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TO ASSESS THE EFFECTIVENESS OF INFORMATIONAL BOOKLET REGARDING HOSPITAL ACQUIRED INFECTION AND ITS PREVENTION AMONG THE PARENTS OF UNDER FIVE YEAR CHILDREN

¹Ms. Rashmi Joshi,²Mrs. Kanchan

¹Assistant Professor,²Nursing Tutor

¹Child Health Nursing Department,

¹Shri Guru Ram Rai University College of Nursing , Patel Nagar Dehradun, Uttarakhand India

Abstract: ‘Nosocomial’ or ‘healthcare associated infections’ (HCAI) appear in a patient under medical care in the hospital or other health care facility which was absent at the time of admission. These infections can occur during healthcare delivery for other diseases and even after the discharge of the patients. Additionally, they comprise occupational infections among the medical staff. Invasive devices such as catheters and ventilators employed in modern health care are associated to these infections. Populations at stake are patients in Intensive Care Units (ICUs), burn units, undergoing organ transplant and neonates. In pediatric unit Hospital Acquired Infection presents a different set of challenges than adult general ward Hospital Acquired Infection measures consider being successful. The present “**A study to assess the effectiveness of informational booklet regarding Hospital Acquired Infection and its prevention among the parents of under five year children in pediatric unit of SMIH Patel Nagar Dehradun**”

AIM:To assess the effectiveness of informational booklet on knowledge regarding Hospital Acquired Infection among parents of under five year children at SMIH, Patel Nagar Dehradun

OBJECTIVE OF THE STUDY

1. To assess the knowledge of hospital acquired infection among parents of under five children.
2. To assess the effectiveness of information booklet program on hospital acquired infection through knowledge score.
3. To find the difference between pre-test and post-test knowledge score.

METHODOLOGY

The nature of the study was pre-experimental. The study was conducted in SMIH, Patel Nagar, Dehradun, the research design use for the study was one group pre-test and post- test design. Data collected by using structured Knowledge questionnaire. The data collected for to assess the effectiveness of information booklet on knowledge regarding hospital acquired infection among parents under five children.

RESULT According to the score between 0-9 had inadequate knowledge (78%) and 10-17 had moderate knowledge (22%) about Hospital Acquired Infection.

CONCLUSION: It can concluded that pre- test knowledge score was less amount in parents. After implementing informational booklet the knowledge the knowledge score was increased. So it was affected in increasing knowledge.

Index Terms – Assess, Knowledge, Effectiveness, Informational Booklet, Hospital Acquired Infection, Prevention

I. INTRODUCTION

‘Nosocomial’ or ‘healthcare associated infections’ (HCAI) appear in a patient under medical care in the hospital or other health care facility which was absent at the time of admission. These infections can occur during healthcare delivery for other diseases and even after the discharge of the patients. Additionally, they comprise occupational infections among the medical staff. Invasive devices such as catheters and ventilators employed in modern health care are associated to these infections

Populations at stake are patients in Intensive Care Units (ICUs), burn units, undergoing organ transplant and neonates. According to Extended Prevalence of Infection in Intensive Care (EPIC II) study, the proportion of infected patients within the ICU are often as high

as 51% . Based on extensive studies in USA and Europe shows that HCAI incidence density ranged from 13.0 to 20.3 episodes per thousand patient-days.

(Hassan Ahmed Khan, Fatimakanwal Baig, Riffat Mehboob)

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Types of Nosocomial Infections

The most frequent types of infections include central line-associated bloodstream infections, catheter-associated urinary tract infections, surgical site infections and ventilator-associated pneumonia. A brief detail of these is given below:

1. Central line-associated bloodstream infections (CLABSI)

CLABSIs are deadly nosocomial infections with the death incidence rate of 12%–25% . Catheters are placed in central line to provide fluid and medicines but prolonged use can cause serious bloodstream infections resulting in compromised health and increase in care cost]. Although there is a decrease of 46% in CLABSI from 2008 to 2013 in US hospitals yet estimated 30,100 CLABSI still occur in ICU and acute facilities wards in US each year .

2. Catheter associated urinary tract infections (CAUTI)

CAUTI is the most usual type of nosocomial infection globally . According to acute care hospital stats in 2011, UTIs account for more than 12% of reported infections. CAUTIs are caused by endogenous native microflora of the patients. Catheters placed inside serves as a conduit for entry of bacteria whereas the imperfect drainage from catheter retains some volume of urine in the bladder providing stability to bacterial residence. CAUTI can develop to complications such as, orchitis, epididymitis and prostatitis in males, and pyelonephritis, cystitis and meningitis in all patients.

3. Surgical site infections (SSI)

SSIs are nosocomial infections be fall in 2%–5% of patients subjected to surgery. These are the second most common type of nosocomial infections mainly caused by Staphylococcus aureus resulting in prolonged hospitalization and risk of death. The pathogens causing SSI arise from endogenous micro flora of the patient. The incidence may be as high as 20% depending upon procedure and surveillance criteria used.

4. Ventilator associated pneumonia (VAP)

VAP is nosocomial pneumonia found in 9–27% of patients on mechanically assisted ventilator. It usually occurs within 48 h after tracheal incubation. 86% of nosocomial pneumonia is associated with ventilation. Fever, leucopenia, and bronchial sounds are common symptoms of VAP.

II. RESEARCH METHODOLOGY

Methodology is the complete structure of research study, the size and sample methods the practice and techniques utilized to collect data and process to analyses data. -**BOWLING, 2002**

1.1 Population and Sample

In the present study, the population is parents of under 5 children & sample consists of is parents of under 5 children Admitted in Pediatric Ward of SMI HOSPITAL, Patel Nagar Dehradun.

1.2 Data and Sources of Data

Data collected by using the tool i.e. Self structured knowledge questionnaires & socio demographic variables on the knowledge among parents of under five year of children regarding Hospital Acquired Infection in paediatric unit in SMI Hospital Patel Nagar Dehradun

Data Collection Tool:

Data collection tool consists 02 parts .

SECTION-A

Socio Demographic variables

Items on demographic variable include, age, sex, religion, education, occupation of sample , type of family , area of living , sources of information

SECTION-B

Self Structured knowledge questionnaires

1.3 Theoretical framework

Conceptual framework:

(Definition): Conceptual framework is a complex mental formulation of an object, property or an event that is derived from the individual's perception and experience. Conceptualization is a process of forming ideas, which are utilized and forms conceptual framework for development of research deign. It helps the researcher to know what a data is needed to be collected and gives direction and entire research process.

According to the General System Theory, "Science of Wholeness and its purpose is to unite scientific thinking across the discipline and which provide framework for analyzing the whole of any system". The system has a specific purpose or goal and uses a process to achieve that goal. A system activity can be resolved into an aggregation of feedback circuits such as:

1. Input

2. Throughput

3. Output

Socio Demographic variables. In this study, socio demographic variables refers to age, gender, Type of family Occupation , Religion, area of living Source of information, Education

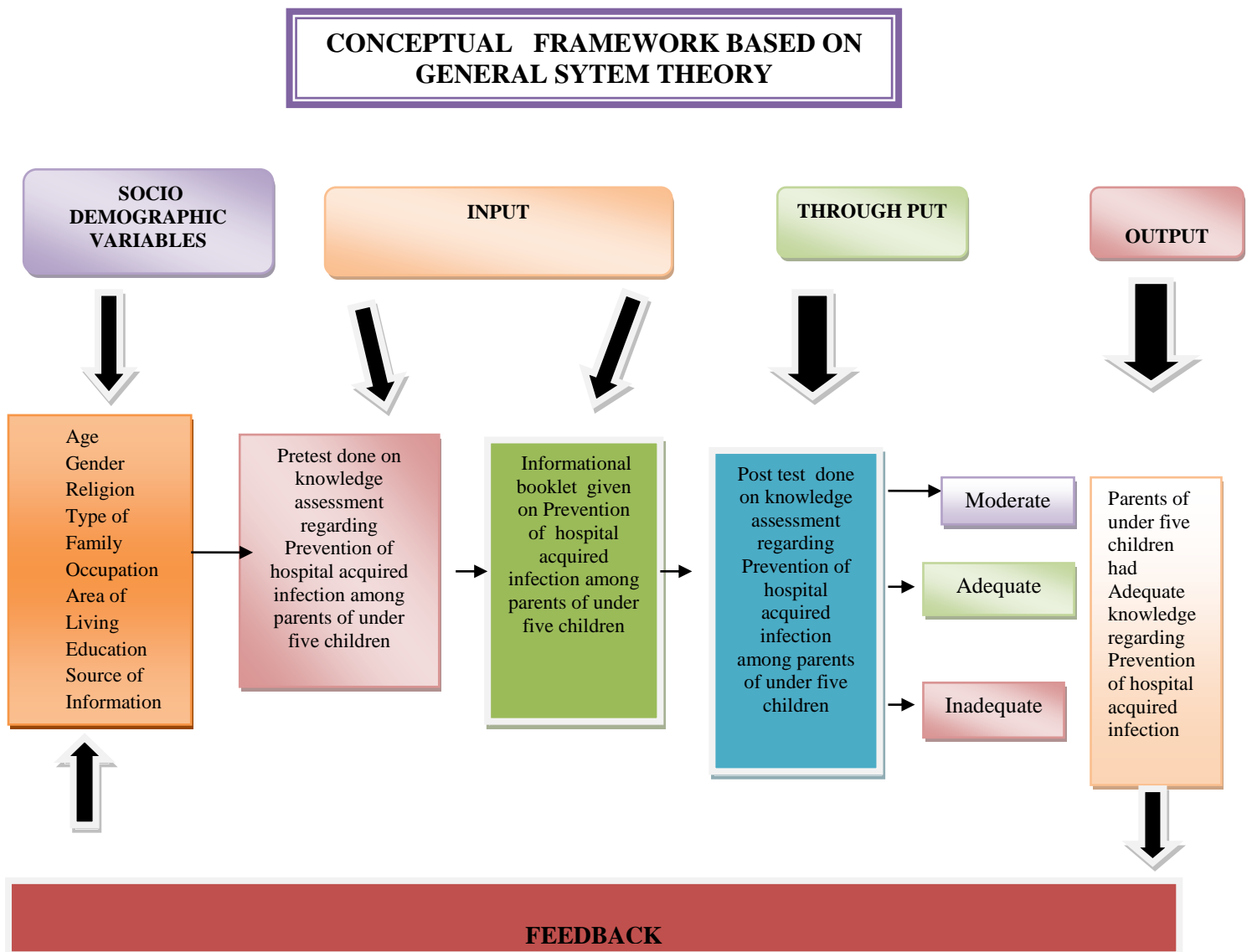
Input: Refers to any information, energy or material that enters into the system through its Boundaries: In this study input includes pretest knowledge assessment of hospital acquired infection its causes, sign and symptoms and management of HAI in different methods. The main focus of assessment is the prevention of Hospital acquired infection

Methods.

The main focus of the assessment Hospital acquired infection is on prevention of Hospital acquired infection Throughput to Refers to the process whereby the System Transforms creates and organizes input. In this Study throughput refers to the post test knowledge assessment of parents of under five year of children & analysis based on the level of knowledge is done.

1. Adequate
2. Moderate
3. Inadequate

Output:. The output release into the environment in an attempt to restore equilibrium to the environment. In this study output refers after providing the informational booklet the knowledge level of parents of under five children increased ,after that they had adequate knowledge.



1.4 Statistical tools

The data was analyzed by descriptive & inferential statistics. Data calculated by using of the t test formula, chi square and frequency percentage.

1.4.1 Descriptive Statistics

III. RESULTS AND DISCUSSION

2.1 Results of Descriptive Statics of Study Variables

Table 1: Frequency and percentage distribution of sample according to socio demographic variables.

(N= 60)

SI. No.	SOCIO DEMOGRAPHIC VARIABLES	FREQUENCY (f)	PERCENTAGE (%)
1	Age (in year)		
	24-26 year	6	10%
	27-29 year	13	21.6%
	30-32 year	18	30%
	Above 32 year	23	38.3%
2	Sex		
	Male	36	60%
	Female	24	40%
3	Religion		
	Hindu	34	56.6%
	Christian	8	13.3%
	Sikh	4	6.6%
	Muslim	14	23.3%
4	Education		
	Graduate	15	25%
	Post graduate	7	11.6%
	10 th pass	26	43.3%
	12 th pass	12	20%
5	Occupation		
	Farmer	15	25%
	Labor	13	21.6%
	Business man	9	15%
	Government job	23	38.3%
6	Type of family		
	Nuclear family	25	41.6%
	Joint family	34	56.6%
	Separated family	1	1.6%
	Extended family	0	0%
7	Area of living		
	Urban	32	53.3%
	Rural	28	46.6%
8	Sources of information		
	Newspaper	5	8.33%
	Neighbor	13	21.6%
	Television	2	3.33%
	All of the above	40	66.6%

Table No. 1 showed the Frequency and percentage distribution of sample according to socio demographic variables. Less than 50% of parents were under 32 years of age. More than 60% were male & less than 40% were female. More than 50 % were Hindu, less than 50 % were 10th pass only, less than 50% of parents were in government job; more than 50 % parents were from joint family ,more than 50 % parents were from urban community area & less than 50 % parents were from rural area. More than 65% parents had previous information from newspaper, neighbor& television.

TABLE- 2 Frequency and percentage distribution of knowledge level about hospital acquired infection among parents

S.No	Level of knowledge (Score)	Pre-test	Percentage (%)
1	0-9	47	78%
2	10-17	13	22%
3	Above 18	0	0%

The Table No. 2 showed that the demographic details according to score between 0-9 had inadequate knowledge (78%) and score above 10-17 had a adequate knowledge (22%) about Hospital acquired Infection.

Table 3: “t” value between pre-test and post-test score value

Knowledge score	Mean	SD	t-value	Level of significance
Pre- test	8	1.763	0.09	>0.05
Post-test	18	2.521		

Table No. 3 revealed that the mean post- test knowledge score value among parents in pediatric unit of S.M.I. hospital Were significantly higher than the mean pre- test value. The calculated “t” value (0.009) is more than the table value (2) at P>0.05 level of significance.

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