2]. The aim of this study was to describe which strategies and techniques clinical teachers use to teach clinical skills to undergraduate nursing students during

their clinical practice and develop bench marking criteria for clinical teaching strategies.

Background

During supervised clinical training, nursing students are expected to develop their professional competence and attitudes. The present study investigates how teaching is carried out during nursing students' clinical training. Often the clinical instruction in nursing is like a master apprenticeship system of learning and the fundamental condition for such teaching is that an expert is teaching a novice.[2,3] In such a system, the clinical teachers play a crucial role as a teacher for student's learning and knowledge acquisition. All formal education and academic teaching including clinical training is aimed at developing new knowledge, skills and attitude that are essentially required for a professional to practice, according to curriculum expectations. In clinical teaching, it is expected to communicate scientifically proved and professional experiential knowledge that are useful in professional practice[1]. Hence student's knowledge acquisition leads to qualitative transformation and quantitatively different kinds of student understanding. So clinical teacher has to be vigilant in appraising student's qualitative differences in what they learn, understood and practice. So the teaching strategies used by clinical teachers have an impact on student abilities to learn and understand.[1,2]

Clinical Teaching has its consequences on student's abilities to practice. Some view clinical teaching as telling or transmission of knowledge. Some others believe it as organizing student activity and, yet others think teaching as making understanding possible. These strategies depict the qualitative differences in clinical teaching. Whatever may be the view; clinical teaching should ensure patient/client safety and promote professional development among students. Clinical teaching has three main functions: educational; supportive; and managerial or administrative. The effective and excellent clinical teacher is described as an: excellent role model; effective supervisor; and dynamic and supportive educator[1]. So clinical teaching is complex and multifactorial. It transcends ordinary teaching, and is characterized by teachers inspiring, supporting, actively involving and communicating with the student. In nursing, clinics are considered as the actual laboratory for hands on experience where students learn all competencies related to nursing practice. One conclusion to be drawn from the literature is that clinical teaching must be seen as a complex learning situation influenced by the learning content, the setting and the actions and interactions of the participants.[1]

The literature demonstrates a vast number of pedagogical techniques used in clinical teaching.[2,3,4,5,6,7] but there seems to be a lack of studies describing how such techniques are applied and used. The majority of the teaching methods used by clinical teachers in India are not based on empirical studies but on personal experiences. Presently there is no system of measuring the effectiveness of clinical teaching in this country. By reviewing the literature it was found that no scientific study had conducted to find out the effectiveness of any of the clinical teaching strategies. However, studies have been conducted in measuring effectiveness of different teaching strategies in class room teaching[8]. So it is highly essential to identify the better pedagogical strategies for developing clinical skills in undergraduate nursing students. There had no bench marking system to standardize clinical teaching strategies. So the researcher would like to set bench marking criteria for different clinical teaching strategies. As a first step, it is essential to find out what are the types of pedagogical strategies clinical teachers use for teaching undergraduate nursing students and how often certain strategies are used; then as a second step, the outcome of such strategies need to be measured. As a third step, bench marking criteria need to be developed for each strategies as priority.

In order to increase the knowledge concerning clinical teaching, the aim of the present study is to explore how clinical teaching is carried out using different pedagogical approach in a clinical environment with undergraduate nursing students.

Method

Design, setting and participants

An ethnographic approach rooted in symbolic interactionism was used, to look for meaning, patterns, similarities and differences in how clinical teaching is carried out[9]. Non- participant observations and informal interviews were used as general data collection methods[4]. According to the ethnographic approach, the analysis of data involves interpretation of meanings, functions and consequences of human actions and instructional practice[9]. In this study, the researcher used a qualitative design, with data collected from

observations from clinical teaching situations and informal interviews with clinical teachers and undergraduate nursing students.

The data were collected from medical and surgical units of Malabar Institute of Medical Sciences Hospital, Calicut, a 700 bedded teaching hospital in Kerala, South India. The undergraduate nursing education is extended over 4 years before students graduate as nurses. The participants in this study were clinical teachers and their undergraduate nursing students in the third year taking a course in medical surgical nursing II. In order to focus on the interaction between the clinical teacher and the student, observation was mainly conducted during preparations for procedure and care plan discussions at a unit where assigned clinical teacher scheduled their time with students. With support from the clinical teacher, students were expected to manage patients. Data were collected on a total of 15 occasions (see table 1) during a two month period.

List of observations, observer participated & settings.

A total of 79 students were observed during their clinical practice with 5 teachers. Maximum observations were conducted among teacher B (35.9%) and the least chances of observation got for teacher A (4.4%).

For informal interview

Ten Nursing students (male=1, female= 9; aged 20 to 22 years of age) were selected by the researcher and asked to participate. The students were selected to represent different clinical areas. Each student was asked to give their response on their experience of clinical instruction with these five teachers who taught them in the clinical area.

Table 1 : List of Observations conducted in different settings

S. No.	Clinical Teacher	Number of Students	Setting
1	A	1	Surgical Ward
2	B	2	Medical Ward
3	C	3	Surgical Ward
4	E	1	Surgical Ward
5	B	4	Medical Ward
6	D	5	Medical Ward
7	A	3	Surgical Ward
8	F	6	Surgical Ward
9	B	7	Medical Ward
10	G	8	Surgical Ward
11	G	9	Surgical Ward
12	E	2	Surgical Ward
13	E	9	Surgical Ward
14	B	10	Medical Ward
15	B	9	Medical Ward
	Total	**79**	

Table - 2 : The age, Title and Clinical Teaching Experience of Clinical Teachers

Code	Age	Title	Clinical Teaching Experience	Total Experience in Clinical area
A	33	Senior Lecturer	3 years	5
B	34	Assistant Professor	5 years	7
C	38	Assistant Professor	7 years	11
D	41	Associate Professor	9 years	13
E	40	Assistant Professor	5 years	10
F	41	Assistant Professor	4 years	11

Data Collection :

The observations were carried out by two nurses who were trained by the investigator. They had enough experience in teaching nurses and they were often present in the ward for identifying training needs of nurses. So their presence were not viewed skeptically by the clinical instructors or the students. So confidentiality of the observations were maintained. They have been given training by the principal investigator and all the process of observation and informal interview were discussed beforehand to have unanimity in collection of data. In this way, the researcher could participate without being a distraction or being directly involved. The observations were guided by the aim of the study, during which the researchers took notes. Informal interviews were, for example, conducted in the coffee rooms or in the corridor by the principal investigator. These informal interviews were mainly carried out in order to add further information to the observations and in order to establish a foundation for a deeper understanding of what had been observed. Observational notes and notes from informal interviews were transcribed after each observation.

Ethical Considerations

Permission to carry out the study was given by the heads of each department. Ethics committee approval was obtained before commencing the study.

Analysis

Data Analysis was performed in two steps.

Step I: A preliminary analysis was carried out when

observational notes were taken. Analysis was done keeping in mind whether the type of teaching done can be considered as a pedagogy and whether it has an effect in student learning. The analysis process was in this way iterative and undertaken throughout the research process. In this first analysis, the researcher discovered that clinical teachers used different strategies in teaching students.

Step II: When all the data material was collected and transcribed, the data text was read several times and meaning units describing different ways of teaching detected. These meaning units were given a code describing their content. Data text, meaning units with entailed code were read several times and seven different pedagogical strategies could be described as a result of this final analysis.

Result

The result of this study showed that that the clinical teacher used a number of pedagogical strategies in clinical teaching, in order to increase the likelihood of student learning. The strategies are entitled; 1) Questions and answers, 2) Lecturing, 3) probing 4) Prompting, 5) Supplementing, 6) Demonstrating and 7) Intervening. The clinical teacher frequently made use of these strategies to help the students to solve problems or complete tasks. The strategies were used flexibly and could be changed during clinical teaching depending on situation, context and preferences of the clinical teacher.

Questions and Answers : This strategy is observed when clinical teachers ask questions in order to activate the students; make them discuss and describe how to deal with nursing issues/ problems; and management of specific issues in resolving patient problems[10]. Before leaving the student, the teacher assures the reasoning capacity of the student in resolving patient problems and quite often made a conclusion on student's views.

A patient with respiratory distress discussed.

Teacher : On a PES format let us discuss the Nursing Management of Ms. A. and her nursing problems. The students picks up the NANDA Nursing Diagnosis: Ineffective breathing pattern.

- What are the common related factors?

Students answer: decreased lung compliance
Increased fluid transudation
Increased work of breathing

Teacher adds ventilator associated pneumonia a possibility for this patient as she was on ventilator.

- What are the defining characteristics?

Dyspnea
Tachypnea
Crackles
Wet cough
Abnormal ABGs and decreased SaO2
Abnormal breath sounds

Teacher: what are the normal ABG and SaO2 values?

Students do refer their pocket book and answers

What are the nursing interventions?

Student answers: asses respiratory parameters like rate, rhythm, breathe sounds etc

Administer oxygen

Teacher: how much oxygen and how will you administer?

Student: Maintain oxygen saturation level above 95%

The teacher and student further discuss what the cause of the problem could be and the interventions that will relieve respiratory distress and expected outcome of the interventions.

Teacher asks : What is respiratory distress? What are the causes? What nursing interventions a nurse need to provide for such a client?

Student answers: The teacher nods and confirms. The teacher ends the discussion by saying that we may possibly talk to the concerned clinician about the care of this patient during medical rounds.

The teacher also permitted the students to ask questions and relate these to the teachers' reasoning and actions. There were also examples where a student's question was returned by the teacher with the comment: The problem and the solution are now your responsibility.

Using this strategy, the teacher created a dynamic process where the clinical teacher and students shared newly encountered experiences with previously acquired knowledge and experience.

The strategy sometimes took the form of a clinical micro teaching. For example, in one situation a teacher asked: What is intussusception? Name the non-surgical intervention for intussusception? The questions asked were based on what the teachers considered most important to understand. The teacher would supplement with knowledge they considered crucial, which could result in lecturing.

Mini-Lecturing: By asking questions and observing students' behavior, the clinical teacher could assess students' level of knowledge. In cases where students showed a lack of knowledge, the teachers' intention changed from questioning to lecturing about the actual

area of knowledge[5]. Lecturing could also occur if teachers observed errors in any areas or a deficit in students' behavior or reasoning. Lecturing took place frequently throughout the teaching session and examples of the strategy included: explaining the medical terms; explaining symptoms of illnesses; surgical and medical treatments and nursing care. The clinical teacher clearly explained the effect and side effect of treatment, nurses' responsibilities while administering certain drugs. Talked about look alike, sound alike medications etc. Usually this mini lecture took 15-20 minutes and done at the besides of the patient with patient's medical record. The observational note illustrates such a situation as clear and precise description of the procedure for each nursing interventions especially communication with patient and relatives.

Probing : The meaning of this strategy is that the clinical teacher uses guiding questions, statements or signals to ensure the student pays attention to and focuses on specific content in order to reach an expected or previously decided goal. By probing, the teachers prevent students from getting stuck in the management of a particular task[5]. The teachers used guiding statements, invitations or questions in order to make them continue what they were doing. The students acted according to the teacher's directives, but through probing the teacher promoted critical thinking.

Example: The student prescribes nursing orders. The teacher ask why the specific nursing order? How it it going to ease the patient problem? Student thinks and answers[11]. A situation which often occurred is the student plan a lots of nursing activities and fail to prioritize. Teacher probe them & make them to prioritize the intervention so that the patient is benefitted.

Prompting: This strategy is characterized by the clinical teacher prompting a student to prevent the student "losing face" in front of the patient or other personnel. This approach is similar to piloting, but the focus of using prompting is found in the process[3]. By prompting, the teacher supported the student in, assuming the role of a nurse for example, and communication with a patient. The teacher provided advice and/or directives by prompting. One illustration of this is described below. The teacher is standing away from the bed. The undergraduate nursing student seems unsure if the wound appears to be healing for a patient and subsequently looks at the teacher. The teacher whispers to the student: The wound looks like its healing fine.

Care Analysis and Discussion: This approach is characterized by care planning and performing intervention as per prioritized plan. The teacher and the student discussed the care provided according to plan and identify the pros and cons of the care given by looking at the expected outcome[12,13]. Here, the patient is also asked about their feelings about the care given by the student. It is more of participatory approach and helps the student to evaluate the care given by her. Here teacher acts an expert and the student as a novice.

Supplementing : This approach is characterized by clinical teachers' supplementation during students' communications with patients or other personnel. The strategy is characterized by the teacher either adding some complementary important facts, or in some cases completely taking over the student's activity[3,12]. This strategy demands teachers' sensitivity and awareness in deciding whether students are in need of support to handle a situation, otherwise loss of face is inevitable.

For example : While preparing and giving intravenous administration of medications, if the student is not confident and looks at the teacher, teacher encourages the student and support the student while administering medications.

In this particular case, the student signals that she does not know how to deal with the situation entirely. The teacher notices this and supports the student by helping her with what has to be done. In other cases the clinical teachers assessed the students' ability to deal with the situation and found it necessary to step in and supplement together with the student.

Demonstrating: With this strategy the clinical teacher demonstrates how to act, assess, and communicate with the patients. This is demonstrated when teachers deliberately illustrate how to act or what to focus on, by displaying the correct behavior in a clinical situation, for example when communicating with patients, or in assessment or evaluation. The observational note below describes such a situation.

Instead of the teacher telling the student what to ask the patient, the teacher does it himself by greeting the patient and asking patients on their history and conducts physical assessment[3]. The purpose was to illustrate and create a perceptual understanding of a nursing intervention. At ward rounds the teacher examines a patient's surgical wound and explains what are special features of a surgical wound and stages of healing. Another example: Insertion of indwelling catheter: demonstrate insertion of an indwelling catheter, the

teacher prepares articles, follow aseptic precautions, explains steps, greet patients, obtain consent and does the procedure, document the procedure with necessary details. The student observes and asks questions. Students were encouraged by the teacher to increase their awareness of the differences in catheterizing male and female patients.

Intervening: Significant in this strategy is the teacher taking an authoritative role, interrupting the student and taking over the situation. In intervening, the clinical teacher focuses on getting the assignment completed. The observational notes below describe one situation where a teacher uses this strategy.

Teacher looks at the watch. It was time to leave. The student had not completed his duties in respect of patient assignment. He has to complete a wound dressing. The student asks the patient can I do the dressing and looks at the teacher. Teacher responds and takes over the situation and started performing wound dressing, leaving the student feeling somewhat "excluded". Significant in the above situation is the student's actions being interrupted when the clinical teacher intervenes and takes over[3]. The student has to stand aside and assume the role of an observer. Using this strategy, patient management, organizational demands and limitations were demonstrated to the student. It is observed that the students could thus experience a lack of feedback resulting in a lack of explanation and diminished understanding of their actions and how they managed the situation. Sometimes they felt "excluded" and their knowledge undervalued.

Invisible Presence: In this approach, the teacher will not directly involve or intervene. Teacher is in and around. The teachers are close to the students, without hovering over them in every situation. The student nurse is engaged in small talk with the patient while preparing for an injection, meanwhile the teacher, walks back and forth between the nurse's office and the room, picking up some forgotten items, talking to other patients. The observational notes marked teacher had seen a student loading medication for a patient. Teacher came near to the adjacent patient. Talked to the patient about her condition where the student can see the teacher but teacher is not directly involving in the medication administration. But the student knows that the teacher is somewhat near to her though in actual involvement is seen.

Discussion and Conclusion

The aim of the study was to explore how clinical teaching was carried out in clinical education. The study was carried out in two wards at a teaching hospital in Kerala. By observing clinical teaching and interaction in authentic situations, a more comprehensive understanding of the educational mechanisms of clinical teaching could be reached. The result is mainly built on the observations made during clinical teaching, and the informal interviews were generally used to support the understanding of the observed phenomena. However, the findings of the present study support findings of the studies conducted in different parts of the world [3,4,11,12]. Research from other settings would be required to determine whether the pedagogical strategies described reflect a more general way of teaching nursing students. More likely is that the pedagogical strategies are related to a number of factors such as students' knowledge level, clinical situation and personal preferences and also clinical teachers' educational environment at the clinic. Therefore, other strategies might be observed in other settings or situations. The researcher assumes however, that the findings demonstrate the importance of attention to pedagogical strategies used in clinical teaching in order to facilitate student learning.[13]

The findings of this study elucidate that the clinical teachers used a repertoire of different pedagogical strategies namely: Questions and answers, mini-lecturing, probing, prompting, care analysis and discussion, Supplementing, Demonstrating and Intervening. The invisible presence of the teacher was appreciated by 80% of the students and said that they had confidence that their teachers are somewhere and leaving them to perform independently. But 20% of the students had a feeling that they need teachers to be with them.[14]

Since the present study identified the clinical teaching strategies, the findings will be used for preparing bench marking criteria for these clinical strategies and will be tested for effectiveness.

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Original Research Article

Side Effects of Chemotherapy and Coping Strategies adopted by Patients

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ABSTRACT

The purpose of the study was to assess the side effects of chemotherapy and coping strategies adopted by patients in Hi-Tech Medical College & Hospital. Explorative approach and descriptive survey design was adopted. A total of 50 subjects were selected by non-probability purposive sampling technique. It was found that side effects were present in mild to moderate form in all the subjects, while none reported side effects as severe. Majority of subjects were inadequately coping with side effects of chemotherapy. Distracting themselves by chatting with friends, listening to music or TV was found to be major strategies utilized by majority of subjects to cope with nausea. Personal habits was associated with side effects of chemotherapy. Relation was found between family income and personal habits with coping.

Keywords – Side effects, Chemotherapy, Coping strategies.

Introduction

Cancer is the second largest non-communicable disease affecting people; approximately 10 million people get cancer every year throughout the world. Caner of all forms is causing about 12 percent deaths throughout the world. The major types of treatment of cancer are surgery, radiotherapy, chemotherapy and biological therapy.

When a person is diagnosed with cancer, he / she may feel as if the whole world has fallen apart. Coping with cancer is difficult but one can find ways to help deal with the diagnosis & side effects of treatment.

Objective

- To assess the side effect of chemotherapy and coping strategies adopted by the cancer patients.
- To associate the side effects with selected demographic variables.
- To associate the coping strategies with demographic variables.

Hypothesis

H_1→ There is significant association of side effects with demographic variables.

H_2→ There is significant association of coping strategies with demographic variables.

Here, the conceptual model is based on sister Callistra Roy's adoption model.

Methodology

In this descriptive (explorative approach) study, non-experimental descriptive design was conducted in Hi-Tech Medical College & Hospital. Non-probability purposive sampling was used. The sample size was 50.

Inclusion Criteria→ Cancer patients above the age of 18 years, receiving chemotherapeutic drugs with ability to read and write English, Hindi and Odiya and who are willing to participate in the study.

Exclusion Criteria→ Cancer patients receiving first cycle of chemotherapy, or those receiving combination of therapy.

Data Collection Tool

The tool for the study consisted of 3 section.

Section – I → Self structured questionnaire for demographic data consisting of 16 items.

Section – II → Rating scale -1 to assess the side effects of chemotherapy consisted of 12 common side effects of chemotherapy.

Section – III → Rating scale – II to assess the coping strategies adopted by patients consisted of 5 coping strategies for each 12 common side effects of chemotherapy.

- **Validity –** Content validity of the tool was done by experts in the field.
- **Reliability –** Cronbach's Alpha test was used.

Rating scale – II – The reliability was 0.83

Rating scale – III – The reliability was 0.84
All the result was more than 0.8. So, the tool was highly reliable.

RESULTS & DISCUSSION:-

❖ **Demographic Information –**

It was found that 43 percent of the sample were in 44-56 years of age group, 65 percent were female. Majority (80%) were Hindu, majority (81%) were residing in urban areas, 45% were secondary school educated, 42% were unemployed, majority (82%) were married, 62% belongs to nuclear family, 52% were not having any habits like smoking, tobacco chewing, alcohol consumption. Majority 35% had family income between Rs.10,000 – Rs.15,000, (62%) were having the family history of cancer, (70%) were in their 2nd stage of cancer.

Majority (52%) were receiving pyrimidine antagonist group of chemotherapeutic drug, (62%) were receiving III cycle of chemotherapy. Majorities (92%) have received information for coping with side effects of chemotherapy and all received information from health professional.

❖ **Side effects of chemotherapy – Table – I**

Alopecia was the main side effects of chemotherapy as majority (76%) of respondent said they experienced alopecia. However, nausea was present in 65% of cases, while 57% reported that they experienced taste change, in 55% of cases, tiredness was present. Anxiety was reported by 40% while constipation was present 39% and feeling of sadness in 38% of cases. Mouth ulcer was present in 35%. Vomiting was present in 36%. Loss of appetite was present in 25% and repeated infection was present in 12% of cases & loose stools found only in 8%.

Majority of respondents (63%) were having mild side effects and remaining 38% were having moderate side effects of chemotherapy while none reported side effects as severe.

Table – I : Association of side effects with demographic variable. N=50

Demographic Variables	Chi-Square value	Degree of freedom	P-value	Level of significance
Age	0.51	3	0.76	>0.05
Gender	1.12	1	0.21	>0.05
Diagnosis	6.05	6	0.41	>0.05
Cycle of chemotherapy	1.52	4	0.62	>0.05
Chemotherapeutic drugs	3.49	3	0.26	>0.05
Stage of cancer	2.83	3	0.26	>0.05
Personal habit	11.12	1	0.00	<0.05

Note: Significant association between side effects & personnel habits was found as p-value was less than 0.05.

Coping with side effects of chemotherapy: (Table – II)

Majority of the sample (90%) were inadequately coping while only 10% were adequately coping with side effects. Listening to music or TV was found to be major strategy utilized by majority (52%) of subjects to cope with nausea, 29% said that they always take medicine for vomiting. 8% said that they always drinks lots of clear liquids to deal with loose motion. Constipation was managed by 35% of subject with always adding more fibre to their diet, 48% said they always brush after each meal to cope with taste change, 28% said they always avoid spicy, hot foods and drinks to deal with mouth ulcer, 24% said they always eat whenever they feel hungry, 45% said they always maintain their routine schedule to avoid fatigue, 8% said they visited a doctor frequently to cope with infection, 70% said they always cover hair with scarf for hair loss, 35% said always concentrate their efforts doing something to avoid anxiety and 35%said they always put their trust on God / religious activity to cope with depression. The common side effects of chemotherapy include hair loss, nausea, hot flashes, mucositis, fatigue and cognitive side effects. In this study also, majority (70%) of the sample suffered from alopecia followed by nausea, taste change, tiredness, anxiety, constipation, feeling of sadness, mouth ulcer, vomiting, loss of appetite, repeated infection and loose motion.

Table – II – Association of coping strategies with selected demographic variable. N=5

Demographic variables	Chi square value	Degree of freedom	P-value	Level of significant
Age	2.42	3	0.63	>0.05
Gender	0.31	1	0.492	>0.05
Religion	1.41	2	0.562	>0.05
Residence	1.81	1	0.160	>0.05
Education	1.49	3	0.752	>0.05
Occupation	3.12	3	0.451	>0.05
Marital status	1.82	3	0.671	>0.05
Types of family	0.16	1	0.892	>0.05
Diagnosis	6.65	5	0.342	>0.05
Stage of cancer	0.61	2	0.690	>0.05
Heredity	0.53	1	0.402	>0.05
Cycles of chemotherapy	4.20	4	0.371	>0.05
Received information about chemotherapy	0.31	1	0.521	>0.05
Support person	0.25	3	0.921	>0.05
Personal habit	21.92	7	0.002	<0.05
Monthly family income	7.42	2	0.031	<0.05

Note – Significant association was found between monthly family incomes and coping strategies, as p-value was less than 0.05. Significant association was found between personal habit and coping strategies as p-value was less than 0.05

Conclusion:-

It shows that there is significant association between side effects and personal habits. But other demographic variables are not significantly associated. Similarly, there is significant association was found between monthly family incomes and coping strategies also between personal habit and coping strategies but other demographic variable are not significantly associated.

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Original Research Article

Effectiveness of Planned Health Teaching Program regarding oral hygiene among students

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ABSTRACT

A Pre-Experimental One Group Pre test Post-test study was conducted to evaluate the Effectiveness of Planned Health Teaching program regarding oral hygiene among 250 school students from 4th and 5th standard from selected schools of Rohtak, Haryana by using simple random sampling technique. Structured interview knowledge questionnaire was used to assess the knowledge of school students. The findings of the study revealed that the mean post test scores were significantly higher than mean pre scores.

Keywords: Planned Health Teaching Program, Oral Hygiene, Students, Schools

"There is a garden in every childhood, an enchanted place where colors are brighter, the air softer and the morning more fragrant than ever again"

Healthy children are successful learners. The health and well being of school age children has become a high profile issue, lying at the heart of numerous government initiatives and policies and receiving considerable public attention[1]. The goal of WHO "Health for all by the year 2025" also includes oral health. The school age child has multitude of problems among them, one of the most existing problem is related to dental health[2]

"Oral cavity is a mirror of rest of the body."

Dental health is an important aspect of personal health of individual. Teeth are essential not only for mastication of food but also for good appearance and clear speech. All over the world reported prevalence of dental caries varies from 30% to 80%. In many developing countries including India, dental caries is on the increase. India faces many challenges in rendering oral health needs. The majority of Indian children can not avail oral facilities due to inaccessibility, financial constraints and stagnation of public dental health care services. This entails the health professional to adopt a more practical approach to achieve primary prevention of oral disease. The most vital solution seems to be oral health education[3]. A significant increase in prevalence of dental caries among rural school children in Rohtak, Haryana with age was observed where as difference between males and females was found to be statistically not significant[4]. A cross sectional study conducted on oral health knowledge, attitude and behavior among students of age 10-18 years old, attending Jenadriyah festival, Riyadh. Through this study the researchers recommended that evidenced based effective dental awareness programs are needed in order to improve dental related practice among 10-18 years age group[5].

An experimental study on effectiveness of oral health education on knowledge, attitude, practices and oral hygiene status among 12-15 years old school children of fishermen of Kutch district, Gujarat, India. The result of the study reflects the accomplishment of upgrading oral health knowledge, attitude, practices and oral hygiene status of fishermen children through school oral health education program[6].

A study on the prevalence of dental caries in 6, 9, 12 &15 years old school age children of Chandigarh using "Molar criteria". Study result found that prevalence of dental caries was 80% due to lack of fluoride toothpaste, 98% due to knowledge deficiency and 30% due to frequently sugar consumption[7].

A study on dental caries status and found that about 82.8% of children aged 5-14 years had dental caries residing in the coastal areas of Karnataka region in South India.[8]

A study on 572 boys & 482 girls of urban area of Pondicherry to assess the pattern of prevalence of dental caries in the primary dentition among 5 years old children showed that the prevalence of dental caries was 44.9% among the study population, being higher in the boys[9].

A study on 12 years old school children in Thiruvanthapuram, Kerala in India to describe the dental health status and to identify socio demographic factors, oral health behavior, attitude and knowledge related to dental caries experiences. Dental caries was measured using World Health Organization criteria, the factors were assessed by self administered questionnaire. The study found that 27% dental caries prevalence was in permanent dentition. Dental caries was higher in those children who did not use a tooth brush & consumed sweets. Study indicated that urban living conditions were associated with more dental caries[10].

A study conducted to assess the prevalence of dental caries among school children in urban slums of Delhi. A total of 452 participants were enrolled in the study. The prevalence of dental caries in 7-10 years age-group was 82.4% and 91.9% in 6 years. A statistically significant association was found between poor hygiene and dental caries (P = 0.026). The awareness about good and bad dental practices was found to be low among the study participants. One-fifth of the individuals with dental problems relied on home remedies[11].

A cross-sectional study conducted among 599 children of 11-14 year group in Bhopal India to assess the knowledge and practice in relation to oral health and oral health behaviors. It was found that caries prevalence proportion in both the dentitions was 57% and 2.5times higher in slum areas compared to children living in rural areas, 75% of the children reported tooth brushing once a day, 31% used a plastic tooth brush and general level of knowledge on dental health was low[12].

A study on the prevalence of dental caries and treatment needs among children of Cuttak (Orissa). An epidemiological investigation was carried out to know the prevalence of Dental caries among 1257 children in the age group of 6-15 years respectively attending schools in Cuttack city. The result showed that the prevalence of dental caries was 68.3% and pattern of occurrence reveled that prevalence consistently increased from 6 years to 8 years age group and subsequently decreased at 11 and 15 years. Regarding treatment needs 63.6% children required dental treatment for various reasons and it is in accordance with dental caries prevalence of different age groups[13].

"Teach Children how they should live, they will remember it all their lives"

Aim and Objective of the Study

- To evaluate the effectiveness of Planned Health Teaching Program regarding oral hygiene among primary schools students.

Materials and Methods :

The present study was conducted to evaluate the effectiveness of Planned Health Teaching Program regarding oral hygiene among school students in selected government primary schools of Rohtak, Haryana. Pre Experimental (One Group Pretest Posttest) research design was used in the study using simple random sampling technique and sample size was 250. Data was collected by structured interview knowledge questionnaire regarding knowledge of 4th and 5th standard students regarding oral hygiene in Government primary school, 14J Medical campus, Government Primary School, Indra colony, Government primary school Sector-2, 3, 4 and Government Primary School, Gandhi Camp Rohtak, Haryana in the month of January and February 2013. Descriptive and inferential statistics were employed to analyze the data.

Table 1 – Demographic Variables with their frequencies and percentage (N=250)

Demographic Variables	Demographic Variables	Freq-uency	%
Age (in years)	a. 9-11	210	84%
	b. 12-13	40	16%
Sex	a. Male	145	58%
	b. Female	105	42%
Standard / Class	a. 4th Standard	131	52%
	b. 5th Standard	119	48%
Father's Education	a. 12th Pass	25	10%
	b. 10th Pass	38	15%
	c. 8th Pass	54	22%
	d. 5th Pass	61	24%
	e. Illiterate	72	29%
Mother's Education	a. 10th Pass	16	6%
	b. 8th Pass	49	20%
	c. 5th Pass	67	27%
	d. Illiterate	118	47%
Father's Occupation	a. Government Job	28	11%
	b. Private Job	33	13%
	c. Laborers	189	76%
Mother's Occupation	a. Housewife	47	19%
	b. Servant	71	28%
	c. Laborers	132	53%

Results :

The Study articulated that the difference among Mean Post Test & Pretest Knowledge Score is 6.41. The 'T' Value calculated was found to be greater than 'T' Value tabulated at 0.05 level of significance (P Value). Hence, null hypothesis was rejected and Planned Health Teaching Programme was found to be effective.

Figure 1- Pre-Post Test Knowledge Mean Scores of Study Subjects

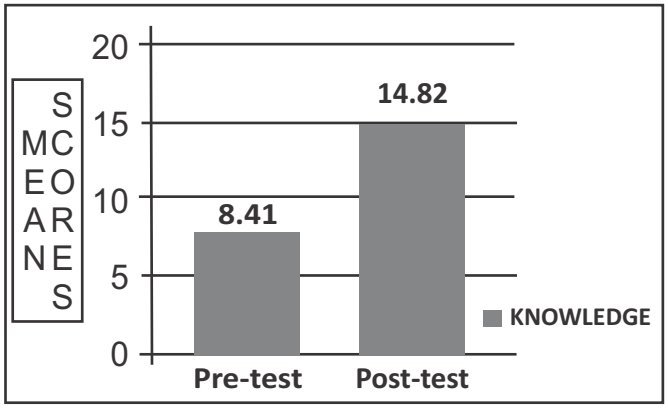

Figure 1 represents the mean of knowledge scores of study subjects before and after administration of Planned Health Teaching Programme i.e. Pre-Post Test Mean Scores.

Table 2 - Mean, Range, SD and T value of knowledge scores regarding Oral hygiene

Compo-nents	Max Score	Range	Mean	SD	t_{Cal}	p value	T_{tab}
Pre-test Scores (K)	20	12-3=9	8.41	1.92	92	0.05	3.29
Post-test Scores (K)	20	18-8=10	14.82	2.06			

Discussion

"Children are our most valuable natural resources"

School health education services are an economical and powerful means of raising standard of community health, especially for the future generations. School is considered as a best setting for the positive health and prevention of diseases, awakening health consciousness in which the child grows and develops.

A Pre-Experimental One Group Pre-test Post-test study was conducted using the structured interview knowledge questionnaire consisted of 20 items based on oral hygiene divided under four areas :

- Structure and function of oral cavity
- Measures for maintaining oral hygiene
- Technique of cleaning the oral cavity
- Nutrition for good oral hygiene

to find out the knowledge of 4th & 5th class children regarding oral hygiene using Planned Teaching program which covered the below sub-headings:

- Introduction of oral hygiene
- Meaning & definition of oral hygiene
- Purposes of oral hygiene
- Structure and functions of oral cavity
- Reasons for poor oral hygiene, diseases due to poor oral hygiene & sign and symptoms of oral diseases
- Elements of oral hygiene – brushing of teeth (techniques), massaging of gum and cleaning of tongue
- Nutrition for good oral hygiene
- Tips for maintaining good oral hygiene

The findings of the study implied that the education plays a vital role in improving the knowledge of school children regarding dental hygiene. The findings in the present study were supported by studies conducted on children's knowledge regarding dental hygiene and stated that the school provides a perfect setting for

promoting oral health. School education is an integral part of medical and dental services; nurses can play an important role in health educational program, making the children an important channel for disseminating the health information to the families and the communities. The student community needs to be strengthened with the treasure of knowledge especially with health related issues.[4] Schools offer an efficient and effective way to reach over 1 billion children worldwide and through them to their families and community members[3]. Schools can be an important setting for health education program. Many advocacies promote oral health through schools. The school system is the logical environment to teach preventive dental health practices. The rationale behind the inclusion of educational activities is that prevention is the key element in controlling dental disease. School-based oral health education in short term has shown positive outcomes for oral cleanliness, gingival health and oral health knowledge in some developing and developed countries.[12,13]

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Original Research Article

Level of depression among the mothers of children with Leukaemia

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ABSTRACT

A diagnosis of childhood cancer represents challenges for patients and family members. Mothers of children with cancer represent a group prone to high levels of emotional distress, and the period following their child's diagnosis and the initiation of treatment may be predominantly stressful and disturbing leading them to depression. The present study was carried out to assess the level of depression among the mothers of children with leukaemia admitted in Gauhati Medical College and Hospital, Guwahati, Assam. In this descriptive research study, 50 mothers of children with leukaemia were selected using convenient sampling technique and they were asked to take part in a structured interview schedule and their depression's score was measured using the Beck Depression Inventory (BDI-II). In the present study data were analysed using both descriptive and inferential statistics. The result of this study showed that majority 36% mothers of children with leukaemia have severe depression. There is no significant association between the level of depression and the demographic variables.

Key words: Depression, Leukaemia

Background Currently depression is the leading cause of disability in the world and is predicted to become the second largest killer after heart disease by the year 2020.[1] 80% of individual with depression report functional impairment while 27% report serious difficulties at work and home life.[2] According to a study, conducted in 2011, India has the highest rate of depression (36%) and in low income countries with women being affected twice more than men.[3]

Any chronic illness might cause a heavy impact on family members. Several studies have shown that depressive disorders are more common among the parents of children with chronic disease than normal population.[4,5]

Need of the study and Literature Review

Cancer in children and adolescents is rare and biologically very different from cancer in adults.[6] In India, cancer is the 9th common cause of deaths among children between 5 to 14 years of age.[7] The proportion of childhood cancers reported by Indian Cancer Registries varied from 0.8% to 5.8% in boys and from 0.5% to 3.4% in girls.[8]

It has been long recognized that in the early months after diagnosis, the parents of children with cancer often suffer a variety of psychosocial symptoms. As a primary care provider mother's responsibility increases substantially starting a vicious cycle of anxiety and socio-economic uncertainty leading her to depression much more than the father.

In a similar study conducted in Turkey reported that 88%mothers were depressed. Mild depression was reported in 22.7 % and major depression in 61.5%.[9]

A study in Pakistan reported that the prevalence of depression in mothers was as high as 78%. Mild depression was seen in 69% of mothers, moderate in 25%, severe in 5% while 1% had very severe depression.[10]

In a study conducted by [11] reported that 68% of mothers had moderate depression scores 6 months after their child's cancer diagnosis. Although not stated, this would be close to the beginning of the maintenance phase of treatment in many treatment centres. 50% of the children had either leukaemia or lymphoma.

There is importance of incorporating mothers into the treatment process during the diagnosis and treatment of their children with leukaemia. While caring for the child many a time the mother cannot cope with the distress related to the diagnosis and various treatment procedure of the child and become depressed. The investigator being in nursing profession felt the need to assess the level of depression of the mother caring for the sick child with leukaemia. Nursing personnel in the hospital setup can give the psychological support to the depressed mother to improve the quality of life of care giver.

Objectives:

1. To assess the level of depression among the mothers of children with leukaemia admitted in Gauhati Medical College and Hospital, Guwahati, Assam.
2. To find out the association between the level of depression and the demographic variables.

Hypotheses:

H01 - There is no significant association between depression of the mothers and the demographic variables.

METHODOLOGY:

Research approach and design: Descriptive research approach with survey design was adopted for the study as it was found to be most suitable for studying the problem under study.

Setting: The study was conducted in the haematology ward of Gauhati Medical College and Hospital, Guwahati, Assam after obtaining approval from the Institutional Ethical Committee.

Study population: Population is the set of people or entities to which the results of a research are to be generalized. The population considered for the study was- all the mothers of children with leukaemia between the ages of 3 to 15 years admitted in the haematology ward of Gauhati Medical College and Hospital, Guwahati, Assam.

Sample size: The sample size considered for the present study was 50 mothers and convenient sampling technique was used for selecting the sample from the study population.

Description of the tool

The instrument/tool for the present study consists of two parts – Part I and Part II and administered at the same time.

Part- I is the demographic data sheet that consists of a structured interview schedule comprising of 7 variables (i.e. age of the child, sex of the child, no. of children, education of the mother, occupation of the mother, family income and place of residence).

Part- II: To assess mothers' depressive symptoms the Beck Depression Inventory-II (BDI) was used. Beck Depression Inventory is the most frequently used screening instrument in research on depression. Beck Depression Inventory was first developed by A. T. Beck in 1961. The inventory was re-evaluated and revised in 1978 as a second form. The BDI total score correlates significantly with diagnoses of clinical depression.[12, 13] The scale has well-established psychometric properties in both psychiatric and non-psychiatric samples.[14]

Beck Depression Inventory is a quadruple Likert-Scale consisting of 21 questions to measure the severity of symptoms associated with depression. Each question is scored between 0 and 3, and the total score range from 0 to 63. The cut-off score of the scale was determined as 17 in the Persian validity and reliability study. The scale was classified as follows: a score of 0-10 denoted these ups and down are considered normal, a score of 11-16

denoted mild mood disturbances, a score of 17-20 signified borderline clinical depression a score of 21 – 30 indicated moderate depression, a score of 31 – 40 denoted severe depression and a score of over 40 denoted extreme depressions. The BDI has had high internal consistency, with alpha coefficients of 0.86 and 0.81 for psychiatric and non-psychiatric populations, respectively.[15]

FINDINGS:

Section 1: Socio demographic data of the mothers:

The demographic information of mothers showed that most of the mothers (44%) have child from the age group of 9 to 15 years, majority of the mothers (66%) have male child having leukaemia, majority (46%) have 3 or more than 3 no. of children, most of the mothers (34%) educational level is high school pass, Majority of the mothers (96%) were house wife, majorities (64%) family income was < 10,000 per month and most of the mothers (86%) were from rural place of residence.

Section 2:

Assessment of level of depression among the mothers of children with leukaemia

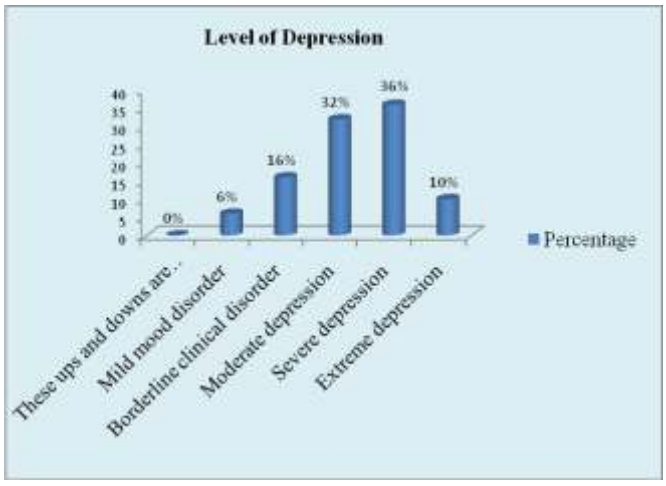

Figure 1: Assessment of level of depression among the mothers of children with leukaemia

The result shows that most of the mothers 18 (36%) of children with leukaemia have severe depression, 16 (32%) have moderate depression, 8 (16%) have borderline depression, 5 (10%) have extreme depression and 3 (6%) have mild mood disorder.

Section 3:

In the present study, the null hypothesis is rejected as no significant association was found between the level of depression and selected demographic variables of the sample.

Discussion

The diagnosis and subsequent treatment of childhood leukaemia is undeniably stressful for any family. A parent's ability to manage his or her distress during treatment of the child is vital as there may be potential impact on the well-being and long-term psychological adjustment of both parents and child.

Various studies have shown that mothers display symptoms such as hopelessness, despair, anger, stress, anxiety, and depression.[16,17]

In the present study, most of the mothers (36%) of children with leukaemia have severe depression, (32%) have moderate depression, (16%) have borderline depression, (10%) have extreme depression and (6%) have mild mood disorder.

Similar findings was seen in a study conducted in Pakistan[10] reported that the prevalence of depression in mothers was as high as 78%. Mild depression was seen in 69% of mothers, moderate in 25%, severe in 5% while 1% had very severe depression.

In another study in Pakistan, [17] have reported more than 65% of mothers of children with leukaemia were found to be depressed.

In the present study, there was no significant association between mother's depression level and demographic variables. Similarly, in a study the researchers examined to determine association between the level of depression and demographic information, and no significant association was found.[18]

Conclusion

There is importance of incorporating mothers into the treatment process during the diagnosis and treatment of their children with leukaemia. This study concludes that a majority of attending mothers of children with leukaemia suffers from severe depression. This study results may be useful for health care professionals as part of the initial consultation when diagnosing childhood leukaemia so as to prevent any potential negative impact of maternal depressive symptoms on child health outcomes. However, further well-designed study need to conduct on a large number of mothers or both parents in order to make any logical conclusions, and finding socioeconomic and related factors on mother's depression level.

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Original Research Article

Nursing Care from Patient's Perspective

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ABSTRACT

This study was conducted to assess the nursing care from patient's perspective. It was conducted on 60 patients selected from medical and surgical wards of Nehru Hospital, PGIMER, Chandigarh. A descriptive approach was used. Patients who were going to be discharged were taken as the target population. The sampling technique used was total enumeration. Caring Behavior Measurement tool (C.B.M) was used, which consisted of 28 items to assess the nursing care. A socio-demographic interview schedule was also used to collect the demographic data of the subjects. Data was analyzed by SPSS 16.0. Findings of the present study revealed that out of 60 subjects nearly three fourth subjects i.e 44 (73.3%) were fully satisfied and 16(26.6%) were moderately satisfied whereas not satisfied and not sure were less than 0.1%. Although the number of 'not satisfied' and 'not sure' was very less, we need to understand the patient's perception more keenly to make them more satisfied with the services offered.

Key words : Nursing Care, Patient's Perspective, Caring Behavior Measurement.

Background

Attainment of health is fundamental right of human beings. Health care agency is the major social and organizational set up committed to provide health care services to sick people who are in need. The WHO defines health as a state of complete physical, mental and social well being not merely an absence of diseases or infirmity[1]. Thus one cannot attain the goal of health if any of the above mentioned aspects is neglected. Hospital is basically a caring unit. It deals with health and welfare of human beings. It is a place where sick and injured persons are treated.[2] satisfaction with care is an important component for all health care professionals. It is especially true when attempts are being made to measure or change the quality of health care services in the hospital[3].From a patient perspective, their satisfaction with care can be influenced by various factors such as their expectations attitude and prior experiences with hospital care[4]. Hospital is basically a caring unit. It deals with health and welfare of human beings. It is a place where sick and injured persons are treated.[2] One does not always come to hospital with pain and illness but hospitals also provides joy, hope and confidence e.g. the joy of a pregnant women who gets her child after a difficult operation and similarly the confidence of a person who has a successful heart surgery. One cannot achieve this mission without a spirit of caring and compassion. The core principle and aim of any health care agency should be caring and compassion along with professional excellence and advancement.

As we talk of professional excellence we talk of various health care professionals including nurses that forms the major part of man power in the field of health care. Leininger (1995) recognized the importance of the concept of 'caring' in nursing.[5] The concept of caring for others has been prevalent throughout the history of human beings. There are many examples of caring for others; the idea of caring for another persisted into more recent times with the beginning of the Nightingale era in

nursing. She was known as the founder of nursing profession.[6] She was concerned that human beings receive appropriate care. She focused on ventilation warmth cleanliness and the like. All of these were ways for nurses to provide care to others and provided a foundation for nursing to be a caring science.[7] Nursing care is the key factor in the outcomes of patients during hospitalization. Thus patients and patient satisfaction forms an important measure to assess the quality of nursing care.[8] It is seen as a crucial dimension of quality of care.[9]

Problem Statement :

A descriptive study to assess the nursing care from the patient's perspective admitted in medical and surgical wards of Nehru Hospital, PGIMER, Chandigarh.

Objective :

To assess the nursing care from the patient's perspective admitted in medical and surgical wards of Nehru Hospital, PGIMER, Chandigarh.

Research Methodology :

Research Design : Descriptive study in nature.

Sample and sampling technique : Total enumeration technique was used and total 60 patients were taken for study. In inclusion criteria focus was on male and female patients of medical and surgical units who were going to discharge from the unit. An interview schedule was used to collect the data.

Setting : Nehru Hospital, PGIMER, Chandigarh.

Data collection tools : Tools were consisted of socio-demographic profile and Caring Behavior Measurement tool. Caring Behavior Measurement tool was standardized tool. In this nursing care was assessed from patient's perspectives that were going to be discharged from medical and surgical wards.

Procedure for data collection : Ethical approval was sought from ethical committee of the institute. Written permission was obtained from authorities for conducting the study. Informed consent was obtained from each subject after explaining the objectives, activities and duration of their involvement. They were assured for maintaining their confidentiality. Data was analyzed using SPSS 16.0 version.

Findings:

Table 1 : Socio-Demographic Profile of the study subjects N =60

Variables	n (%)
Age (in years)	
<20	03(5)
21-40	16(26.7)
41-60 (Mean=S.D=45.25=5.9)	29(48.3)
>61	12(17.3)
Sex	
Meal	32(53.3)
Female	28(46.7)
Education	
Professional	4(6.7%)
Graduate or postgraduate	17(28%)
Higher secondary	13(21.7%)
Middle school	9(15.0%)
Primary school	4(6.7%)
Illiterate	13(21.7%)
Marital Status	
Single	10 (16_7)
Married	**46 (76.7)**
Widowod	4 (6.7)
Occupation	
Profession	14 (23.3)
Clerical	2 (3.3)
Shop owner	4 (6.7)
Farmer	3 (5.0)
Skilled worker	1 (1.7)
Unskilledworker	4 (6.70)
Unemployed	**29 (48.33)**
Student	3 (5.0)
Income (in Rs)/month	
<5000	9 (15.0)
10,000-20,000	**25 (41)**
20,000-30,000 (Mean =S.D. -24223.33+5.6 Range-5000-150000.00)	12 (20.0)
30,000-40,000	7 (11.7)
40,000-50,000	3 (5.0)
50,000>	4 (6.70)
Type of Family	
Nuclear	**33 (55.0)**
Joint	17 (45.0)

Locality	
Urban	**37 (61.7)**
Rural	23 (38)

Table 2. Clinical Data of the subjects

N=60

Diagnosis		
Medical		**33 (55.0)**
Surgical		27 (45)
Duration of hospitalization (in days)		
5-10		**31 (51.7)**
10-15	Mean = S.D.=11.63=5.77	15 (25.0)
15-20		8 (13.3)
20-25		2 (3.3)
25-30		1 (1.7)
30-35		3 (5.0)

Discussion :

Nursing encompasses collaborative care of individuals of all ages, families, groups and communities, sick or well. It includes the promotion of health, the prevention of illness and care of ill, disabled and dying people (WHO). Caring is central to nursing. It is important to know what the patient feels about the care which he is experiencing. There is no universal tool used in satisfaction studies and comparisons are difficult to make but still by looking at different research studies one can know the overall satisfaction score and patient satisfaction rating.

One of studies conducted at the Iran University of Medical Science,(2007), where in 250 subjects were hospitalized in medical and surgical wards, indicated statistically significant relationship between patient report of nurse caring and satisfaction with nursing care. (r=0-72. p=0.000. ci 95%, 178178. 31-189. 99 for the CBI and 82. 81-86. 71 for the PSI). Findings indicated male patient were more satisfied with nursing care then female patients.[10] The findings of the present study also indicated that male patients were more satisfied with nursing care as compare to the female patients of the study.

Another conducted in Saudi Arabia, showed high level of satisfaction in female patients (n=55) than male patients (n=45) with the nursing care provided to the patient.[11] The findings of this study were contradictory to present study.

Another study was conducted at International Medical University, Kuala Lumpur, on 100 patients. The findings of this study revealed that the patients were moderately satisfied with nursing care but majority of patients were highly satisfied with affective support showed by the nurses i.e. respect, smile, care etc. Age, gender and marital status shows no significant differences of patient satisfaction.[12] In the present study 35 (58.3%) were highly satisfied with the domain of respect and only 9(15.5) were highly satisfied with the domain of smile.

Also socio-demographic variable were compared with the mean satisfaction score to observe any variation in the level of satisfaction but statistically there was no significant difference observed in their level of satisfaction related to those selected socio-demographic variables. Maximum results falls between the categories of fully satisfied and moderately satisfied which shows that the patients were satisfied with the nursing care provided to them.

It is truly impossible to pursue the satisfaction of patients. Satisfaction is a very abstract concept having so much of subjectivity that with even most standardized tools; one may face difficulties in assessing level of satisfaction. Moreover, there is clear possibility that patients' satisfaction is dependent on other factor like chronic and acute illness of patients, their expectations, their previous experience with nursing care.

Finding of present study suggest that out of 60 patients 16(26.6%) were moderately satisfied and 44(74.3) were fully satisfied as evaluated with Caring Behavior Measurement (CBM) tool.

Even though the findings suggest that subjects were mostly fully satisfied, it may be that their responses were influenced by their present state of mind. These subjects

Table 3.Level of satisfaction of subjects as per C. B. M. Tool. **N=60**

Item No.	Items	Fully Satisfied = 4 n(%)	Moderately Satisfied = 3 n(%)	Not Satisfied = 2 n(%)	Not Sure = 1 n(%)
1.	Did nurses communicate in simple clear language or use of medical terminology	**36(60.0)**	21(35)	3(5.0)	-
2.	Did nurse explain your situation to you and your family ?	**33(55.0)**	25(41.7)	2(3.3)	-
3.	Did nurses understand your condition by your behavior?	24(40.0)	**30(50.0)**	6(10.0)	-
4.	Did nurse realize you that you are have caring nurse?	**32 (53.3)**	27(45.0)	1(1.7)	-
5.	Did nurse address you properly and make you feel respected?	**35 (58.3)**	25(41.7)	-	-
6.	Did nurse respect your privacy?	32(53.3)	28(46.7)	-	-
7.	Did nurse treat you like a family ?	22(36.7)	**37(61.7)**	1(1.7)	-
8.	Did nurse keep promises and explain why she broke them?	12(20.0)	**29(48.3)**	6(10.0)	13(21.0)
9.	Did nurse praise you, e.g. Yes, you are doing well?	19 (31.7)	**34(56.7)**	3(5.0)	4(6.7)
10.	Did nurse take immediate action to comfort you?	21(35.0)	**38(63.3)**	1(1.7)	-
11.	Did she help you take medicine and therapy when supposed to?	**40(66.7)**	20(33.3)	-	-
12.	When nurse is busy or her shift time to be finished does she inform you?	7 (11.7)	**23(38.3)**	20(33.3)	10(16.7)
13.	Did nurse regularly examine the speed of IV fluid and checks insertion site?	**37(61.7**)	23(38.3)	-	-
14.	Did nurse explain you procedures (before and after)?	29(48.3)	28(46.7)	3(5.0)	-
15.	Did nurse explain you about effects and side effects of midicine?	16(26.7)	**25(41.7)**	17(28.3)	2(3.3)
16.	Did nurse teach or demonstrate the skill how to take care of yourself?	21(35.0)	**35(58.3)**	4(6.7)	-
17.	Did nurse contact your concerned health personal to solve your problem?	**29(48.3)**	**29(48.3)**	1(1.7)	1(1.7)
18.	Did nurses introduce herself/himself and let you know their responsibility for you ?	12(48.3)	**27(45.0)**	12(20.0)	9(15.0)

Item No.	Items	Fully Satisfied = 4 n(%)	Moderately Satisfied = 3 n(%)	Not Satisfied = 2 n(%)	Not Sure = 1 n(%)
19.	Did nurse make you more comfortable ?	22(36.7)	**36(60.0)**	1(1.7)	1(1.7)
20.	Did nurse pay attention to your safety ?	**29(48.3)**	**29(48.3)**	2(3.3)	-
21.	Did nurse inform you her daily examination and nursing care plan to prepare you psychologically ?	21(35.0)	**34(56.7)**	5(8.3)	-
22.	Did nurse listen to you and your family patiently ?	**34 (56.7)**	26(43.3)	-	-
23.	Did nurse wear genuine smile ?	9(15.0)	9(15.0)	15(25.0)	**27(45.0)**
24.	Did nurse provide support when you was going through difficulty ?	24(40.0)	**33(55.0)**	2(3.3)	1(1.7)
25.	Were nurse actions gentle ?	**33(55.0)**	26(43.3)	-	1(1.7)
26.	On necessary examination and therapy, did nurse check you on time to time and concern with you ?	**32 (53.3)**	28(46.7)	-	-
27.	Did nurse provide you a quite and comfortable environment ?	20(33.3)	**35(58.3)**	3(5.0)	2(3.3)
28.	Did nurse give you enough time to speak	25 (41.7)	**32(53.3)**	3(5.0)	-

Table 4 : Relationship between socio-demographic variables and items of CBM Tool.

Variables	Fully Satisfied n(%)	Moderately Satisfied n(%)
Age (years)		
<20	2(66.7)	1(33.3)
21-40	13(81.3)	3(18.8)
41-60	**19(65.5)**	**10(34.5)**
>60	10(83.3)	2(16.7)
Sex		
Male	**29(90.6)**	3(9.4)
Female	15(53.6)	**13(46.4)**
Education		
Profession	3(75.0)	1(25.0)
Graduate/postgraduate	**14(82.4)**	3(17.6)
High school certificate	10(76.9)	3(23.1)
Middle school certificate	6(66.7)	3(33.3)
Primary school certificate	4(100)	-
Illiterate	7(53.8)	**6(46.2)**

Variables	Fully Satisfied n(%)	Moderately Satisfied n(%)
Marital Status		
Unmarried	9(90)	1(10)
Married	**32(69.6)**	**14(30.4)**
Widowed	3(75.0)	1(25.0)
Occupation		
Profession	13(92.9)	1(7.1)
Clerical	2(100.0)	-
Shop owner	3(75.0)	1(25.0)
Farmer	2(66.7)	1(33.3)
Skilled workers	1(100.0)	-
Unskilled workers	3(75.0)	1(25.0)
Unemployed	**17(58.6)**	**12(41.4)**
Students	3(100.0)	-

Table 5 : Relationship between Socio-demographic profile and items of CBM tool

Variables	Fully Satisfied	Moderately Satisfied
Family Type		
Nuclear	**24**(54.54)	9(56.25)
Joint	20(95.45)	7(43.75)
Income		
<5000	3(6.81)	**6**(37.5)
10000-20000	**21**(47.72)	4(25)
20000-30000	11(25)	1(6.25)
30000-40000	6(13.63)	1(6.25)
40000-50000	1(33.3)	2(66.7)
>50000	2(4.54)	2(12.5)
Locality		
Urban	**29**(65.90)	8(50)
Rural	15(34.09)	8(50)
Duration of Hospitalization (Days)		
5-10	**20**(45.45)	**11**(68.75)
10-15	12(27.27)	3(18.75)
15-20	8(9.09)	-
20-25	2(4.54)	-
25-30	-	1(6.25)
30-35	2(4.54)	1(6.25)
Diagnosis		
Medical	26(59.09)	7(43.75)
Surgical	18(40.90)	9(56.25)

were going to be discharged from hospital at the time of interview and may be they were having a joyous feeling of going home. It may also summarise that many of them afraid to express their dissatisfaction with the nursing care.

Conclusion :

In nursing care perspective, it is essential to maintain satisfaction and contentment within the patient for quality nursing care. It is necessary for nurses to ensure how they behave and act with patients. It is important to know what the patient feels about the care which he is experiencing. This study results may be of interest to the nurse administrators in the hospital setting so that nurses can improve their communication as well as caring skills for patient care.

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Original Research Article

Benson's relaxation therapy on stress among the Antenatal women undergoing Caesarean Section

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ABSTRACT

The childbirth experience has always represented a very important event in a woman's life, a unique and special moment, marked by the transformation of the woman in her new role, that of being a mother. These days, Caesarean surgery is common and it is almost guaranteed that a mother is wide awake during the procedure and it can be stressful.

Benson's Relaxation therapy was practiced on antenatal mothers undergoing caesarean section.. A Quasi experimental pre test - post test control group research design was adopted. Findings of this study revealed that the mean post test stress scores (22.45 ± 3.73) was lesser than the mean pre test stress score (40.2 ± 4.93) in the experimental group. Thus it was concluded that Benson's relaxation therapy has a significant effect in reducing stress of antenatal women prior to the caesarean section

Keywords

Antenatal women, effectiveness, undergoing caesarean section; Benson's relaxation therapy, stress.

Background of the study

Pregnancy and childbirth are beautiful experience in a woman's life. In the life experience of a woman, one goes through the most vital transaction of giving new life to another totally unique being in and through child birth. The significant event entails a lot of bearing for an expectant mother. For quite many women childbirth is a joyous, fulfilling and empowering experience. Women who express a long-term satisfaction with their births feel a sense of accomplishment; while others have awry experience which leave them feel distressed, confused and resentful.[1]

Facing the surgery can be a frightening experience fraught with questions, doubts, stress, anxiety, uncertainties etc which cannot be denied. Many women undergo psychological and physical trauma for which they require care, attention, emotional and psychological support more than the medical care.[2] The best ultimate remedy at first hand for these would be met by providing alternative and complementary therapeutic measure like Benson's relaxation therapy (BRT) which serve as relaxation therapy before undergoing caesarean section. Researchers also noted that BRT provided psychological benefit by giving the women an opportunity to partake an active role in preparing for the birth process.[3]

Need of the study and literature review

Child birth is considered a multi dimensional experience as during the journey of pregnancy women undergo anxiety, fear, and stress especially before delivery. Some mothers experience their cesarean as a physical assault and a form of institutional violence. For some mothers the surgical birth is experienced as a rape[4]

Caesarean section is a common surgical procedure, and in recent years the age-standardized rate has been steadily increasing. Many women who were about to undergo a caesarean section report high preoperative anxiety levels. The authors found that women have pre

surgery anxiety and receive pre medications, despite being aware of its potential adverse side effects[5].

The decision to undertake caesarean section brings fear as operation approaches. There are many causes for inducing stress in the antenatal period. This includes: financial burden of the family, fear of future pregnancy, fear of marital relationship, fear on changes in body image, lack of knowledge on wound care, fear of occurrence of infection and all. Stress management is an attainable and realistic goal that can be achieved by a number of relaxation therapies which includes yoga, Guided imagery, Biofeedback, Progressive muscle relaxation, Relaxation breathing exercises, Meditation and Benson's relaxation therapy.[6]

A pre experimental study conducted in Sri Ramachandra Hospital, Chennai highlights the effectiveness of BRT in reducing the level of stress and coping among thirty mothers with high risk pregnancy at 28 weeks to 36 weeks of gestational ages.[7]

A quasi experimental study conducted at Government Hospital and A.J Hospital, Mangalore proved the effectiveness of relaxation therapy in 30 antenatal women on Mild Pregnancy Induced Hypertension. It was found that the mean of pre-relaxation score (17.40) was significantly higher than the mean of post relaxation score (7.17).[8]

An experimental study was conducted in a maternity hospital at Brazil to evaluate the effect of relaxation techniques on anxiety levels, and the relation between anxiety and the concentration of Immunoglobulin A among 60 puerperae. The result showed a significant reduction in the levels of the state of anxiety in the experimental group.[9]

In Egypt, the effect of Zikr Meditation and Jaw relaxation was assessed on post-operative pain, anxiety and physiologic response of patients undergoing abdominal surgery. The study proved that patients who practiced Zikr meditation & Jaw relaxation exercise had less pain, anxiety and physiologic parameter.[10]

Objectives

1. To assess the pre interventional stress level in antenatal women undergoing caesarean section.
2. To assess the effectiveness of Benson's relaxation therapy on stress in antenatal women undergoing caesarean section
3. To find the association between pre-test level of stress and the demographic variables.

Hypothesis

The hypothesis will be tested at 0.05 level of significance.

H_1: There will be a significant reduction in the stress level after Benson's relaxation therapy in antenatal women undergoing caesarean section.

H_2: There will be a significant association between stress level of antenatal women undergoing caesarean section and the demographic variables.

Research Methodology

Research Approach: Evaluative approach is adopted

Research Design: Quasi experimental Pre test - post test control group design

Setting of the Study: Obstetric wards of a selected hospital at Mangalore

Sample and Sampling Technique: Purposive sampling technique was used to select the antenatal women for the study. The subjects were allotted to the experimental and control group (N=20 in each group) using randomization and their consent to participate in the intervention.

Sampling Criteria

Inclusion Criteria: Antenatal women who

1. Are admitted & posted for elective caesarean section.
2. Who have completed 32weeks of gestation and more
3. Are diagnosed with gestational hypertension and/or gestational diabetes mellitus.
4. Have undergone previous caesarean section.
5. Are with a precious pregnancy and bad obstetric history.

6. Who have had previous vaginal delivery
7. Are primi with breech presentation or CPD

Exclusion Criteria: Antenatal women who are posted for emergency caesarean section.

Data Collection Instruments:

1. Baseline Proforma
2. Stress Scale

Data Collection Process:

A formal permission was obtained from the concerned authority and the pre-operative antenatal women who fulfilled the sampling criteria were identified. After obtaining an informed consent, the experimental group was administered the Benson's relaxation therapy five times for 20 minutes after assessing their stress on the second day of admission to the hospital prior to the cesarean section. The post test was conducted just prior to the caesarean section. The data was collected and analyzed using descriptive and inferential statistics.

Results

Section I: Description of Baseline Characteristics

Most of the antenatal women in experimental group (55%) and control group (35%) belonged to age group 26-32years. Half of the women in experimental group (50%) and control group (50%) belonged to nuclear family. Majority (70%) of the women are in experimental group and 65% in control group had previous caesarean section. Majority of mothers in experimental group (45%) and only 20% in control group were 38-39 weeks of gestational age.

Section II: Stress level in experimental and control group.

Table 1: Distribution of subject according to the stress level in experimental and control group

N=20+20

Stress score	Range in %	Category	Experimental Group		Control Group	
			f	%	f	%
27-52	34-66%	Moderate	17	85%	19	95%
53-78	67-100%	Severe	3	15%	1	5%

Data in Table 1 shows that majority of the subjects in experimental (85%) and control group (95%) had moderate stress and only 15% of subjects in experimental group and 5% in control group had severe stress. There were no mothers with mild stress (< 26)

Section III: Effectiveness of Benson's relaxation therapy on stress in experimental group.

Table 2: Mean, mean difference, standard deviation, Independent 't' value and 'p' value of post scores of experimental and control group.

N=20+20

Variable	Mean		SD		Mean of difference	Independent 't' test value	'P' value
	Exp. Group	Control Group	Exp. Group	Control Group			
Stress Scores	17.75	0.65	3.19	1.72	8.4	22.67	.000

$t_{38=2.02,P} < 0.05$

The data in Table 2 shows the mean, mean difference, standard deviation, Independent 't' value and 'p' value of post test scores of experimental group is decreased when comparing to control group after administration of Benson's relaxation therapy to experimental group. The calculated' value (t=22.67) were greater than the table value (t_{38}=2.02) at 0.05 level of significance. Hence null hypothesis was rejected and conclude that there was a significant difference in the post intervention stress scores of antenatal women undergoing cesarean section in the experimental and control group.

Section IV: Association between pre-test stress score of antenatal women and baseline proforma.

Table 3: Association between pre-test stress score of antenatal women and baseline proforma.

N = 20 + 20

Sl. No.	Variable	≤median (40)	>median (40)	Fisher's P value
1.	**Age in years**			
a)	18-25	3	2	
b)	26-32	5	6	.71
c)	33-39	3	1	
2.	**Education**			
a)	No formal education	-	-	
b)	Primary	2	3	.89
c)	Secondary	7	4	
d)	Higher secondary	1	1	
e)	Graduate	1	1	

3.	**Place of Residence**			
a)	Rural	9	7	1.00
b)	Urban	2	2	
4.	**Type of Family**			
a)	Nuclear family	5	5	1.00
b)	Joint family	6	4	
c)	Extended family			
5.	**Number of Pregnancy**			
a)	first	3	1	
b)	Second	5	7	.60
c)	third	2	1	
d)	Fourth	1	0	
6.	**Mode of Delivery**			
a)	Normal vaginal birth	0	1	
b)	Instrumental delivery	0	1	
c)	caesarean section	8	6	.50
d)	Not applicable	3	1	
7.	**Gestational Age**			
a)	32-33wks	1	0	
b)	34-35wks	1	1	.09
c)	36-37wks	1	5	
d)	38-39wks	7	2	
e)	40weeks	1	1	

$p<0.05$

Table 3 presents the Fisher's exact value was computed between the baseline proforma and pre stress score. Since the Fisher's exact value is greater than 0.05 level of significant for all the baseline proforma, the null hypotheses was accepted and concluded that there is no significant association between pre interventional stress level and their baseline proforma.

Discussion

Benson's relaxation therapy has proved to be effective in reducing stress in antenatal women undergoing caesarean section. The pretest (Mean± SD = 40.20±4.93) was higher than the post-test score (Mean± SD = 22.45±3.73) in the experimental group. Antenatal women will have stress, nervousness, anxiety, apprehension and fear before and after the caesarean section and relaxation is one of the most useful non pharmacological techniques, which can reduces stress through a positive impact on the mental and physical conditions, depression and stress. This finding are similar to the findings of study where the mean of pre-relaxation score (17.4) was significantly higher than the mean of post relaxation score (7.17).[8] Also, other measures have proved to be effective in reduction of stress in variety of surgeries.[10]

Conclusion

Midwives play an important role in preparing antenatal women for undergoing caesarean section. The study findings imply that preoperative antenatal women experience moderate to severe anxiety and so, measures have to be considered to relax them before going for caesarean section. Since Benson's relaxation therapy is easy to learn and has no side adverse effects, it can be taught to antenatal women and family members so that they can apply this therapy by themselves. Using this non invasive intervention, nurses can achieve positive outcomes in physiological and psychological dimensions of stress. It also helps in maintaining nurse patient relationship.

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Original Research Article

Addressing Stress Among Nurses in India

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ABSTRACT

Stress affects the well-beingand productivity of professionals in high stress jobs like nursing. However, nurses suffering from stress related problems, especially in the developing world, may not receive diagnosis and treatment because of barriers to access or stigma. The current study administered a stress screening questionnaire to nurses in an urban hospital in India to determine levels of work and home life stress. Nurses reported experiencing stress in the work place, indicating the need for possible solutions to minimize stress and aid in coping. The large percentage of nurses suffering from stress suggest an acute need for adoption of policies that close the gaps in access to mental, emotional, and behavioral healthcare through appropriate screening tools, referrals, interventions, and support services.

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Keywords: Behavioral Health, Emotional health, India, Mental Health, Nurses, Stress.

Background: Occupational stress, an inevitable outcome when environmental demands exceed an individual's capacity to cope, results from an assortment of factors, including long working hours, poor remuneration, and the difficulty of balancing work and family life. One such highly stressful career is nursing (Kunaviktikul et al., 2015). Nurses often report that a major source of stress is the insufficient time available for them to complete their job responsibilities (Bogossian, Winters-Chang, and Tuckett, 2015) and almost half of British nurses in a study by Mark and Smith (2011) reported that occupational stress affected their health. In addition to general work stressors, nurses have to cope with both patient-related social stressors (e.g. patient verbal abuse and unrealistic patient expectations) as well as emotional dissonance, when nurses have to act in manner opposite of their emotions (Dollard et al., 2003). Nurses as practitioners must balance providing adequate care without becoming overly involved or overly emotional. Additionally, home stress can cross

over into work life (Kane, 2009), compounding the level and nature of stress. Kane (2009) found that 74% of nurses in two private hospitals in India suffer from substantial stress, with many reporting that home life stress is significant given the time demands of running a household, concern over family members, and work requirements like night shift sand overtime interfering with home life. Kashani et al. (2010) report that 81% of nurses in their American study were stressed, but they also found high morale and belief in coping ability, with nurses continuing to care for others but neglecting their own needs. In fact, many nurses may even fail "to recognize their own physical and emotional needs" (Mullen, 2015, p. 97).

This extreme stress and sacrifice can have dire consequences. A review article by Alderson, Parent-Rocheleau, and Mishara (2015) concluded that nurses worldwide have higher rates of suicide than comparable groups. The suicide rate in the United Kingdom was so severe that it dropped nurse life expectancy to just above miners working below ground in the 1980's (Morton-Cooper 1984) and nursing remains in the top 30 occupations for suicides in females (Bogossian, Winters-Chang, and Tuckett, 2015).Travesso et al. (2014) refer to the suicide rate in India as one of the highest in the world, therefore nurses in India are likely at risk, especially if suffering from psychosocial stress which precipitates suicides in India (Manoranjitham et al., 2010). However, there is a lack of data on nurse suicides and most of the females who commit suicide in India are housewives (Radhakrishnan and Andrade, 2012).

Work-Life Balance:

Nursing conditions and job satisfaction in India have not been well studied, but the work environment has been found to be very stressful, perhaps even more so in rural areas (Varma, Kelling, and Goswami, 2016; Oommen et al. 2010). Various studies and reports have claimed that the workload, work hours, salary, opportunities for advancement, job security, safety, and equipment are inadequate (Evans, Razia, and Cook, 2013; Oommen et al.,2010). In addition, there is a serious shortage of nurses in India, with the deficit estimated at over 2 million (World Health Organization, 2010). This shortage is caused by a plethora of factors, including low social status and inadequate salaries, which restrict recruitment and also increase migration and attrition (Gill, 2011). This shortage creates extremely high workloads for Indian nurses, with hospital nurse-to-patient ratios so extreme that there is less than one nurse for every 1000 people, which contrasts sharply to the estimate of nearly 10 nurses for every 1000 people in the United States (WHO, 2006). Reports also suggest that nurses in India feel a general lack of support from their supervisors which prevents opportunities for buffering of the stressful conditions. For instance, Oommen et al. (2010) found that supervisor-related stress was ranked higher than patient-related stress among nurses in India. Because of the stressful nature of the relationship, nurses did not feel comfortable discussing work stress with co-workers or supervisors.

Nurses in India are almost exclusively females. The World Health Organization (2006) report found that approximately 90% of nurses in Southeast Asia are women, versus 70% worldwide. Thus, nurses face both the stressors of belonging to the female gender and belonging to their nursing occupation, dealing with the overlap of being working women. Given the high stress levels of being a nurse in India, these women likely experience work-life imbalance and thus additional stress. Oommen et al. (2010)report that Indian nurses often experience stress since they not satisfied with their ability to meet family obligations. Further, many nurses leave their natal families for their nursing jobs, living in nursing hostels. These living situations can be stressful because roommates are colleagues, which can blur the work and life balance.

Objective:

The current study examines the prevalence of various forms of stress among nurses in India by assessing their mental, emotional, and behavioral health using a computer-based screening tool called Stressometer. The Stressometerisa survey developed by psychiatrist Dr. Sandeep Vohra and his team, primarily to help bridge the access gap in stress related healthcare. Additionally, the results of this study can identify the major work-life stressors, and help healthcare organizations develop and implement policies that minimize work life conflict, reduce stress, and provide an organizational support structure to enhance coping among nurses.

Hypotheses:

It was hypothesized that nurses would be experiencing stress at high rates and work stress would be greater than home stress.

Methods:

Participants: The participants consisted of 365 nurses from a large urban hospital in New Delhi, India. The nurses were a range of specialties and levels. Almost all (95%, 348) were female. The nurses ranged in age from 21 to 61 years, with a mean age of 31.6 years. On a question relating to children, 45% answered not applicable, suggesting that many did not have children at the time of the survey.

Questionnaire:

The questionnaire was adapted from Peiffer's (1976) book on stress management. It included 50 questions divided into 5 subscales of 10 questions each. All questions allowed for participants to choose "Can't Say" or "Not Applicable." Additionally, the first two sub scales had answer choices of Yes or No. These sub scales related to Human Nature (e.g. irritability) and Circumstances (e.g. recent job changes or marriage). The last three sub scales had the answer choices of never, sometimes, often, and always. These subscales included Human Body and Mind (symptoms of stress; e.g. anxiety or disturbed sleep), Home Life (e.g. lack of family support), and Work Life (e.g. unsupportive colleagues).

Procedure

Data were collected in June 3-24, 2015. After receiving informed consent, the researchers administered the self-screening questionnaire on the Stressometer online platform. Researchers were available for support if needed. All participants were provided explanations of their results.

Ethical Considerations:

The Institutional Review Board (IRB) of No Worry No Tension Healthcare approved the study protocol (reference number: NWNT:A16/2013). The IRB gave permission for nurses to participate and participants gave written informed consent to take part in the research.

Data Analysis

Descriptive statistics were calculated. Yes/no questions were given scores of 0 for no and 1 for yes, while Like rt scores were given 0 for never, 1 for sometimes, 2 for often, and 3 for always. Scores on questions were then added within their groups to get a sub scale score for Human Nature, Life Circumstances, Human Body and Mind, Home Life, and Work Life. Additionally, ratings for all questions were added to get a total score. Spearman correlations were used to analyze the relationships among the five sub scales and total score. A Wilcoxon signed ranks test was performed to examine the difference between work and home stress.

Findings:

Several questions had noteworthy patterns of responses (all percentages are of the total sample, n=365). A significant minority of nurses reported that they are fearful or anxious (21.4%) and that they feel sad or low (17.5%) (See Table 1). A substantial number of nurses reported that they have been more irritable or emotional in the last month (47.9%), have started getting worrying thoughts or feel anxious (46.8%), have disturbed sleep (33.1%), have erratic eating patterns(27.7%), feel tired or weak for no apparent reason (38.9%), get body aches or vague pains for no apparent reason (32.0%), or feel like leaving everything and going away (23.5%).

Table 1 : Descriptive Statistics for Selected Yes/No and Likert Questions

	Yes	No	Can't Say/Not Applicable
Frequently sad or low	17.5%	81.1%	1.4%
Fearful or anxious	21.9%	74.2%	3.8%
People take advantage of you Too much importance to what others think	37.0%	55.9%	7.1%
	38.9%	54.8%	6.3%
Put others first	66.6%	26.8%	6.6%
Oversensitive	43.3%	54.0%	2.7%
Irritable easily	21.4%	75.9%	2.8%

Home stress was found mostly in two areas: in having someone close to them stressed(41.7%) and feeling isolated or lonely at home (15.4%).In terms of work stress, 50.7% found their work atmosphere stressful, 22.8% found their colleagues/peers unsupportive, 24.6% felt they had to deal with hostility from their colleagues/peers (See Table 2).As hypothesized, work stress (M=12.8, SD=3.6. Mdn=11) was found to be higher than home stress (M=11.0, SD=2.6, Mdn=10; Z=10.0, p<.001).

All correlations between the sub scales and total score are significant (n=365, all p-values <.001) (See Table 3).

Discussion

Implications for Practice: A significant portion of the nurses reported somatic and other symptoms of mental, emotional, and behavioral health issues. Many nurses reported work issues as a source of stress. Overall, the results indicate that nurses are stressed working women lacking effective work-life balance. Many of the studies on stress or behavioral health issues in India examine primarily homemakers (see Deshpande et al., 2014) or low-income working mothers (Travasso et al., 2014). Additionally, studies of nurses have often focused on occupational stressors; thus it is crucial to examine the personal characteristics, work stress, and home life stress in nurses to understand the full spectrum of stressors in professional working women attempting to balance family and a career (e.g. Oommen, et al., 2010).

There was a significant minority reporting disturbed

Table 2 Descriptive Statistics for Selected Likert Question. Work stress questions are highlighted in light gray.

	Never	Sometimes	Often	Always	Can't Say/Not Applicable
Recently more irritable or emotional	49.9%	42.7%	4.4%	0.8%	2.1%
Recently getting worrying or anxious thoughts	52.1%	38.6%	7.4%	0.5%	1.4%
Disturbed sleep	65.5%	26.0%	4.4%	2.7%	1.4%
Erratic eating	71.0%	20.8%	4.7%	2.2%	1.2%
Tired or weak	60.3%	34.2%	3.6%	1.1%	0.8%
Body aches	66.0%	27.9%	3.3%	0.8%	1.9%
Feel like leaving everything	75.6%	20.0%	1.6%	1.9%	0.8%
Close person stressed	53.7%	35.9%	4.7%	1.1%	4.7%
Feel isolated at home	84.1%	14.0%	1.4%	0.0%	0.5%
Work atmosphere stressful	48.8%	44.1%	3.6%	3.0%	0.5%
Colleagues/peers unsupportive	75.1%	20.3%	1.4%	1.1%	2.1%
Deal with colleague/peer hostility	72.1%	20.3%	2.7%	1.6%	3.3%
Work more than Colleagues/peers	51.8%	32.6%	4.9%	5.2%	5.4%
Work formalities interfere with work	74.0%	19.5%	3.3%	1.4%	1.9%
Feel isolated at work	85.5%	12.1%	1.1%	0.8%	0.6%

sleep, erratic eating patterns, unexplained tiredness, unexplained pain, and stomach problems, all of which are the typical somatic symptoms seen in India (Patel et al. 2001). However, in this sample, the participants also seemed willing to admit mood and cognitive symptoms, so perhaps many had reached a tipping point forcing them to realize that they needed help or perhaps the survey made them feel willing to divulge the full range of symptoms. The level of symptoms reported combined with the fact that many stated that they are self-sacrificing suggest that a significant proportion of these participants are suffering but still caring for others and performing their roles. This is common for women in India, where their societal roles often require them to experience numerous stressors ranging from childbirth to caring for the elderly, with women expected to continue caring for the family even if distressed and struggling to cope (Malhotra and Shah, 2015).

Although only one-fifth stated they felt like leaving everything and going away, this is still a significantly high number of respondents who have reached this level of desperation. Additionally, major life stress events, like job loss, illness or recent marriage, were infrequently reported. Therefore, most of the stress and mental, emotional, and behavioral health issues in this sample were most likely driven by more chronic sources and thus undeniably need to be addressed.

Most participants reported valuable support from family and meaningful relationships with family, friends, and neighbors. Therefore, a disturbed relationship does not appear to be driving stress and emotional and behavioral health symptoms. However, many did report that a close family member or friend was stressed, thus adding to their own stress and reducing needed social support (WHO, 2001). It is important that organizations focus on work-life balance to ensure the well-being of their employees. One aspect of nursing which may endanger that balance is shift work. According to Brought and O'Driscoll (2010), “adapting shift work schedules so that they take into account workers' family, recreational, and personal needs can alleviate some of the potentially negative health outcomes of shift work, and lead to improved work-life balance” (p. 288). However, although shift work obviously affects work and home life and retention, Brooks (2000) suggests that control and working conditions are more influential.

Nursing has been studied throughout the world as one of the most stressful occupations (Healy et al., 2000). Nurses often have to work through extreme stress, forcing them to attempt to cope and still function. It is essential for optimal mental, emotional and behavioral health that people in these occupations have resources to mitigate work stress, namely control/ autonomy and social support; thus the work climate is crucial to nurse

behavioral health. For instance, Carson et al. (1994) found that although community practice behavioral health nurses experienced more stressors, the nurses reported greater job satisfaction and a better relationship with their clients than ward nurses. Organizations should strive to protect the behavioral and emotional health of their employees, perhaps by enhancing autonomy (Mauno, Kinnunen, and Ruokolainen, 2006) and encouraging social support. Improving well-being of nurses will benefit both the nurses and the organization because excess work stress has been found to decrease work performance (Edwards, Guppy, and Cockerton, 2007).

A significant portion of nurses in the current sample felt that their occupational climate was not supportive enough with the majority reporting that the work environment was stressful. Mark and Smith (2011) found that job demands and social support were the biggest factors determining susceptibility to depression and anxiety in nurses. In the current sample, many of these nurses appeared unable to cope with the stress of their job given the occupational climate, home life, and individual characteristics.

A large percentage of this participant pool was experiencing or was at risk for developing behavioral and emotional health disorders as well as burnout. According to Maslach (1982), "Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind. It is a response to the chronic emotional strain of dealing extensively with other human beings, particularly when they are troubled or having problems" (p. 3). Individuals in professions like nursing may lose the ability to tolerate the stress that is inherent in their job; essentially the stress of the job renders them unable to cope.

In addition to the potential behavioral and emotional health issues and burnout, extreme stress creates a situation in which work performance suffers. McGrath, Reid, and Boore (2003) found that nurses frequently coped with stress through avoidance behavior, decreasing job performance. Job dissatisfaction and burnout have been related to lower customer satisfaction, patient avoidance, reduced empathy, absenteeism, lower productivity, and turnover (Dollard et al. 2003; Melchior et al. 1997). Extreme stress can also make effective functioning impossible, and can lead to medical errors with drastic consequences (Kunaviktikul et al., 2015). This situation is obviously undesirable, again suggesting that organizations need to create better work environments for the sake of their workers and for their own financial health. There are numerous interventions that have shown to be effective. They range from well-designed break areas (Nejati, Shepley, and Rodiek, 2016) to using yoga to decrease burnout (Alexander et al., 2015). Nowrouzi et al. (2015) report that research has found reductions in stress and/or burnout through mindfulness-based stress reduction and psychosocial intervention programs. They recommend organizations enhance nurse well-being though interventions that focus on stress reduction for individual worker as well addressing organization climate. Hahtela et al. (2015) found in their Finnish sample that, although difficult, "it is worth investing in the nursing work environment because it has been shown to be one of the key factors in retaining and recruiting nurses" (p. 477). This investment is essential in countries like India where nurses are in such short supply, but such investments should also be informed by quality research because the research on workplace interventions with nurses often has methodological issues (Nowrouzi et al., 2015).

Limitations and Future Directions: The present research has a number of limitations worth mentioning. First, it is solely based on self-report data. Individuals may have been hesitant in reporting all their stress symptoms and causes because of stigma or fear of repercussions from supervisors. Second, the study did not consider career data, such years of experience or nursing specialty. For example, Li and Lambert (2008) found a positive correlation between years of experience and job satisfaction for intensive care nurses in China. Additionally, differences by specialty were suggested by Healy and Tyrrell (2011) who identified that 97% of staff placed in emergency departments were experiencing stress, and Sahraian et al. (2008) found that psychiatric nurses in Iran were more likely to be experiencing emotional exhaustion and depersonalization than those with specialties in internal medicine, surgery, or burn wards. Thus, future studies should include data regarding variables related to workplace. It would also

Table 3 : Correlations between Subscales, Overall Score, and Clinical Ratings. All p values < .001.

	Body/ Mind	Na- ture	Work Life	Home Life	Circum- stances	Ove- rall
Body/Mind						
Nature	0.465					
Work Life	0.590	0.396				
Home Life	0.374	0.280	0.475			
Circumstances	0.454	0.359	0.363	0.312		
Overall	0.829	0.667	0.800	0.652	0.598	

be enlightening in future research to include information from those close to the participant such as family members, colleagues, and supervisors so as to obtain better understanding of a participant's stress levels and causes. A simultaneously full clinical analysis to determine behavioral, emotional, and stress-related issues among participants would have also been helpful in strengthening the survey findings.

However, the main intention of this work was to develop a generalized self-assessment screening survey of stress and its associated symptoms to help individuals understand their mental, behavioral and emotional health and recognize if they need to seek professional help. Therefore, future work will administer the current screening tool to other populations likely to experience high levels of stress. Ideally, after some modifications and similar administrations, this software-based self-assessment instrument will help people throughout the world better understand their stress and emotional and behavioral health, prevent extended suffering, and improve outcomes by acting as a screening instrument.

Applying Research to Practice : The nurses in this study reported high levels of occupational stress, suggesting the need for frequent screening to identify nurses at risk for behavioral health issues and burnout. These levels suggest an acute need for adoption of policies that close the gaps in access to mental, emotional, and behavioral healthcare through appropriate screening tools, referrals, interventions, and support services. Frequent screening and stress reduction and coping solutions are imperative in countries experiencing nurse shortages and with barriers to mental health services, such as India. Additional interventions should focus on improving occupational climate and work-life balance. Many aspects of nursing are integral to the occupation, such as shift work and the emotional side of dealing with death. However, occupational climate can help in emphasizing autonomy as well as peer and supervisor support to maximize coping and minimize suffering.

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Original Research Article

Effect of Scalp Depilation on Post Operative Wound Infection among Craniotomy Patients

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ABSTRACT

Post surgical infection leads to increased length of postoperative hospital stay, drastically escalated expense, higher rates of hospital readmission, and jeopardized health outcomes. Removal of the hair is the vital step in skin preparation.

Preoperative skin preparation is an important measure to prevent post operative surgical site infection. The aim of the study was to assess the effect of scalp shaving versus depilation in patients undergoing elective craniotomy for intracranial lesion on the incidence of post operative wound infection. The study sample consists of 70 patients with intracranial lesions, 35 each in control & study group. Patients were observed pre operatively and post operatively on the third & ninth day by using a observation checklist for asepsis, wound assessment & presence of drain. The data was correlated with clinical & laboratory findings. The clinical assessment scores shows correlation with wound assessment scores in 13% cases; however the result were not statistically significant. The commonest organism identified was Staphylococcus aureus.

Key Words: Surgical Site infections, post surgical infection, hair removal, clipping, shaving, wound infection, culture.

Introduction: Surgical site wound infections are responsible for complications, morbidity, mortality and longer duration of hospital stay. (1) The success of Pre operative skin preparation is dependent on the antiseptic used, method of application, method of hair removal, time gap between preparation of skin and performing the surgery. Further it is not clear whether the solution used for skin preparation actually reduces postoperative wound infection.[2]

Infection at or near surgical incisions within 30 days of an operative procedure, known as surgical site infection contributes substantially to surgical morbidity and mortality each year. Surgical site infection leads to increased length of postoperative hospital stay, drastically escalated expense, higher rates of hospital readmission, and jeopardized health outcomes.[1,3] The purpose of preoperative skin preparation is to remove soil and transient organisms from the skin. The skin is a dynamic home to a large number of bacteria, with up to 3 million microorganisms on each square centimeter of skin.

Hair is always considered to be associated with a lack of cleanliness, and thereby hair removal is an accepted protocol for prevention of infection.[4] Shaving of hair may results in microscopic cuts and abrasions, thereby increasing the risk for microorganism colonization. However, Clippers, when used correctly, do not cut into the patient's skin, and significantly lowers the infection rates in the post operative patients.[5]

The CDC recommends that hair not be removed unless it will interfere with the operation, and if hair is to be removed it is done immediately before the operation with electric clippers rather than shaving. Patients who insist on hair removal prior to surgery should be told to clip rather than to shave.[6]

The present study was done at a tertiary care hospital on 70 patients undergoing elective craniotomy For Intracrenial space occupying lesion.

Statement of problem:

A comparative study to determine the effect of scalp shaving versus depilation among patients undergoing elective craniotomy for intracranial lesion on the incidence of post operative wound infection

Objectives:

The objectives of the study were:

1. To prepare the patients with intra cranial space occupying lesion (ICSOL) for elective craniotomy by using depilatory cream.
2. To assess the post operative wound status of patients with ICSOL who were prepared for surgery using depilatory cream.
3. To assess the incidence of post operative wound infection in craniotomy patients who were prepared by shaving the scalp for surgery.
4. To compare the post operative wound infection rate of wound infection among these two groups.

Methodology:

Research approach: quantitative

Design : Quasi experimental study two group post-test only design. The study was based on two groups comparison design. Two groups were compared by only a series of post tests and no pretest.

The schematic representation of the study is as given below:

Group A (Depilation): No pretest - Experiment - 1st post test - 2nd post test - 3rd post test

Group B (Shaving): No pretest - Experiment 1st post test - 2nd post test - 3rd post test

Tool: The instrument consisted of three parts

Part A: Identification data

Pa rt B: Observation checklist consisting of

- Clinical observation from 1st to 9th post operative day
- Wound observation on 3rd & 9th post operative day

Part C: Checklist for bacterial culture report

The checklist for clinical observation comprised of 5 criteria and 19 scores- body temperature, pulse rate, respiration, headache, neck rigidity & Kernig sign. Wound status was rated on a scale of 1 to 19 ranging from no infection to highest score of severe infection

Patients were assessed clinically from first to ninth post operative day.

Wound was assessed for erythema, serous & pus discharge on third & ninth post operative day.

Data Collection Technique & instrument:

1st observation scalp swab was taken preoperatively after the treatment in both the groups.

2nd observation- 1st post operative wound inspection & swab for culture on third post operative day from both the groups.

3rd observation- second post operative wound inspection& swab for culture on ninth post operative day in both the groups.

Data Collection Procedure:

- Informed consent was obtained from the respondents.
- Shaving and depilation were done on the previous day of surgery.
- Clinical observation was done from 1st to 9th post operative day
- Wound observation done & swab sent for bacterial culture on 3rd & 9th post operative day.

Findings:

Findings of the study shows that 64% patients were female & 36% male. Majority of the patients were in the age group of 20-40 yrs, only 7% were in 51-60 yrs age group.

Table 1: Frequency distribution of subjects in relation to assessment criteria

N = 35

Criteria	Group	Mean	SD	Std Error Mean
Age	A	39.03	9.269	1.567
	B	37.34	8.509	1.438
Clinical	A	7.17	1.098	1.86
score	B	6.80	0.719	1.22
Wound	A	4.77	1.087	0.184
Assessment	B	4.91	1.269	0.214

It is clearly indicated that there is no significant difference between the means of the two groups.

		T- Test for Equality of Means								
		Levene Test					Mean	Std Error	95% CI	
		F	Sig	t	df	Sig (2 tailed)	Diff	Diff	Lower	Upper
Age	Equal variances assumed	595	.443	.793	68	.431	1.686	2.127	-2.558	5.390
	Equal variances not assumed			.793	67.509	.431	1.686	2.127	2.559	5.390
Clinical Score	Equal variances assumed	.032	.8600	1.674	68	0.99	.371	.222-	.071	.814
	Equal variances not assumed			1.674	58.66	00.99	.371	.222	-.073	815
Wound Assessment	Equal variances assumed	2.606	.1111	-.506	68	.615-	.143	.282	-.706	.421
	Equal variances not assumed			-.506	66.434	.615	-.143	.282-	.707	.421

Data presented in the above table indicates that P value in all the groups were not significant. Though clinical assessment scores in 13% cases correlate with the wound assessment scores but, the result is not statistically significant.

Table 3: Laboratory Investigation report showing infection rate in pre & post operative patients

Culture sensitivity Report	Group I (N=35)		Group II (N=35)	
	Sterile	Infection	Sterile	Infection
Pre-operative	100%	-	100%-	
Post- operative	88.5%	11%	97.1%	2.8%

Pre operative cultures were sterile in all the cases. Post operative wound infection was present in 11% patients prepared by shaving in contrast to 2.8% patients prepared by depilation. Staphylococcus aureus was the prevalent organism in all the infections except for one patient, where Acenatobactor was present.

However, difference between the means are not statistically significant to signify the relationship between preoperative method of hair removal & post operative wound infection in craniotomy patients.

Implications:

Surgical site infections raise costs due to prolonged hospitalization, additional diagnostic tests, therapeutic antibiotic treatment, and, rarely, additional surgery. Various modalities of hair removal include shaving, clipping, and depilatory creams. Routine preoperative shaving is usually a protocol in many govt & private hospitals for all the major surgeries to reduce the incidence of SSI.

The purpose of preoperative skin preparation is to

remove soil and transient organisms from the skin. The skin is a dynamic home to a large number of bacteria, with up to 3 million microorganisms on each square centimeter of skin.

The findings of the present study indicates higher rate of infections in the patients after shaving(11%) as compared to 2.8% in patients prepared by depilation.

Recommendations :

- Significant findings may be incorporated in hospital policies for preparation of the patients for surgery.
- Health care personnel to be motivated to adopt the recent techniques.
- The study may be done for larger sample for generalization of the findings.

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Conflict of Interest : None

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Original Research Article

Case Report on Henoch Schölein Purpura (HSP)

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ABSTRACT

enoch-Schonlein Purpura (HSP) is a disorder that causes inflammation and bleeding in the small blood vessels in your skin, joints, intestines and kidneys. The striking feature of Henoch-Schonlein purpura is a purplish rash, abdominal pain and aching joints. Rarely serious kidney damage can occur. This report describes about 9years old child with HSP, which is a rare condition.

Key Words: Henoch-Schonlein Purpura, rash, oedema, joints, kidney complications.

Case Report: A 9 year old child admitted to the hospital with history of fever, severe abdominal pain, joint pain, constipation since five days. Child had history of mild upper respiratory tract infection two weeks back which was treated only with antipyretic, no antibiotics was needed. For constipation, Neotomic enema was given and the resultant was melena and child presented with loose motions which was bloody in nature. Child had arrived in emergency department in hospital and advised to be hospitalized in pediatric ward and if needed to be managed in Intensive care, if the symptoms worsened.

This child was born pre term in 32 weeks with birth weight of 1200 gm and also had history of Crossed fused right sided ectopic kidney since birth. Child's developmental milestones was normal.

Day1: When the child was hospitalized, investigations like USG abdomen was done which showed multi-lymphnodes in intestine, thickened edematous jejunal loops. CT Scan abdomen and pelvis showed the enlarged mesenteric nodes, Xray chest was normal, Xray abdomen shows excessive gases in intestines. The stool sample showed numerous RBC, numerous pus cells, Occult blood- positive, CBC was done which showed WBC count 26,200/mm^3, marked Neutrophilic Leucocytosis, ESR was raised, platelet count was normal. Urine catheterization was done due to retention of urine. Urine routine examination showed Hazy appearance, sugar was present 3+, ketones were present, pus cells and epithelial cells were occasional. Blood sugar was checked as child had vomiting and severe loss of appetite, it was 156 mg/dl which was on higher side.

Child was advised IV Metrogyl 200 mg BD, Inj Amikacin 15 mg BD, Inj Buscopaan every 8 hourly and SOS on pain, IV Kidral for fluid maintenance. Child was Nil Per Oral due to severe nausea and had vomiting after any oral intake. Child presented with 9 to 10 episodes of bloody diarrhea.

Day 2: The symptoms remained the same, the abdominal pain was not reduced. The same line of management was continued, child was under observation.

Day 3: bloody diarrhea of 9-10 episodes was same, child developed abdominal distention, oedema in upper and lower limbs, severe nausea and loss of appetite, fever was moderate ranging from 99º F to 100 º F. Abdominal USG was repeated, it shows increased lymph nodes, there was increased WBC to 51,000, hyponatremia with Na level 120meq/l, Potassium and chlorides was normal, Increased S Urea level, Creatinine was normal, decreased total Proteins 4.75 g/dl, low Albumin 3.12 g/dl, reference to Gastroenterology was given, but it was advised to continue same treatment

Day 4: Child's abdominal distention, limbs oedema was increasing, peristalsis was very sluggish, mild joint pain, diarrhea was same, Stool for Clostridium Welchii was send, Blood culture was send. Reports were awaited for further 5 days.

Differential diagnosis done was Acute Abdomen, Intestinal Obstruction, suspected Paralytic Ileus, Meckel's Diverticulum, Kidney disease, Septicemia.

Day 5: Child developed bleeding spots, bruises over skin of upper palms, till mid elbow, lower limbs with ankles and mid thigh, some on buttocks, child was shifted to Pediatric Intensive Care Unit. Inj. Linospan 200 mg, was started immediately in PICU, after an intelligent discussion of a team of Pediatric doctors, it was decided to observe the child and started with Oral Steroids, Tab. Prednisolone 40 mg BD, then it was continued for further 7 days. During the 7 days, child had developed mild pleural effusion and mild Ascites. The blood culture and stool Clostridium Welchi report was negative.

Child was cured, but it took a time period of 2 weeks for diagnosis and appropriate management. Child had severe loss of protein, was malnourished, had weight loss of 5 Kgs till discharge from hospital. Follow up after 8 days and Urine investigation every 15 days till 2 months to check for presence of urine protein, renal tests to rule out any renal complications. Every month follow up was done till 6 months. USG and urine investigations were repeated, which were normal, 2nd follow up again after another 6 months done. The child was observed and followed up for a year. The child was normal, only complaint was physical weakness and slow growth.

Definition of HSP, also referred to as Anaphylactoid Purpura: Henoch-Schönlein Purpura is a particular form of blood vessel inflammation called vasculitis. HSP results in a purpulish skin rash, associated with joint inflammation and sometimes camping pain in the abdomen. HSP is characterized by deposition of immune complexes containing the antibody Ig A; the exact cause for this is unknown.

Dr. William Heberden (1710–1801), a London physician, described the first cases of Henoch-Schönlein purpura (HSP) in 1801, in a 5 year age child. The disease is named after Eduard Heinrich Henoch (1820-1910), a German pediatrician (nephew of Moritz Heinrich Romberg) and his teacher Johann Lukas Schonlein (1793–1864), who described it in the 1860s. Schönlein associated the purpura and arthritis, and Henoch the purpura and gastrointestinal involvement. The English Physician William Heberden and the dermatologist Robert Willan (1757–1812) had already described the disease in 1802 and 1808, respectively, William Osler was the first to recognize the underlying allergic mechanism of HSP.

Epidemiology: HSP occurs more often in children than in adults and usually follows an upper respiratory tract infection. Half of affected patients are below the age of 6 years and 90% under 10. It occurs twice as often in boys as in girls. The incidence of HSP in children about 20 per 100,000 children per year, making the most vacuities in children.[1]

Pathophysiology: Henoch–Schönlein purpura is a small-vessel vasculitis in which complexes of immunoglobulin A (IgA) and complement component 3 (C3) are deposited on arterioles, capillaries, and venules. As with IgA nephropathy, serum levels of IgA are high in HSP and there are identical findings on renal biopsy; however, IgA nephropathy has a predilection for young adults while HSP is more predominant among children. Further, IgA nephropathy typically only affects the kidneys while HSP is a systemic disease. HSP involves the skin and connective tissues, scrotum, joints, gastrointestinal tract and kidneys.

Figure 1

Causes of HSP: HSP a vasculitis disease characterized by deposition of immune complexes containing the antibody IgA; the exact cause for this phenomenon is unknown.

HSP occurs most often in the spring season and frequently follows an infection of the throat or breathing passages. HSP seems to represent an unusual reaction of the body's immune system that is in response to this infection (either bacteria or virus). Aside from infection, drugs can also trigger the condition. HSP occurs most commonly in children, but people of all age groups can be affected, including adults.[2]

Risk factors for HSP: HSP is often preceded by an infection, such as a throat infection. The only known risk factors for HSP are exposure to certain viruses and drugs. The reaction to these agents that leads to HSP is not, however, predictable[3].

HSP symptoms and signs: The typical prodrome of HSP includes the following:

- Headache
- Anorexia
- Fever

There are four main characteristics of HSP, although not everyone with the disease develops all four .i) Rash (purpura) - classically HSP causes a Reddish purple-appearing skin rash which look like bruises, are the most distinctive and universal sign of HSP. The rash of skin lesions appears in gravity-dependent areas, such as the legs and feet , then mainly on the buttocks, but it can also appear on the arms, face and trunk and may be worse in areas of pressure, such as the sock line and waistline. ii) Gastrointestinal symptoms. Many children with HSP develop gastrointestinal symptoms, such as abdominal pain which is very severe, there is nausea, vomiting or bloody stools. These symptoms sometimes occur before the rash appears. iii) Sore joints/ joint inflammation (arthritis). Child with HSP often have painful, swollen joints — mainly in the knees and ankles. Joint pain sometimes precedes the classical rash by one or two days. These symptoms subside when the disease clears and leave no lasting damage. iv) Kidney involvement - HSP can also affect the kidneys. In most cases, this shows up as protein or blood in the urine, which you may not even know is there unless you have a urine test done. Usually this goes away once the illness passes, but in a few cases, kidney disease may develop and even persist[4].

Not all features need be present for the diagnosis. Serious kidney complications are infrequent but can occur. Symptoms usually last approximately a month. Recurrences are not frequent but do occur.

How is HSP diagnosed? HSP is usually diagnosed based on the typical skin, joint, and kidney findings. Throat culture, urinalysis, and blood tests - Antinuclear antibody (ANA) and rheumatoid factor (RF),Factors VIII and XIII, Complete blood count (CBC), Platelet count, Electrolytes, Erythrocyte sedimentation rate (ESR), Blood urea nitrogen (BUN) and creatinine, Amylase and lipase, Plasma D-dimer, Plasma thrombin-antithrombin (PAT) complex, prothrombin fragment (PF)-1, and PF-2, Prothrombin time (PT) and activated partial thromboplastin time (aPTT), Serum IgA, Antistreptolysin O (ASO), C3 and C4,Immunocomplexes of IgG and IgA, Stool analysis especially occult blood, urinanalysis - microscopy is useful for diagnosing.

A biopsy of the skin, and less commonly kidneys, can be used to demonstrate vasculitis. Special staining techniques (direct immune-fluorescence) of the biopsy specimen can be used with microscopic examination to document antibody deposits of IgA in the blood vessels of involved tissue.

Imaging modalities that may be considered such as Ultrasonography (abdominal, scrotal/testicular), Radiography (chest radiography; plain radiography of the abdomen; contrast radiography of the small intestine; barium enema study), Magnetic resonance imaging for assessing neurologic findings, Computed tomography (CT) of the head or abdomen

Other studies that may be warranted as Endoscopy, Renal biopsy (particularly when nephrotic syndrome persists and when renal function deteriorates)[3]

How to Approach:

Criteria	ITP	Acute Leukemia	Aplastic Anemia	HSP
Hb/ RBC count.	Normal	Decreased	Decreased	Normal
WBC count.	Normal	Increased ++	Decreased in some cases	Increased
Platelet count.	Decreased	Decreased	Decreased	Normal

Treatment for HSP:

While HSP is generally a mild illness that resolves spontaneously, it can cause serious problems in the kidneys and bowels. The treatment of HSP is directed toward the most significant area of involvement. Joint pain can be relieved by anti-inflammatory medications such as aspirin or ibuprofen. Some patients can require cortisone medications, such as prednisone. or prednisolone, especially those with significant abdominal pain or kidney disease. With more severe kidney disease, involvement called glomerulo-nephritis or nephritis, cyclo-phosphamide (Cytoxan) azathioprine (Imuran), or mycophenolate mofetil (Cellcept) have been used to suppress the immune system. Infection, if present, can require antibiotics.[5]

Complications of HSP: which generally occur more frequently in children than in adults. These complications include severe abdominal pain,

gastrointestinal bleeding ,kidney complications and very rare in some cases intussusception.[6]

Can HSP be prevented ? HSP can be prevented only to the extent that one minimizes exposure to viruses and certain drugs that could cause the abnormal immune response. As it is impossible to know who will get HSP, it is not possible to actually prevent it.

Some facts to know about HSP: HSP is usually self-limited. Therefore, treatment is not indicated in all cases, and full recovery is the rule. Henoch-Schonlein purpura usually improves on its own. Medical care is generally needed if the disorder affects the kidneys. HSP is more common in children than adults, but has a tendency to be more severe when it occurs in adults.

When to see a doctor: In some cases, Henoch-Schonlein purpura causes serious problems of the bowel or kidneys. See your doctor as soon as possible if you or your child develops the distinctive rash associated with Henoch-Schonlein purpura.

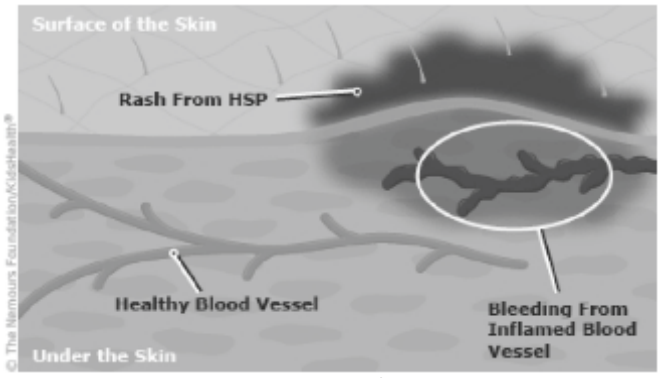
Management: Treatment remains primarily supportive in most cases, though pharmacotherapy, plasmapheresis, and surgical interventions may also be considered in select cases.

Discontinuance of any drugs suspected of playing a causative role. Supportive measures may includes ensuring adequate hydration, monitoring for abdominal and renal complications, treating minor symptoms of arthritis, edema, fever, or malaise, eating a bland diet. Joint and soft tissue discomfort may be reduced by giving analgesics such as Acetaminophen, Ibuprofen, Flurbiprofen, Ketoprofen, Naproxen. IV or oral steroids such as Azathioprine, Cyclophosphamide, Cyclosporine, Dipyridamole, High-dose IV immunoglobulin G (IVIg)

Plasma pheresis may be effective in delaying the progression of kidney disease.

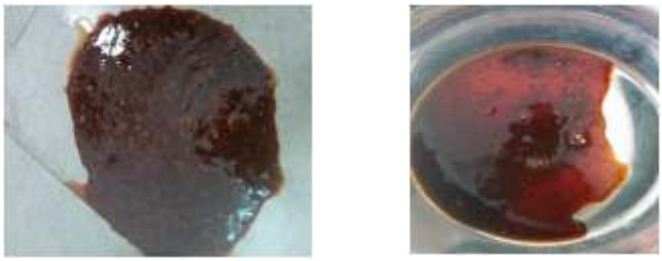
Surgical interventions that may be considered in specific circumstances include the following: Surgery for severe bowel ischemia, Kidney transplantation for severe renal disease that is resistant to medical therapy, Tonsillectomy together with corticosteroid pulse therapy for progressive HSP nephritis.[7]

HSP Prognosis: The prognosis (outlook) for patients with HSP is generally excellent. Nearly all patients have no long-term problems. The kidney is the most serious organ involved when it is affected. Rarely, patients can have serious long-term kidney damage. Some patients have recurrences of symptoms, particularly skin rash, for months to a year after the onset of the illness.

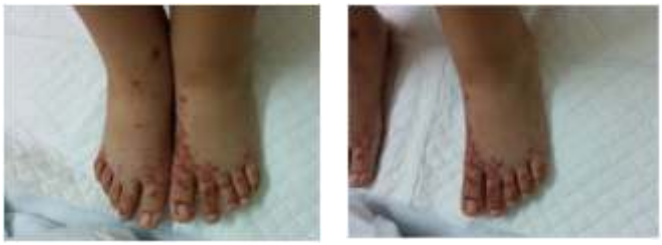


courtesy: J H Vasculitis centre

Actual pictures of the child's HSP symptoms:



Bloody diarrhea seen in the child with HSP - Thick, frothy and liquid watery



Purpural rash and oedema seen on palms, upper limb and lower limbs

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Non Research Article

Responsible Conduct of Research

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The Responsible Conduct of Research (RCR) is a widely acknowledged set of ethical principles and professional standards for conducting research which is vital for excellence, as well as for public trust while dealing with living beings.

Responsible conduct of research (RCR) is **defined** as "the practice of scientific investigation with integrity." It involves the responsiveness and application of recognized professional norms and ethical principles in the performance of all activities related to scientific **research**. - National Institutes of Health (NIH).

Norms of conducting research varies from discipline to discipline. Yet, there are some important values common in all to facilitate all researchers to bind together. Responsible conduct of research (RCR) includes most of the professional activities those are essential part of a research career. As defined by federal agencies, RCR includes the following nine areas: [2]

1. Collaborative Science: Collaboration may take place in diversified forms comprising of borrowing and lending of supplies, resources, articles and equipments, instruments between researchers; seeking input from an expert in different specialties and disciplines; and partnering with colleagues who have a similar background or field of knowledge for fresh ideas and abilities. The researchers get opportunity to learn

2. Conflicts of Interest and Commitments **:** Conflicts of interests are broadly divided into two categories: Academic conflict of interest (COI) or intellectual bias or there may be other COI which may compromise the objectivity eg. Conflict of commitment, conflict of effort etc.

3. Data Acquisition, Management, Sharing and Ownership One of the important facets of Responsible conduct of research is data integrity. Responsible management of data include appropriate storage of data. Accuracy and consistency of data must be maintained. Data should be archived in a secured and controlled environment.

4. Human Research Protections **:** Principles of respect, beneficence and justice should be kept in mind and followed strictly. Research with human participants has an invaluable role in advancing knowledge in the biomedical, behavioral and social sciences.[2]

5. Lab Animal Welfare : Lab animals should be treated with humane care and respect. The implementation of policies and regulations are needed to maintain the integrity of scientific research and sustain the welfare of these animals.

6. Mentoring **:** Mentoring an inexperienced researcher is a professional responsibility of all scientists. The ultimate goal of the mentor is to establish the trainee as an independent researcher.

7. Peer Review: Positive peer reviews add to increase funding opportunities, academic advancement and a good reputation. Comments from colleagues with similar milieu, proficiency and knowledge are of additional benefit. Reviewers must use their knowledge to assess the quality of research, honestly judge the importance of the research and protect confidentiality.

8. Publications Practices and Responsible Authorship**:** Researchers must publish their findings through many different avenues; results are most likely to be disseminated as an article in a scholarly journal. Accurate and honest reporting of methodology is expected. Integrity and trust are the hall mark of scientific publications.[4]

9. Research Misconduct : Institutions should have procedures in place to scrutinize the findings of misconduct to the Office of Research Integrity (ORI). They should also have policies that protect both whistle blowers and the accused until willpower is made.

The foundation of responsible conduct of research include:

- **Honesty-** conveying information truthfully and honoring promise.
- **Accuracy-** reporting findings specifically and taking care to avoid error.
- **Efficiency-** using resources wisely and avoiding waste, and
- **Objectivity-** allowing the facts to speak for themselves and remaining away from improper prejudice.

Conclusion: Responsible conduct of research is simply good citizenship applied to professional life.

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Non Research Article

Emotional Intelligence: Context for Successful Nursing Leadership- A Literature Review

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ABSTRACT

A leader is the stronghold of any organization and leadership styles have evolved and transformed along with mankind. Leadership styles have varied from one-dimensional model to multidimensional models. From static styles practiced in the past to dynamic styles in the current contemporary world. Nursing leaders have mirrored the leadership styles adopted in their tenure of practice. The dynamism in the current worldwide scenario, has favored the nursing leaders to adopt emotional intelligence in their practice. Emotionally intelligent nursing leadership style has been successfully implemented palliative care, oncology and mental health settings. Methods: A systematic review of literature based on emotional intelligence among nursing leaders, published between 2008 and 2015 from selected databases was done. A total of 19 articles were included in the review. The selected articles were critically appraised using the Rating System for the Hierarchy of Evidence: Nursing Resources. Results: The focus in the selected articles were centered around the basic nature of emotional intelligence, its significance in the global health care delivery system and the intricacies in implementing emotionally intelligent leadership by nursing leaders.

Discussion: Three significant themes emerged from the findings of the reviewed studies. Emotional intelligence is a charismatic virtue for Nurse Leaders, emotional intelligence remediates the chronic challenges in nursing practice, and the success of emotional intelligence is in its implementation. Implications to incorporate emotional intelligence into the nursing curriculum, future scope of research in this domain & a need to recruit emotionally intelligent nurse managers have been implied.

Key-words: Nursing leaders, emotional intelligence, self-awareness, self-regulation, nursing practice

Key Messages: Emotional intelligence is a dynamic virtue with requires proactive, self-reflective practices and empathizes on behaviors based on experiential knowledge. It serves as a remediation for contemporary health care issues. Nurse leaders equipped with emotional intelligence are strategically placed to manage changes, resolve conflicts and maintain clinical competence standards.

Introduction: Leadership is the cornerstone for an organizational and has been moulded over the centuries to its current form. In ancient times, any person with a dominant personality was considered the leader, this was the evolution of the autocratic style of leadership. The enormous physical and emotional pressure felt by the subordinates in this leadership style paved the way for the democratic style, which considered the needs and problems of the subordinates, and assigned tasks which could be efficiently and effectively performed by a person. As decades passed by some democratic leaders failed to maintain their standards, and allowed the 'laissez faire' leadership style to permeate. This style was characterized by autonomy and decision making powers to the subordinates, with the leader serving as a 'puppet' dancing to the tunes of the subordinate.

Background

Over the past few decades, organizations realized that, implementing a single style of leadership was unfruitful and a mixed method which incorporated all the components discussed above was effective. This was called as the transformational leadership style, which yielded higher productivity and satisfaction in organizations. The major disadvantage stemming from this model of leadership was the inability of the leader to decide on which standard of leadership to adopt to in a given situation. These mismatched situation created the environment for the incorporation of emotional intelligence into leadership. Spano-Szekely (2016) has empirically postulated that emotional intelligence is positively correlated with transformational leadership and negatively correlated with 'laissez faire' leadership.

Varied leadership styles have been utilized in nursing. Vesterinen (2009) studied the leadership style practiced by Finnish nurse managers and has broadcasted the styles practiced as visionary, coaching, affiliate, democratic and commanding. From the perspective of Rishel (2015), leadership development in nursing should focus on development of their innate sense of purpose and enrichment of their emotional intelligence.

Emotional intelligence (EI) is the capacity of individuals to recognize their own, and other people's emotions, to discriminate between different feelings and label them appropriately, and to use emotional information to guide thinking and behavior. It is generally said to include 3 skills:

1. Emotional awareness, including the ability to identify your own emotions and those of others;
2. The ability to harness emotions and apply them to tasks like thinking and problems solving;
3. The ability to manage emotions, including the ability to regulate your own emotions, and the ability to cheer up or calm down another person.

Emotional intelligence is connected with positive authorization processes as well as positive administrative effects. Emotionally intelligent nurse leadership characterized by self-awareness and supervisory skills and positive empowerment processes, creating a favorable work environment characterized by flexibility, novelty and transformation. Emotional intelligence cannot be measured a general solution, but it may offer new ways of thinking and being for nurse leaders, as it takes the intelligence of feelings more seriously by frequently reflecting, evaluating and improving leadership and supervisory skills.

Emotional intelligence has been empirically tested to yield convincing results in mental health nursing (Powell 2015) and palliative care settings (Davies 2010). The benefits achieved by the employees were an improved overall health, increased work satisfaction, higher spiritual well-being and decreased burn-out.

Methods

Search Strategy: the review included article published from 2008 to 2016. The following electronic databases were searched CINAHL, Medline, SCOPUS, OVID and EBSCO. Key words used included emotional intelligence, nurse leaders, nurse managers, self-awareness, reflection, self-regulation and job satisfaction.

Inclusion Criteria: Scholarly articles based on (a) Emotional intelligence in Nursing Practice (b) Nursing leaders / managers employing emotional intelligence (c) English language (d) quantitative, qualitative and review studies

Exclusion Criteria: included studies which focused on application of emotional intelligence in other health care professionals

Critical appraisal: quality assessment of the selected studies was done by experts in nursing education and practice; The Methodological quality of the studies chosen was ranked utilizing the rating system for hierarchy of evidence: nursing resources (Table 1). Meta-analysis was not performed due to the variations in tools and methods used.

Data Extraction: a total of thirteen journal articles were included in the review. All articles selected for review were entered into a bibliographic software package (Endnote Version 7). Synthesis of data was presented in text and tabular format.

Results : Table 2 summarizes the studies reviewed for the current study. The studies selected were globally diverse. Majority (five) of the articles were experiential opinions or reports. Four of them belonged to Level IV, three of the qualified articles were either a single descriptive or qualitative study and one of the article was a well-designed quasi experimental study.

One fourth of the studies reviewed had focused on

Table 1: Rating System for the Hierarchy of Evidence: Nursing Resources

Level	Definition
Level I	Evidence from a systematic review of all relevant randomized controlled trials (RCT's), or evidence-based clinical practice guidelines based on systematic reviews of RCT's
Level II	Evidence obtained from at least one well-designed Randomized Controlled Trial (RCT)
Level III	Evidence obtained from well-designed controlled trials without randomization, quasi-experimental
Level IV	Evidence from well-designed case-control and cohort studies
Level V	Evidence from systematic reviews of descriptive and qualitative studies
Level VI	Evidence from a single descriptive or qualitative study
Level VII	Evidence from the opinion of authorities and/or reports of expert committees

the benefits of emotional intelligent leadership styles to nurses and the organization. Another quarter of the reviews showcased the necessity of emotional intelligence in the context of the current global healthcare scenario. Majority of these reviews outlined the strategic implementation of emotional intelligence in health care settings. Three studies outlined the significance of emotionally intelligent nurse leaders in specific health care setting, which were palliative care, oncology and mental health. One study broadcasted the lack of emotional intelligence in the nursing curriculum.

Table 2: Essentials on the Literature Review of Emotional Intelligence

Author (Year)	Major themes / findings / implications	Level of Evidence
Akerjordet (2008)	Emotional intelligence was associated with positive empowerment processes, prompting nurse leaders to continually reflect and evaluate, and improving their supervisory and leadership capabilities	Level V
Akerjordet (2010)	Critical reflection fosters the implementation of emotional intelligence in the context of individual and surrounding differences	Leval V
Cooper (2015)	Emotional Intelligence provides a drive and passion to lead, accentuating their self-awareness, self-regulation and social skills	Level VII
Eason (2009)	Emotional Intelligence sharpens personal and social competence. It promotes effective communication, cognitive decision making and professional empathy capabilities.	Level VII
Feather (2009)	Emotionally intelligent nurse leaders are required to combat the increasing turnover and shortage of nurses	Level V
Foltin (2012)	Staff working under emotionally intelligent leaders, reported increase team work, job satisfaction and improved quality of patient care Strategies adopted by emotionally intelligent nurse leaders to implement a change includes, explicit explanation to the team on what the change involves and to generate enthusiasm and commitment from the team members	Level VII
Heckemann (2015)	Emotional intelligence can be successfully implemented on a reflective frame work	Level V
Horton-Deutsch (2008)	The transition to clinical competence and leadership in practice requires self-awareness and emotional intelligence. Integrating theoretical learning with experiential learning promotes the development of emotional intelligence	Level VII
Hutchinson (2013)	Emotionally intelligent nurse leaders play a vital role in diminishing experiential bullying in nursing	Level VI
Lorber (2011)	From the employees point of view, emotionally intelligent nurse leaders are efficient in managing change and conflict resolution	Level VI
Lucas (2008)	Emotional intelligent becomes increasingly difficult to implement if span of control increases	Level VI
O'Neill (2013)	Contemporary health care issues requires transformational leadership with emotional intelligence	Level VII
Wallis (2013)	Team dynamics requires Emotional Intelligence of key members holding supervisory positions	Level VIII

Discussion

Systematic review of empirical evidences on the practice of emotional intelligence by nurse leaders crystallized on the following themes.

- Emotional intelligence is a charismatic virtue for Nurse Leaders
- Emotional intelligence remediates the chronic challenges in nursing practice
- The success of emotional intelligence is in its implementation

Emotional intelligence is a charismatic virtue for Nurse Leaders

Emotional intelligence carries with it a string of virtues which has strong significance among nursing leaders. Akerjordet (2008) reports that emotional intelligence is associated with positive empowerment abilities which is characterized by stronger self-awareness and supervisory skills. The combination of these virtues helps the nurse leaders to introspect the challenges and unsuccessful standards from their previous experiences and devise customized strategies to overcome the identified barriers. Cooper (2015) quoted that possession of emotional intelligence provides a drive and passion to lead. In this article his focus also includes self-regulation and social skills. These virtues contradicts the olden day styles of leadership, in which nurse leaders had the authority to enforce, extract and extinguish the abilities of their subordinates. When the virtue of self-regulation is activated subordinates are provided tasks which can be accomplished within the scope of their abilities, resources and time. Social skills is implemented by participative leadership, which eliminates the positional distance between the leader and the subordinate and provides room for clarification, opinions and innovations. Eason (2009) included the abilities of cognitive decision making and professional empathy to the characteristics of emotional intelligence. Emotional intelligence virtues has eradicated the stereotyped decision making efforts taken by nurse leaders based on policies and protocols. Decision making is a dynamic process among nurse leaders with emotional intelligence. It changes according to the cause, nature and consequences of the issue or challenge. The nurse leader employs her past knowledge and investigates current evidence based literature for solutions before deducing a decision. Empathy was never in the realm of leadership characteristics, however initiating this virtue in practice settings, eliminates the fear of control and facilitates freedom to express, explore and experiment. Nursing leaders with these virtues possess a charisma, which draws their subordinates towards them, which facilities effective and efficient delegation of tasks and also improves the organizational outcomes.

Emotional intelligence remediates the chronic challenges in nursing practice

Nursing practice is based on the framework of teamwork. Wallis (2013) claims that team dynamics requires emotional intelligence of key members holding supervisory positions. Foltin (2012) supplements to the above discussion by stating that nurses who work under emotionally intelligent leaders reported greater teamwork, job satisfaction and increased quality of patient care. Emotionally intelligent leaders promote teamwork by their experiential understanding of a given task or situation. They are able to professionally emphasize with their subordinates and are not work extractors. The hierarchical difference among nursing fraternity often poses the novice nurses at risk for experienced bullying. Hutchinson (2013) recommends the need to strengthen nursing leadership capabilities associated with emotional intelligence to diminish experienced bullying within nursing. The author elaborates on the ways to accomplish this by stating that, a protocol or procedural response to bullying is to be developed in organizations. On an individual basis, the author recommends the need to respond to emotions and to support the intrapersonal and interpersonal capabilities of the nursing workforce. These strategies provides the space to voice out the bullying experience and also provides room for the leader to deal with such issues in the light of an individual's capacities. **Contemporary health care and nursing practice issues**, like escalating health care costs, transition in health care setting, conflict resolution and increased turnover requires the implementation of innovative nursing leadership expertise through transformational leadership and emotional intelligence (O'Neill 2013, Feather 2009 & Lorber 2011). These authors have strategically stated that, emotionally intelligent leaders employ a more comprehensive cognitive approach in facing these challenges. Motivation and enhancing their subordinates understanding of the situation also pays a

vital role in the resolution of these issues (Foltin 2012). Novice nurses are reared in carefully-controlled educational environments and are expected to practice in rapidly changing complex health care settings. Horton-Deutsch (2008) suggests that a transition to clinical competence and leadership in practice requires a strong sense of self and emotional intelligence. Leadership is an essential role-specific competency required in professional nurses, and novice nurses are perplexed at the expectation of this virtue at their hierarchical level. Providing to them the insight that self-awareness is the primary sign of leadership, enables them to confidently practice their educational experiences.

The success of emotional intelligence is in its implementation

Emotional intelligence is a virtue and not a responsibility which can be outlined on pen and paper. It is the cultivation of a nature which guides the doings, directions and decisions of nursing leaders. The implementation of emotional intelligence in practice settings cannot be generalized. It has to be considered in the context of the individual and surrounding differences (Akerjordet 2010). Hence a comprehensive assessment of the nature of the workforce, job requirements and outcomes of the organization has to be considered before regulating the varied composition in which emotional intelligence can be employed. Once incepted the proportion of these capacities have to be readjusted in accordance to the situation. Leaders who are to be nurtured with emotional intelligence should be reinforced to incorporate theoretical learning with their experiential learning **(**Horton-Deutsch 2008). A constant recall of their cognitive and experiential backgrounds will facilitate professional empathy, which will provide them with a better understanding of the demands of a situation and the strategies they had employed in resolving it. This clearly implies to the need for progressively experiencing every phase of the job before holding leadership position. When employing emotional intelligence in a situation requiring change, the strategies implied in literature focuses on preparing the team by explicitly explaining the expected change; and initiating measures to generate their enthusiasm and commitment (Foltin 2012). This style of emotional intelligence sets off the pace within the team members to work with a passion and motive, yielding higher achievement of the outcome and satisfaction. Heckemann (2015) suggests implementing emotional intelligence through a reflective framework. Reflection requires introspection of one\s emotions, thoughts or experiences in the context of its surroundings and evidence based practice standards, resulting in evolution of innovative and individualized remediation to challenges or concerns. Increasing the span of control can paralyze the positive effects of emotionally intelligent leaders. Hence it is essential to ensure that emotional intelligence is invested in an environment where the possibility of reduced span of control is permissible (Lucas 2008).

Conclusion

Emotional intelligence is a dynamic ever evolving theme which requires a change in perception and a willingness to reflect and regulate constantly. Leaders who possess this capacity are role-modeling this theme, which is the only way in which subordinates and team members are acquainted to this concept. As of now, the concept of emotional intelligent is absent in the nursing curriculum.

A repackaging of the nursing curriculum with socialization processes is recommended by Hurley (2008). From the context of nursing administration, recruiters should consider nurse managers with emotional intelligence (Spano-Szekely 2016). Research implications are directed towards ascertaining if emotionally intelligent leaders can improve the job satisfaction of their subordinates (Feather 2009).

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Non Research Article

Knowledge and Practice of revised CPR protocol (AHA) among nurses of Primary Health Center-A Literature Review

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Abstract

The current study aims to assess the Knowledge and Practice of nurses on revised CPR protocol (AHA) at primary health center employing literature review as the methodology. Multiple surveys been done focusing the skills and knowledge on CPR (AHA) by the nurses of PHC .Research demonstrates that the quality of cardiopulmonary resuscitation (CPR) has a direct effect on patient outcome from cardiac arrest. Recent studies concluded existence poor knowledge and skill retention of nurses at PHC regarding CPR (AHA) which made nurse anxious while handling the emergency condition like cardiac arrest. Therefore (AHA) Cardiopulmonary resuscitation training is mandatory for all nursing staff and is important as nurses often discover the victims of cardiac arrest anywhere in the community sight.

Keywords: Cardio pulmonary resuscitation, American Heart Association, Practice, Primary Health Center, Nurses.

Introduction

Cardiopulmonary resuscitation (CPR) consists of the use of chest compressions and artificial ventilation to maintain circulatory flow and oxygenation during cardiac arrest .Although survival rates and neurologic outcomes are poor for patients with cardiac arrest ventricular fibrillation (VF) or pulse less ventricular tachycardia (VT), early appropriate resuscitation-involving early defibrillation-and appropriate implementation of post–cardiac arrest care lead to improved survival and neurologic outcomes.[(1)]

It has been estimated that out-of hospital cardiac arrests occurring in public areas are more likely to be associated with initial ventricular fibrillation (VF) or pulse less ventricular tachycardia (VT) have better survival rates than arrests occurring at home as nurses of Primary health care centers are first approached personnel in case for primary care and at emergency.[2,3]

Sudden cardiac death is a major health problem in most countries. Sudden unexpected death is defined as death within 24 hours of symptom onset in a previously functional individual. Cardiac arrest is defined as "cessation of cardiac mechanical activity, confirmed by the absence of detectable pulse, unresponsiveness, and apnoea, or agonal, gasping respirations".[4]

Sudden death accounts for one third of all non traumatic deaths. Most occur outside the hospital. Seventy-five per cent of sudden non traumatic deaths are attributed to cardiovascular disease. It's very crucial for not only hospital nurse but even PHC nurse to learn the 2010 revisions to the American Heart Association (AHA).Primary health centre's are the cornerstone of rural health services-a first part of call to a qualified nurse of the public sector in rural areas for the sick and

those who directly report are referred from sub centers for curative preventive and promotive health care.

The literature Reviewed was obtained through different data bases in searches using CINHAL (Cumulative index to nursing & allied health literature), Medline (medical literature analysis & retrieval system online), PubMed, ProQuest, Google, peer reviewed journals and Academic Search Premier. Articles were reviewed for scientific quality and life saving.

Material, method and findings: The study is headed in main areas on surveys of Knowledge & Practice of PHC nurse.

A descriptive study conducted to assess 102 registered nurses CPR knowledge and skill at PHC, secondary & tertiary level clinic Botswana using a 21 item-multiple choice questionnaire. Result was nurses performed CPR over long gap of time all nurses failed the pretest (55.09%) but improved knowledge and skill after training (76.55%) .Scores deteriorated over three months until post test conducted. Study concluded low levels of registered nurses CPR skills in Botswana.[5]

A study to assess the knowledge and attitude towards basic CPR among 70 community nurses in Remo area, Nigeria in 2010 with purpose to improve emergency care at Primary health care delivery system used practice questionnaire (18.6%) had correct theoretical knowledge. Conclusion was Knowledge of basic CPR amongst nurses at primary health care level is generally poor with the young ones having better performance, suggest need of regular CPR training.[6]

Current care guidelines for cardiopulmonary resuscitation implementation, skills and attitudes of nurses in primary health care Finland, health centers (N = 279) (2004estimate). A survey questionnaire mailed to the health centers of resuscitation training and equipment in the health centre questionnaire focused on possible changes in practice and included questions about implementation of the effects of the CC guidelines. the study were nurses' and students' attitudes towards guideline implementation and the ability to implement the guideline recommendations in clinical there was a lack of Appropriate primary and secondary care, especially concerning early defibrillation.[7]

A descriptive study was conducted to assess the knowledge on first aid measures among self help group members in selected community areas of Natekal PHC in 2011 of 100 self help group members selected by purposive sampling technique questionnaires. 17% of them do not have exposure to any source of information about the first aid practices. The results showed that majority of the samples 62% had good knowledge, and 38% had average knowledge about the first aid practice. Among the seven areas of the knowledge assessment on first aid measures the mean concluded education and practice are essential tools for saving the lives in emergencies. First aid is an act of humanity showing willingness to save lives.[8]

A trial conducted to assess the knowledge of cardiopulmonary resuscitation (CPR) among the nurses (n= 302) of community-based health services in Hainan province of China, a survey was made by randomized stratified cluster sampling using self-designed questionnaires. The passing rate for qualification of the knowledge of CPR was found to be very low in Hainan province (23.18 %).. It may be concluded from the study that nurses of community-based health services in Hainan province lack the basic knowledge of CPR, especially in Hainan region.[9]

Cardiac or respiratory arrests are common emergencies in adults, children and neonatal period. Resuscitation is the art of restoring life or consciousness of one apparently dead. The main aim of the study was to assess and compare knowledge and practices regarding BLS among Nursing Students before and after administration of training program. Training program

was effective in enhancing the knowledge and practices of Nursing Students regarding BLS.[10]

A study on exploratory and descriptive quantitative and qualitative research designs on "Cardio-Pulmonary Resuscitation: Perceptions, Needs And barriers experienced By The 12 Registered Nurses In Botswana" in November 2009 at Botswana hospitals ,Selecting structured checklist semi structured interview consisting closed and open-ended questions .Result more practice expected from nurses during CPR . Conclusion was a lack of confidence and feelings of inadequacy radically decrease the efficiency of CPR performance. The nurse managers explained how nurses began to panic and become frightened during CPR because of their feelings of inadequacy and their lack of confidence in what they were doing. Research also indicates care givers, on the whole, do not perform CPR within established guidelines associated with compression rate and depth, duration of no compression activity (or "hands-off" time), and ventilation rate.[11]

Rescuer Fatigue in Cardiopulmonary Resuscitation: A Review of the Literature evidence-based research have studied the effecting factors interrupting CPR Provision of adequate chest compressions remains a standard of care for optimal outcome in cardiopulmonary arrest. Given the recent changes to CPR rates and a greater emphasis on pushing faster and deeper, this has raised questions surrounding rescuer fatigue and efficacy of compressions. While a body of work has been undertaken on previous CPR rates and associated fatigue levels, there is a shortage of literature on the latest CPR rates and associated rescuer fatigue in the hospital and pre-hospital settings. The objective of this paper was to determine the extent of fatigue associated with CPR in both the hospital and pre hospital settings.[12]

Effect of Cardiopulmonary Resuscitation Training Program conducted on 111 Nurses Knowledge and Practice at Tanta University from May to July 2012, applied Tool were questionnaire check list. Result was Correlation between nurses' knowledge and performance related to CPR pre and post training program. It can be seen that the study recommended annually assessment and refreshing courses to nursing staff with up- to- date guidelines to impart both cognitive knowledge and psychomotor skills of CPR and to provide a standardized care to cardiac arrest victim. The American Heart Association (AHA) CPR guidelines, state that untrained should perform COCPR in place of standard CPR or no CPR (CAB) this has given a better survival result then the previous sequence (ABC). [(13)]

Nurses' training in pre hospital care: The performance of nurses in pre -hospital care (PHC) assumes acquiring specific competencies, study were to verify nurses' opinion on theoretical knowledge and nursing skills necessary for the practice in pre-hospital setting and to analyze them according to their clinical practice, opinion indicated that the basic topics were related to situations that demanded making decisions, readiness and skill under stress or caring for a specific population, making training important in this area.[14]

Effectiveness Of American Heart Association (AHA) Certified Basic Life Support (BLS) Training Among the Nurses Working in Selected Hospitals of Pune City, India as Cardiac cases are on the rise world over and this City population is no exception The Nurses working in Hospitals must know to perform Basic Life Support (BLS),its finding help hospital management and other concern to identify the training need of the nurses and plan the intervention.[15]

An Education Intervention To Assess Knowledge And Practices About CPR Among Nurses And Nursing Students Of Tertiary Care Hospital In Gujarat, West India, Vadodara, Gujarat (India). The educational intervention in the form training was given and divided into a theoretical and a practical part. For the purpose of study, questionnaires regarding knowledge and practices were

developed the questionnaires were same in pre-training and post training. At the end of study evaluated the effectiveness of educational intervention among nurses with significant increased knowledge and practices of basic life support (BLS) after giving training. That means education to the health care professional lead to not only improvement but also update their knowledge regarding BLS/CPR.[15]

A non-experimental, quantitative, descriptive contextual study on "Cardio-pulmonary resuscitation knowledge of 30 registered nurses working in private hospital South Africa", in June 2001 using convenience sampling technique .Tool used for data collection was structured multiple-choice questionnaire. The result correlation coefficient of 0.60 % was thus obtained, indicate that have adequate knowledge with regards to basic CPR actions such performance of respiratory assessment, However, their knowledge of the underlying rationale appeared to be inadequate regarding emergency medications as well as defibrillation. Concluding future training in CPR needs to focus on specific problem areas, such as knowledge of emergency medications and serious attention should be given to CPR training program for registered nurses.[16]

Conclusion: Efforts should be made to investigate skill deterioration, and determine if simple and cost effective updating strategies .To improve skill retention, and hence, survival rates following bystander initiated CPR, strategies are required to reduce skill deterioration that are simple and effective, independent of time and place, and that cause minimal disruption of one's working day. As many skills deteriorate rapidly over the course of the first 90 days, changing frequency of certification is not necessarily the most obvious choice to increase retention of skill and knowledge. Alternatively, methods of regularly "refreshing" a skill should be explored as could be delivered at a high frequency – such as every 90 days

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Short Communication

SC Abolishes Thrice Weekly Dose Restores Daily Dose Protocol in TB across India

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On 23rd January 2017, The Supreme Court of India delivered a historic judgment (on DOTS), which will affect the fate of ailing millions - 27% of globe's TB patients. Govt. of India shall switch over to Daily Dose protocol as soon as possible. No sick Indian can be placed on "Thrice weekly dose" of anti TB drugs after 9 months from today.

SUMMARY

A Writ Petition (Civil) No. 604 of 2016 was filed by a doctor in the Supreme Court of India challenging 'the way Tuberculosis (TB) is being treated. It sought to abolish government's protocol of administering '3 doses of medicines per week' and to replace that with 'Daily dose' regimen under DOTS.

Petitioner, Dr. Raman Kakar (www.tbfreeworld.org), who headed one of government's 3000 odd sub-district TB Units in India, claims that the current DOTS model is unscientific, ineffective and harmful. Giving only 3 doses (instead of 7) per week no doubt reduces cost (to 43%). But it also means drastic reduction of drug-intake, which truncates therapy, weakens it. Even a (Category II) patient in India ends up getting only 24 injections (of Streptomycin) in 2 months while in other countries (using Daily dose), such a patient gets 60 injections!

As a result, Indians are not getting proper, long-lasting recovery. Too many treated patients return sick, for yet another course of treatment. India's relapse (and recurrence) rates are quite high (10%) compared to about 3% internationally.

Kakar and his dedicated team of TB workers serving under Revised National TB Control Program (RNTCP) at district Faridabad (Haryana) have been conducting for over 6 years exhaustive research (published). Long term fate of 36785 patients registered under Thrice-weekly era (2000-2016) was scrutinized. Of them, 4675 (12.7%) were found Re-registered for a second innings of medication; enrolled twice. Curing them a second time is that much harder. They found several patients who had already taken 4, 5 or 6 long courses of government-therapy (DOTS) and were still sick (or dead). Is it a therapy or a deception?

Petition warns that rather than eradicating TB, our national program may be doing the very opposite – generating lethal, drug-resistant strains (through high recurrence) and that too on an industrial scale, ominous for mankind. We seem to be headed back to pre-antibiotic era of our grandparents when TB used to be incurable.

Over 500-page petition cites several scientific researches, which, directly or indirectly, support Daily dose. It is a pity that someone has had to resort to legal recourse for such a clear-cut scientific topic and which underscores total govt. apathy.

In their reply (counter affidavit), govt. while denying most of the 'averments', has agreed to switch over to Daily dose in a phased manner taking over 2 years, which Kakar claims is too little too late. He urged government to do so urgently, on war footing - before 2nd October, 2017 - a deadline; modern India does possess the wherewithal.

Govt. argued that their present stock of (thrice weekly) drugs worth Rs. 117 crores will go waste. Kakar says "No. Just remove 1 tablet of H and half tablet of E, and the 'present IP strip' becomes a 'Daily IP dose' - with R 450, H 300, E 900, Z 1500." Reconstituted thus, entire stock will be used up as Daily doses (with some compromise), with no national losses. Besides, human life transcends monetary considerations.

Govt. claims that TB has been declining in India, which is disputed by recent reports that India's figures for 2015 have been revised upwards by Global TB Report, bursting the Indian bubble – a national disgrace.

Kakar rubbishes Govt.'s unsubstantiated claims that 132 countries world over had adopted thrice weekly dose just like India. A chart from an international journal, shows that 20 (out of 22) high TB burden countries use Daily dose; India is one of the few exceptions to experiment with thrice weekly protocol – **a historic technical blunder,** for which accountability ought to be fixed.

WHO is India's technical advisor having a huge presence; 87 influential WHO consultants busily conduct money-drenched surveys. So, WHO too owes an apology to public of India for 20 years of mal-practice.

Dr. Kakar did not engage any advocates and argued himself. He feels that the family of registered dead and survivors (who suffered repeated recurrences) ought to be awarded monthly pension as compensation.

Government admitted in their Reply that "…, WHO in 2007, and again in 2010, advised daily treatment as the preferred drug regimen…"? So, petitioner asked, why wait? How many more deaths / recurrences / drug-resistant cases before we act?

The 3 judge bench of Supreme Court headed by the Hon'ble Chief Justice of India adjudicated at a lightning speed - 5 hearings, in 4 months.

Key Words: TB, DOTS, RNTCP, Tuberculosis, Thrice Weekly Dose, Daily Dose, NTP, Supreme Court.

Letter to Editor

A Study to Analyse Awareness regarding Hepatitis B in Nursing Staff

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Sir / Madam,

Hepatitis B virus infection is common all over the world and constitutes a major health problem. The frequency of hepatitis B virus infection is 4-10 times higher in health care workers [1] It is a major occupational hazard and even 0.0001 ml of infected blood can transmit infection. Studies among healthcare professionals have indicated a prevalence of HBsAg, HCV to be 0-15% and 1-2% respectively [2-5]. Since nursing staff deal with bulk of work like sample collection and administering injectable medicines, they are at risk of acquiring blood borne pathogens. The present study was done to assess the awareness regarding hepatitis B infection in nursing staff at a private hospital- Choithram Hospital and Research Centre, Indore.

The study was done over a period of two weeks in May 2014. Questionnaires containing ten questions on hepatitis B were distributed among the nursing staff. The questions dealt with epidemiology, transmission, prevention and vaccination in hepatitis B. A pilot study of the questionnaire had been done before initiating the study to assess its language, ease of understanding, logical sequence, relevance and accuracy. Each question had four options and only one was correct. The answered questionnaires were collected. The data was tabulated and analysed using Microsoft Excel sheet.

A total of one hundred forty questionnaires were distributed and 114(81.42%) were received back. Thirty nine questions out of a maximum possible of 1140 questions were left unanswered. 97.5% of the respondents were aware that Hepatitis B is caused by a virus but only 54.38% knew that it is more infective than HIV and Hepatitis C. One fourth of the respondents felt that all three were equally infective. The awareness regarding infectivity and diseases caused by hepatitis B was low. Significant number of nurses believed blood and blood products alone transmitted hepatitis B. Only three fifths of the respondents knew that both vaccine and immunoglobulin should be administered to prevent vertical transmission. Nearly one quarter of the respondents did not know the correct vaccination schedule for hepatitis B and 30% had not received three doses of the vaccine. Sixty one percent had never been tested or did not remember when they were last tested.

In a similar study at Dublin, Ireland, 82% respondents knew that hepatitis B is more infective than HIV and 83% had received full course of the vaccine. The factors that influenced the decision to accept vaccination were information regarding the benefit of vaccination and the vaccine being provided free of charge.[6] One of the most efficient modes of transmission of hepatitis B is percutaneous exposure to HBV by unintentional injury from sharp objects and this is responsible for 40-60% HBV infections in health care workers in developing countries.[7] A study from India has reported that only 38.7% of health care workers are vaccinated against hepatitis B.[8]Hepatitis B is a vaccine preventable disease against which a safe, immunogenic and effective vaccine is available since 1981.[9] However , the awareness and vaccine acceptance has been low. The present study also highlights the same lack of awareness about hepatitis B infectivity and transmission among nurses at our centre. Since the study is done at a single centre, it is not be representative of the awareness in general nursing

fraternity, majority of who work in villages and health care centres. The awareness may be even lower than demonstrated.

The study highlights the need for proper education of health care workers regarding hepatitis B and the need to initiate early vaccination among new entrants in the health care field. Regular seminars and continued medical education programmes to promote awareness regarding hepatitis B is the need of the hour.

Funding : No fund received for this project.

Conflict of Interest: None

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REPORT

4th Annual Conference of NRSI (North Region)
Date: 24th- 26th November 2016

Dr. Parampal Kaur Cheema
Secretary NRSI,
North Region

The 4th Annual Conference of North Zone Nursing Research Society of India(NRSI) was organized at RP Indraprastha Institute of Medical Sciences, Karnal, Haryana, from 24th- 26th Nov 2016 on the theme **"Innovation in Nursing Practices: Through Advance Nursing Research for Improving Health status of Aging Population"**

The **Sub-themes** selected were *issues and challenges of aging population in India; issues and challenges of chronic Illness, Disabilities and their family support system; Professional practices challenges in community based/home care to aging population; Problems and remedies of aging population in regards to physical/emotional, social and economical status.*

The overall aim of the conference was to provide platform for professional and research scholars working in various fields of nursing to motivate and engage in innovative practices primarily to improve the health status of aging population and their family support system.

On the first day (24 Nov. 2016) Pre-Conference Workshop was organized on "Advance Research Methodology-Innovation in Nursing Practice". The chief guest for workshop was Col. Y.S. Parmar, Principal, Sainik School, Kunjpura .The workshop had a great opening with lamp lightening & praising the lord of knowledge & wisdom – Lord Ganesha. The opening remarks were delivered by Dr. G.S. Sharma, Director General of RPIIT campus. Dr. Sorabh Gupta, Director of RPIIT campus welcome the gathering .Prof. H.C. Rawat, President NRSI, North Zone, unfold the theme of pre-conference workshop. The chief guest addressed the gathering about the career in nursing in military & congratulated the organizers for organizing a research conference at such a grand level for the nursing personnel. The vote of thanks was delivered by Prof. Arun Kumar Jindal, Principal of college of nursing RPIIMS.

The first session was taken on Research Concept; Research Question & Hypothesis/Assumptions by Prof. H.C. Rawat, President NRSI, North Zone. Dr. Sushil Maheshwari, Assistant Professor, UCON, BFUHS, Faridkot talked about Qualitative v/s Quantitative Research Approach &Quantitative Research Design. The third session was delivered by Mrs. Sharanjit Kaur, Lecturer, UCON, BFUHS, Faridkot on Quantitative Research Design; Experimental Research Design; True v/s Quasi Experimental Cross- Sectional time series. Dr. Shashi Mawar, Lecturer, CON, AIIMS, New Delhi explained the salient features of developing research proposal/protocol. The fifth session was addressed by Dr. Sushil Maheshwari on case control & cohort studies. The sixth session was delivered by Dr. Shashi Kant Dhir, Assistant Professor, GGSMH, Faridkot regarding review of literature information retrieval in health science, PUBMED etc. Ms. Satinder Kaur, Lecturer, UCON, BFUHS, Faridkot taken the topic ethical & legal issues in health science research & RCT registry. Dr. Suresh K. Sharma, Principal, AIIMS, Rishikesh explained Techniques, tools &methods of data collection. Dr. R. K. Soni, Deptt. of Biostatistics, DMCH, Ludhiana have the topic data concept: types, expressions, presentations & examples/basic statistics: descriptive & inferential, Samples, sampling techniques & determining sampling size. Prof. H.C. Rawat talked on writing research report for publication & critical evaluation of research article.

On 25th November the inaugural session was started at 9 AM with lightening of lamp by dignitaries and saraswati vandana by the students of RPIIMS College of nursing. The chief guest for the day was Dr. Surender Kashyap(Director Kalpana Chawla govt. Medical college,Karnal) and Mrs. Uma Handa(Founder Secretary, NRSI) was the guest of honor.Dr. Parampal Kaur Cheema Secretary North Zone NRSI welcomed the guests and all delegates. Presidental address was delivered by Proff.

H.C. Rawat President North Zone NRSI. The key note address was given by Mrs. Uma Handa Founder Secretary of NRSI and she was honoured by Dr. G.S. Sharma, Director General of RPIIT campus. Dr. Surender Kashyap Director Kalpana Chawla govt. Medical College in his address expressed that the nurses plays a vital role for delivering quality care to the patients. Vote of thanks was given by Prof. Arun Kumar Jindal, Principal, RPIIMS.

Four planary sessions were taken on the sub themes by eminent speakers from nursing and medical profession.

Planary Session 1: On Issues and challenges of aging population in India: Demography of aging population , current scenario of aging population in India , concept of geriatric nursing , theories of aging common health problems of elderly was conducted by Dr. Raman Kalia Principal Saraswati college of nursing, Dhianpura, Kurali, Ropar and Dr. S.N. Gowda, Principal, Anil Baghi college of Nursing, Ferozepur.

Planary session 2: Issues and challenges of chronic illness and disabilities family support: Older people with Hypertension and stroke- Degenerative disorders, delirium and dementia, osteoporosis, mobility problems and sleep disorders was conducted by Ms. Prabhjot Saini associate proff. college of nursing DMCH, Ludhiana, Dr. Sukhpal Kaur lecturer, NINE, PGIMER, Chandigarh (UT) and Dr. Suresh Sharma principal, CON AIIMS, Rishikesh.

Planary session 3: Issues and challenges of chronic illness and disabilities, family support: Elderly people with diabetes- recent trends in management, children with diabetes- recent trend in management was conducted by Dr. Parampal Kaur Cheema principal, SPN, CON, Mukerian(PB), Mr. Dinesh Kumar Verma , diabetic nurse educator, PGIMER ,Chandigarh(UT)

Planary session 4: professional expertise and challenges in community based/homecare to aging population-challenges faced in home based care to aging population, profession expertise and practices in community based care to elderly was conducted by Ms. Pramod Kumar, (Lecturer, CON, PGI, Rohtak, Haryana) and Dr. Sushma Saini (Lecturer, NINE, PGI Chandigarh). The Chairpersons for this session were Prof. Uma Handa and Dr. Pity Kaul.

After the completion of planary sessions panel discussion was conducted on the theme "Aging Discrimination-problems and solutions (Physical, psychological/emotional, social and economical) by Dr. Pity Kaul, Dr. Sukhpal Kaur, Dr. Raman Kalia, Ms. Roopa Rawat and Mrs. Uma Handa (Moderator). It was stimulating session which opened opportunities for much discussion, brain storming and participation from delegates.

Total 357 delegates Participated in the conference from Punjab, Haryana, Uttrakhand, and New Delhi. Total 16 research paper presentations were given by scholars from different parts of the North region. A total of 10 research projects were also presented in the form of posters. The scientific session provided a platform for the young nurse researchers to disseminate their researches as well as allow the audience to critically analyze research methodologies. The participants and winners were presented with trophies and certificates.

Valedictory function was conducted in the afternoon and conference ended up by distribution of certificates and mementos to the delegates and honorable guests. Prof. Arun Kumar Jindal summarized the three days conference and proposed the vote of thanks. The conference was rated good by feedback received from the participants.

The NRSI South Regional Conference
Date: 25th July 2016
Theme: "Capacity Building For Nurse Researcher"

Hosted By
St. Xavier's Catholic
College of Nursing

Chunkankadai, Nagercoil,
Kanyakumari, District - 629 003.
Tamilnadu.

Tel: 04651-231740, 8012524049,
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The NRSI south Regional conference entitled as " Capacity Building For Nurse Researcher" held at St.xavier's catholic college of Nursing, Chunkankadai, Nagercoil, Kanyakumari District on 25.07.2016.Totally 170 delegates were registered for the conference and 164 delegates participated as gathering for the conference . The registration along with the spot registration for the conference commenced at 7.30 am. The auditorium was filled by 8.20 am and the inaugural session started at 8.30 am. At 8.35 am prayer song was sung by the choir of st. xavier's catholic college of Nursing and welcome dance was given by B.Sc Nursing students of SXCCN. The Dignitaries lighted the kuthuvilaku. The dignitaries were welcomed by Dr.A.Reena Evency at 8.45 am. At 9.10 am presidential Address was given by Sr.Doris, Regional President, NRSI. At 9.15am, the chief guest address was given by Dr.Assuma Beevi T.M, vice President, NRSI At 9.25 am Prof. Chanu Battacharya, Editor ,NRSI unfolded the conference theme and briefed the concept of theme to the gathering.

At 9.35am Rev. Fr. S. Jaya Prakash, correspond-ent, SXCCN gave the felicitation and guest of honor address.
At 9.40 am the inaugural program came to an end with vote of thanks by Mrs. Edal Kuvin J, Lecturer SXCCN
At 9.45am the first session proceeded with the topic " Quantitative Research Methods" by Dr. Bincy, Principal, Government College of Nursing, Alapuzha. Speaker was introduced by Mrs. Nimmi, Associate Professor, SXCCN and presented the memento to Dr. Bincy. Madam highlighted the points on quantitative research methods. The first session came to an end at10.25am.
The second session started at 10.30 am on the topic of "Qualitative Research Methods" by Dr. Vijayalakshmi, Principal, Sree Deva Raj URS College Of Nursing, Kolar. Introduction about the speaker was given by Mrs. Sheeba Jani. Assistant Professor, SXCCN and Presented the memento to Dr. Vijayalakshmi Madam thoughts on qualitative research was informative. The second session came to an end at 10.50 am.The third session on "Mixed Methods in Research" by Dr. Angela Gnana Durai, Principal, Jubille Mission College Of Nursing, Thrissur, started at 10.55am with the speaker introduction by Mrs. Sowmiya,Assistant Professor, SXCCN and she presented the memento to Dr. Angela Gnana Durai. The session was enlightened with live experience. The third session came to an end at11.15 am Tea Break was scheduled between 11.20-11.30 a.m .The fourth session started at 11.30 am on the topic of "Skill in writing Research Paper" by Dr. S.Kanjana, Principal, Omayal Achi College Of Nursing, Chennai. Speaker introduction was given by Mrs. Jenila, Assistant Professor SXCCN and she presented the memento to Dr. S.Kanjana.The session provoked the gathering to write research papers. The fourth session came to an end at 12.40pm.
At 12.40pm, scientific paper presentation was conducted in the auditorium with the moderator Prof. Chanu Battachaya, Editor, NRSI . Totally 12 participants presented their topics on scientific papers.
Simultaneously paper presentation also carried out at GFATM Hall, St. Xavier's catholic college of Nursing with 12 participants and this session was moderated by Dr. Bincy, Principal, Govt College of Nursing, Alapuzha. Totally 24 presenters presented their topics. The Moderators gave their valuable contributions to the presentators.

Mean while poster presentation was conducted in the lecture hall-III. 14 participants presented their posters .The posters were evaluated by Dr. Anoopa, principal, Bishop Bensigar College of nursing, Kollam and Sr. Roselet, Associate Professor, Holy cross college of Nursing, Kottiyam. Followed by scientific paper presentation lunch break was given to the delegates between 2.25 pm-3.15 pm.At 3.15 Pm we had the discussion session with the vice-president. Different activities of NRSI was discussed. The discussion went on till 4 pm.

At 4.00pm conference was concluded with valedictory function.

Report of the Conference Proceedings

NURSING RESEARCH SOCIETY OF INDIA (NRSI) 20th NATIONAL CONFERENCE

The 20th national conference of the nursing research society of India was held at the Vatika Banquet hall of the Haldwani on 21st -23rd Oct 2016. The conference was organized by the Pal College of Nursing and Medical Sciences. The National Conference was held on Theme, "Inter-disciplinary Research Collaboration: A Key Strategy for High Quality Patient Care." 353 Delegates from different colleges of Gujarat, Rajasthan, Meghalaya, Madhya Pradesh, Kerala, Tamil Nadu, Pondicherry, Manipur, Assam, Uttar Pradesh, Punjab, Uttarkhand, Karnataka, Sikkim, West Bengal, Maharastra, Nagaland, Punjab, Delhi and Haryana participated in the conference.

The inauguration session was commenced at 10am and the dignitaries, the chief guest professor Saudan Singh, Vice Chancellor of HNB University, Dr. Usha Ukande, President Of NRSI, Professor Amarjeet Kaur Sandhu, NRSI Secretary, Mr. Narayan Pal, Former MLA, Mr. Ramesh Pal, Chairman BLHRC&PCNMS, Dr. Ajay Pal, Director of BLHRC, Mr. Ashok Pal, Executive Director of Pal College of Nursing & Medical Sciences & Dr. Ratna Prakash, Principal & Organizing Chairperson did formal inauguration by lighting the ceremonial lamp.

Dr. Ratna Prakash welcomed all the dignitaries, delegates and participants of the national conference& focused the importance of interdisciplinary research in present scenario. Mr. Ashok Pal addressed the gathering with motivational words about quality care given by nurses. NRSI President addressed the audience and emphasized the interdisciplinary research is the need of hour. Chief Guest emphasized the professional courses should be started on critical care, disaster management and release the conference souvenir and college magazines.

The overall aim of the national conference was to bring awareness about the need for partnership in health care promotion of quality patient care, establishment of mutual understanding of nursing field with other fields. Nursing professionals, faculties, Postgraduate students and PhD scholars from 17 States across India had attended this conference.

Program

The three days conference was held on the central theme of Inter-disciplinary Research Collaboration: A Key Strategy for High Quality Practice with Subthemes Of

- Significance of research instrument in nursing research
- Constructing a research tool
- Standardized Vs self development tools (Impaction internal and external validity)
- Cultural adaptation of standardized tools
- Scoring, coding, categorizing and analyzing data from research instruments
- Creating a culture for interdisciplinary collaborative research
- Inter-disciplinary Vs trans-disciplinary research
- Evidence based nursing practice
- Opportunities and challenges for nurses in interdisciplinary research
- Transforming labour - room (gap analysis)
- Use of computer software in managing references and research
- Implementation of existing nursing research studies, nursing education and services
- Dissemination of research outcomes".
- Panel Discussion on scope of Interdisciplinary research".

As a whole, on this three-day national conference, 13 sessions of scientific deliberations, one panel discussion, 52 research papers and 12 posters were displayed and were evaluated by judges . The General body meeting of NRSI was conducted from 12.05 pm on 22/10/16 in which NRSI executive and NRSI members participated. On Day-2, the students of Pal College of Nursing & Medical Sciences organized the cultural evening for the delegates followed by dinner. Conference was concluded with a valedictory session with prize distribution to three best scientific papers and poster presentations.

The Masters of Ceremony of the conference for the three days were our faculty, Mr. Muthuvenkatachalam S. , Mr. Anil Parashar, Ms. Pratiti Halder & Mr. Kumar Shree Harsha.

As per the feedback of the delegates, conference objectives were achieved and delegates had a fruitful time in Pal College of Nursing &Medical Sciences, Haldwani

GUIDELINES TO THE AUTHORS

Journal of Nursing Research Society of India

The "Journal of NRSI" is a biannual publication of Nursing Research Society of India.
All Communication with reference to research studies should be addressed to the editor of "Journal of NRSI", ON THE EMAIL" nrsi.journal@gmail.com", nrslindia@gmail.com

Prerequisites: The preliminary requirements of an article before it is processed for reviews are the following

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Abbreviations & Symbols: Use only standard abbreviations. Please don't use abbreviations in the title.

Spellings: Use American spellings in all cases.

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