

EFFICACY OF HIGH PROTEIN DIET FOR THE PROMOTION OF WOUND HEALING AMONG THE PATIENTS UNDERGONE ABDOMEN SURGERY AT CHENGALPATTU GOVERNMENT MEDICAL COLLEGE AND HOSPITAL, CHENGALPATTU

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Abstract

The aim of the study is to evaluate the effectiveness of selected nursing intervention on promotion of wound healing among the patients who underwent abdominal surgery at Chengalpattu Government Medical College and Hospital, Chengalpattu. Design: True experimental - pre test and post test design. Client were selected using simple random sampling method. Setting of the study: The study was conducted in Chengalpattu Government medical College and Hospital, Chengalpattu. Subjects: A total of 150 members were included in the study out of which 75 were experimental group and 75 were control group Interventions: The experimental group recieved protein diet and control group no interventions Main outcome measure: Pre and post test was conducted by using standardized memorial assessment scale before and after intervention Findings: The mean pre test value for experimental group 5.1 and mean post test value is 2.11 and it is highly significant at the level of $p < 0.001$ Conclusion: The study conducted that selected nursing interventions like protein diet is effective in wound healing among abdominal surgery patients.

Keywords: Nutrition, Protein Diet, Abdominal Surgery, Wound Healing.

INTRODUCTION

Good nutritional status is essential for wound healing to take place. Ignoring nutritional status may compromise the patient's ability to heal and subsequently prolong the stages of wound healing. Glucose provides the body with its power source for wound healing and this give energy for angiogenesis and the deposition of new tissue.

Protein deficiency has been demonstrated to contribute to poor healing rates with reduced collagen formation and wound dehiscence. High exudate loss can result in a deficit of as much as 100g of protein in one day. This subsequently needs to be replaced with a high protein diet. Vitamins are also important in wound healing.

Vitamin C deficiency contributes to fragile granulation tissue. There is a correlation between low serum albumin and body mass index (BMI) and the development of pressure ulcers. Also, low serum albumin and high Waterlow score have a positive association.

Through a wide variety of study are done in patients who underwent abdominal surgeries the most important thing is to provide adequate medication and support to better recovery

Datamonitor (2011) estimates that there were 7.4 million major abdominal surgeries per year in the world. This number is not expected to change significantly, growing to

8.1 million surgeries in 2020 in the world. In India the incidence of abdominal surgery is 12.6% among adult males and 20.8% among adult females.

Smeltzer. S. C (2010) said that abdominal surgery is the most common intervention needed for major abdominal problems in recent years. Postoperative pain is caused by tissue damage that induces release of chemical mediators from the surgical wound. The four processes of pain are transduction, transmission, perception and modulation. Pain medication is the gold standard for acute postoperative pain relief.

Sona Chaturvedi (2012) stated that postoperative pain is both distressing and detrimental to the patient. The management of postoperative pain involves assessment of the pain in terms of intensity at rest and activity associated pain, treatment by pharmacological and non pharmacological means as well as monitoring induced side effects. Besides being physically and emotionally disabling, the pain is associated with various physiological effects of increased perioperative stress response.

In this study we are going to assess the severity of specific symptoms for clients with abdominal surgery undergoing therapy among experimental and control groups and evaluate the effectiveness of protein diet and vitamin c rich diet among Clients underwent abdominal surgery in an experimental group in order to associate the post test scores of patients with selected demographic and clinical variables among experimental and control groups.

These are the variety we are going to analyse during our study in this research process we will find the exact outcome of the study and able to change the problem of the patients

H1. There will be significant difference in wound healing before and after selected nursing interventions among the experimental group

H2. There will be a significant association between the post test score with selected demographic clinical variables among the clients in the experimental group.

Operational Definition

Effectiveness:

In this study it refers to outcome of wound healing after selected nursing interventions among the client undergone abdominal surgery in surgical department at Chengalpattu Government medical College and Hospital, Chengalpattu

Selected nursing interventions:

It refers to nursing care provided to treat with providing protein diet to all patients.

Severity of Specific symptoms:

Refers to following measure they are measured by wound healing scale

Abdominal surgery patients

It refers to patients getting treatment from abdominal surgeries in Chengalpattu Government medical College and Hospital Chengalpattu

Assumption

- The client has poor knowledge in management of wound healing .
- The client will be unable to cope with abdominal surgery wound delayed factors

Delimitation

- The study was limited to people undergone abdominal surgery in Chengalpattu Government medical College and Hospital Chengalpattu
- The study was confined for period of three years
- The study was confined only to apply protein diet consumption.

At the end of the study the client will have adequate knowledge Regarding protein diet promote the wound healing.

For this research adopted Wiedenbach's Helping Art of Clinical Nursing theory (1964) as a base for developing the conceptual framework. This theory directs an action towards an explicit goal. It has 3 factors

1. Central purpose
2. Prescription
3. Realities

Central Purpose

It refers to what nurse want to accomplish.It is the goal towards which nurse strives.In this study the main purpose is to assess the effectiveness of selected nursing intervention on specific symptoms among the clients undergoing radiation therapy

Prescription

It refers to the plan a care for a patient.it will specify the nurses central purpose.In this study the investigator plans to provide nursing intervention and assess the improvement

Realities

It refers to the factors that affects the nursing action.The conceptualization of nursing practice according to this theory consist of three steps:

METHODOLOGY

Primary Objectives:

To assess the wound healing efficacy with

1. High protein diet .
2. Provides vit c along with protein diet.

Secondary Objectives:

To minimize hospitalization, improve nutritional status for abdominal surgery clients and promote pain sensation.

Inclusion Criteria:

1. Age group between 15 - 45 years (Male & Female)
2. Person who had Abdominal surgery clients
3. Client with Elective and Emergency surgery

Exclusion Criteria:

1. Patient with psychiatric problems
2. Client more than 45 years
3. Client with other complications such as Renal, Hepatic impairment, tuberculosis, HIV and AIDS.

Sample Size:

150 in which 75 were experimental group and 75 were control group

Data collection and methods:

1. Selection of subjects (Random sampling)
2. Assessments of abdominal surgery clients Using validated Questionnaire

Analysis Plan:

The sample will be analyzed by following Student "t" test

Benefits:

1. Hospital based Nursing Interventions will improve the wound healing process.
2. Hospital based Nursing Interventions will help to prevent infection and complication
3. Hospital based Nursing Interventions is cost effective and reduces hospitalization and make the client functionally independent
4. Aid the client to adjust with the changes in the occupation
5. Help the patients regain autonomy and improve regular physical activities

Procedures

Assessment for improving wound Healing nutritional status, create the awareness of clients and caregiver for improving wound Healing with high protein diet, breathing exercise, personal hygiene and early ambulation

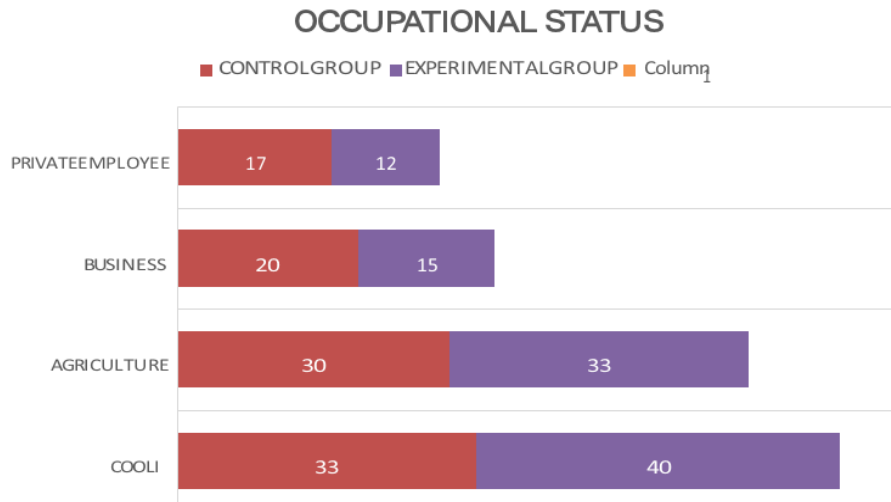
Study Setting:

Chengalpattu Government MedicalCollege, Chengalpattu

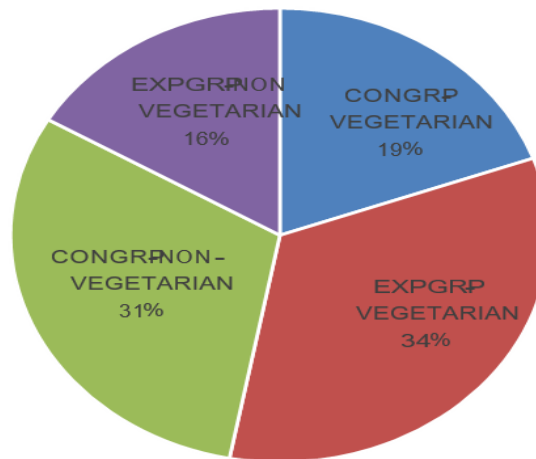
Structured Questionnaires assessing, patient education for wound healing Process, Protocols for hand washing technique, personal hygiene, Nursing Experts and other

The most appropriate technique used is the questionnaire the process of the study is declared by the graph using demographic data, clinical variables of the study is analysed

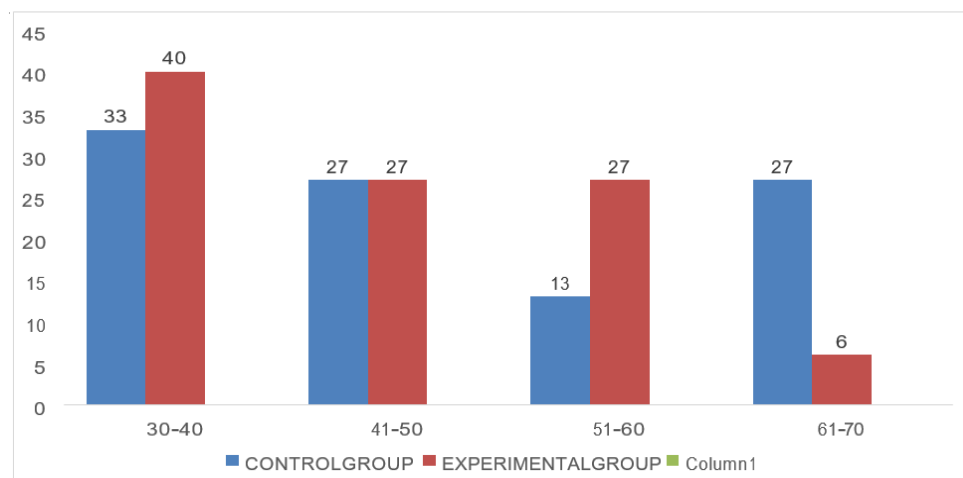
Demographic data:



Clinical variables:



Projected Outcome:



To Minimize the social and economic burden of surgical wound interfere of the normal routine activity of individual, care of the family and regain to the work and to improve good wound healing

Content Validity:

The tool used for this study was given to five experts in the field of nursing and medicine for content validity. Suggestions were considered and appropriate changes were made and found to be valid.

Reliability:

The pain assessment scale, physical activity scale and wound healing scale are multidimensional tools developed to evaluate measure the prevalence, characteristics and evaluating the outcome of nursing interventions. The author who invented this tool has conducted a study to evaluate its reliability and validity. One hundred and fifty Clients were included in this study.

Confidentiality:

We will maintain Confidentiality about all the clients with abdominal surgery. Answers given, name and demographic data, etc.,. We will utilize the data only for research purposes. I received the explanation about the nature and purpose of the above described study, its risks and benefits that are involved in its performance. The first objective of the study was to assess the severity of specific symptoms for clients with abdominal surgery undergoing therapy among experimental and control groups.

The second objective is to evaluate the effectiveness of protein diet. Clients undergoing abdominal surgery in experimental group.

Thus H₁- Hypothesis "There will be significant difference in severity of specific symptoms before and after selected nursing interventions among experimental groups" was retained.

The third objective of the study was to associate the post test scores with Selected Demographic Variables.

There is no significant association between the post test scores with selected demographic variables for experimental group and control group.

Thus H₂ "There will be a significant association between the post test scores with selected demographic and clinical variables among the Clients in the experimental group" was retained.

SUMMARY AND CONCLUSION

Major surgery patients undergoing treatment undergo poor healing due to lack of knowledge in the diet and Lifestyle modification that we focus on providing a protein rich diet for better wound healing. Diet rich in protein helps in better progression of wound healing and improve your cell regeneration. The health care provided at hospital plays an important role in the progress. Hence "A Study to evaluate the effectiveness of high protein diet, promotes the wound healing among the patients Undergoing Abdomen surgery at Chengalpattu Government medical College and Hospital, Chengalpattu" was undergone to see the effectiveness. The study was done on one hundred and fifty clients based on the inclusion and data was collected through simple randomised method (lottery) and 75 client for experimental group and 75 client for control group were made. The conceptual framework for this study was developed based on Wiedenbach Helping art of clinical Nursing theory which has three components namely purpose, prescription, realities. An extensive review of literature

for this study was done by the investigator herself which helped her to develop the conceptual framework and to determine the method of data collection, tool and methodology of the study was simple randomised technique by the lottery method. The research design is true experimental pretest and post test design. Formal permission was obtained from Medical and surgical Head of the department. The data was collected between the period of 24.03.19 to .04.2023 the conceptual framework adopted for the study was Wiendenbach theory model. Sample were collected in medical and surgical department, to identify abdominal surgery patients, Standardized tools were used for data collection. Seven experts did content validity and tools were found to be reliable The protein diet was provided only to the experimental group the intervention was carried for consecutive. Days and three follow up visit after discharge is advised and post test was conducted for both group

With regard the age out of 75 sample of experimental group

According to educational status out of 75 sample of experimental group

The results were satisfactory with good wound healing of 72% of the experimental group and 19% with moderate wound healing in the experimental group those who received protein diet. In control group those who not received nursing interventions shows 27% good wound healing and 33% of moderate wound healing. There is no association of posttest level of distribution of symptoms in control group with selected demographic variables. There is no association of posttest level of distribution of symptoms in control group with demographic variables

CONCLUSION

The protein diet ,helps to wound healing in super fast process based on the finding the statistical evidence that these measures improve the wound healing process.it increase the health and reduce the hospital stay after surgery.The results suggested the association between the post test measures of symptoms levels in the demographic variables. Thus the study of the effectiveness of selected nursing interventions among the abdominal surgery patients had shown improve and good wound healing and therefore it was efficient

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