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RESEARCH ARTICLE

"A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE OF FAMILY MEMBER REGARDING THE MANAGEMENT OF DIARRHEA IN UNDER 5-YEAR CHILDREN IN A SELECTED VILLAGE OF SAHASHPUR"

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Abstract

Objectives:1) To assess the knowledge of family members regarding the management of diarrhea in under 5-year children. 2) To find out the association between knowledge and selected demographic variables.
Methodology: A quantitative research approach with a descriptive research design was employed for the study. The research was conducted in the community area of Sahaspur, Dehradun, Uttarakhand. Data were collected from a total of 60 participants using total sampling technique, through a demographic profile and a self-structured awareness questionnaire.
Result: Among the participants, 35% were in the age group of 39–44 years, 22% belonged to the age group of 28–32 years, another 22% were in the 33–38 years group, and 21% were aged between 23–27 years. Regarding knowledge levels about the management of diarrhea in under-five children, 63.33% of individuals had adequate knowledge, 23.33% had moderate knowledge, and 13.33% had inadequate knowledge. The study found no significant association between knowledge scores and demographic variables.
Conclusion: The study concluded that there is a need to focus on educating and motivating family members for the effective management of diarrhea in children under five years of age, as many families still possess only moderate or inadequate knowledge on the subject.

Introduction:-

Arnold (2013) described diarrhea as occurring more frequently than a child's normal bowel movements, with three or more loose or liquid stools passed within a 24-hour period. A number of pathogenic agents such as bacteria, viruses, and parasites can cause diarrhea. Rotavirus is one of the primary causes of loose, watery stools in children under five. Diarrhea symptoms include watery or loose stools, fever, weight loss, and abdominal cramping.

According to the WHO, in 2016 there were 1.7 billion cases of diarrhea in children worldwide, resulting in 525,000 deaths among children under five. Over the past decade, diarrhea has caused an estimated 1.7 million deaths annually in children under five worldwide. In India, diarrhea accounts for about 13% of all deaths in this age group, ranking third among causes of mortality, with approximately 300,000 deaths each year.

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Reviewing information on diarrheal diseases, their determinants in India, and strategies for prevention and control can help in planning and organizing community health services more effectively. Home-based care is considered the best strategy for managing frequent and extremely loose stools, as diarrhea often starts at home, continues during and after hospital treatment, and can be effectively addressed with prompt care at home.

To prevent dehydration and malnutrition, it is important that children receive proper management at home. Well-informed caregivers should begin home remedies immediately, even before seeking medical advice. Guarino et al. (2018) note that increased fluid intake along with continued feeding has been a key indicator of appropriate diarrhea management since the 1980s, helping reduce childhood deaths. However, diarrhea remains a leading cause of child mortality in Third World countries.

Early intervention and appropriate home management practices are essential in preventing complications related to diarrhea (Chiabi et al., 2018). A caregiver's knowledge of diarrhea is influenced by various factors, such as their level of education, prior exposure to diarrhea management, and overall background (Takele et al., 2019).

The World Health Organization (WHO), United Nations Children's Fund (UNICEF), and the Integrated Management of Childhood Illness (IMCI) all support the use of home-based treatment to reduce the impact of diarrhea, especially in young children. Improvements in sanitation, water quality, early detection of dehydration, and timely administration of oral rehydration solution (ORS) using safe home fluids can significantly reduce diarrhea in children under five, both at primary and secondary care levels.

Promoting good hygiene practices, improved nutrition, and clean living conditions can prevent diarrhea-related deaths. Additional contributing factors to the prevalence of diarrhea in children include poor maternal feeding practices, consumption of contaminated weaning food, lack of access to clean water, poor hand hygiene, inadequate sanitation, and substandard housing (UNICEF, 2019).

Caregivers' knowledge and practices regarding home remedies for diarrhea play a crucial role in managing the condition and preventing complications through early intervention. The National Family Health Survey indicates that the prevalence of childhood diarrhea in India increased slightly from 9% in 2016 to 9.2% in 2020. It remains the third most common cause of mortality among children under five. Research continues to show that diarrhea is a persistent contributor to under-five mortality in India.

Need For The Study

Diarrhea is still a serious worldwide health concern, with a large contribution to the global mortality and morbidity rate among children under the age of five. Recent estimates from UNICEF and the World Health Organization (WHO) indicate that diarrhea causes about 525,000 deaths among children under five each year worldwide. Diarrhea is the second most common preventable cause of mortality in many low- and middle-income nations, after pneumonia. The high death rate is mostly caused by comorbidities from malnourished and severe dehydration, both of which are made worse by inadequate household management of diarrhea. This suggests a significant deficiency in caregiver expertise and approaches to the efficient treatment of this illness.

Treatment for diarrhea remains a challenge in many regions of our country even with advances in medical knowledge and international health initiatives. Children who have diarrheal illnesses are largely affected by the actions and attitudes of their caretakers, who are usually mothers or other close family members. Appropriate care is necessary to lower mortality and long-term effects. This includes knowing when to use Oral Rehydration Therapy (ORT), eating normally, and recognizing the signs of dehydration. However, most caregivers are not aware of these procedures that can save lives. According to WHO research, even though ORT can prevent up to 93% of deaths associated with diarrhea, its uptake is still surprisingly low, especially in remote and resource-poor areas. This suggests a troubling lack of comprehension, approachability, and behavior.

Because caregivers are frequently the first—and perhaps the only—source of care for children with diarrhea in many situations, their role becomes even more crucial. Many communities have misconceptions about the origins, treatments, as well as prevention of diarrhea. Among caretakers, common misconceptions include delaying seeking medical attention, using antibiotics inappropriately, and refusing food or water during episodes of diarrhea. This ignorance may lead to more severe consequences, longer illness times, and higher death rates. Furthermore, several studies have demonstrated that although caregivers may acknowledge diarrhea as a serious condition, many do not

possess the specialized expertise required to effectively manage it at home. Consequently, situations that may be controlled with straightforward home remedies turn into potentially fatal situations.

Huge efforts have been undertaken to increase awareness and accessibility at policy and public health levels. Despite this, many caregivers are either ignorant of or lack a thorough understanding of low-cost, high-impact therapies including zinc supplementation, nutritional education, and Oral Rehydration Salts (ORS). Understanding the factors that drive caregiver behaviors is important, especially for under-served communities, as seen by the gap between knowledge and practice. To create interventions that resonate with caregivers and are long-lasting, it is not sufficient to simply deliver healthcare; one must also understand the social, cultural, and educational hurdles that hinder the proper management of diarrhea.

Examining the abilities and expertise of caregivers in managing diarrhea in children under 5 years is crucial considering this. Identifying current beliefs and knowledge gaps will make it possible to develop targeted instructional programs that will empower caregivers to respond correctly during diarrheal epidemics. Offering evidence-based viewpoints that can impact public health campaigns, reduce the number of young fatalities, and improve the general health of children under five is the ultimate objective.

Background Of The Study

In children under five, diarrhea is a major leading cause of morbidity and mortality, especially in low- and middle-class families. In this age group, diarrhea is estimated to cause 1.7 billion cases and over 500,000 deaths annually by the World Health Organization (WHO). Even with the availability of easy-to-use, efficient medicines like zinc supplements and oral rehydration salts (ORS) and solutions, many children still pass away from complications associated with diarrhea because of poor home care.

Taking care of children with diarrhea is a major responsibility of caregivers, especially mothers or other family members. The consequences for the health of the children are greatly affected by their treatment skills and methods. Unfortunately, the study shows that there are many misunderstandings, misconception as well knowledge gaps, especially in rural and low-economic environments. A lot of caregivers don't know how to use ORS correctly, how important it is to keep feeding, or how to assess dehydration symptoms. Effective management of diarrhea at the home level is further complicated by cultural beliefs and limited access to health information.

Although global health campaigns have advocated better treatment for diarrhea and sanitation, caregiver behavior has not always changed as a result of these initiatives. There is a dearth of focused study on caregivers' comprehension of managing diarrhea, and the gap between knowledge and practice continues to be a major obstacle.

In order to manage diarrhea in children under five years of age, this study aims to evaluate the knowledge and behaviors of caregivers (mother, father and family members). This research attempts to provide information for future educational initiatives and public health policies that can assist lower the death rate associated with diarrhea by identifying knowledge gaps and obstacles to treatment.

Statement Of The Problem

A descriptive study to assess knowledge of family members regarding the management of diarrhea among under 5-year children in the selected village of Sahashpur.

Objectives:-

1. To assess the knowledge of family members regarding the management of diarrhea in under five-year children.
2. To find out the association between level of knowledge and selected demographic variables.

Hypothesis

1. H1=there is a significant association between the demographic variables and knowledge of family members regarding the management of diarrhea in children under 5-year.
2. Ho= there is no significant association between the demographic variables and on level of knowledge regarding management of diarrhea in under 5- year children.

Operational Definitions

Knowledge

Knowledge refers to the ability of family members to understand the serious risks of diarrhea and its management in children under five years of age.

Diarrhea
Diarrhea is defined as the passage of loose, watery stools three or more times a day. It can be classified as acute, persistent, or chronic.

Acute diarrhea
The loose, watery stool which lasts for 1-3 days is known as acute diarrhea.

Chronic diarrhea
The loose/watery stool which lasts for 4 or more weeks is called chronic diarrhea.

Under five children mortality rate
The under-five mortality rate refers to the probability a newborn would die before reaching exactly 5 years of age, expressed per 1,000 live births.

ORS Therapy (ORT)
Oral Rehydration Therapy (ORT) is a form of fluid replacement therapy used to prevent or treat dehydration, particularly resulting from diarrhea.

Rota Virus Vaccine
A vaccine which prevents diseases caused by Rotavirus, which usually causes severe watery stool and diarrhea in babies and children.

Assumptions
Family members have insufficient level of knowledge about the management of diarrhea of under 5-year children.

Limitations
1. The sample size is limited to 60 participants.
2. Excluding newly married couples.
3. We include only family members with children under 5 years of age.

Projected Outcomes
1. It will shed light on family members' awareness of management of diarrhea under 5-year children through the information booklet.
2. It will create awareness and improve the management of diarrhea under 5-year children by the help of information booklet key attached in research project.

Conceptual Framework
A conceptual framework is characterized by a collection of linked ideas or abstractions that are logically arranged according to a shared topic. Without relying on a single pre-existing theory, the conceptual framework offers logically formed concepts to give a general explanation of the link between the concepts of the research inquiry.

A Systematic representation of conceptual framework provides:
1. A theoretical framework for the problem-solving process that is grounded in science and places special focus on the ideas' arrangement, choice, and definition.
2. Clinical practice research and instruction are conducted within a specific framework.
3. A guide for conducting study to address pertinent issues regarding the phenomena and offer solutions for real-world issues.

The aim of the study is to assess the knowledge of family members regarding the management of diarrhea under 5-year children.

The concept framework for this study is based on the system theory model.
It has 3 components:

1. Input
2. Throughput
3. Output

Input:
Assessment of knowledge of family members regarding the management of diarrhea among under 5-year children. Demographic variables of the study are Age, Gender, Education, Occupation, Duration of marriage, Numbers of children, Type of family, Monthly Income, Primary care giver of child.

Throughput: it includes interpretation (MCQs) related to knowledge regarding the management of diarrhea.

Output: it refers to the outcome of the study, such as adequate awareness > 76% to 100%, moderate awareness > 51% to 75%, inadequate awareness < 50%.

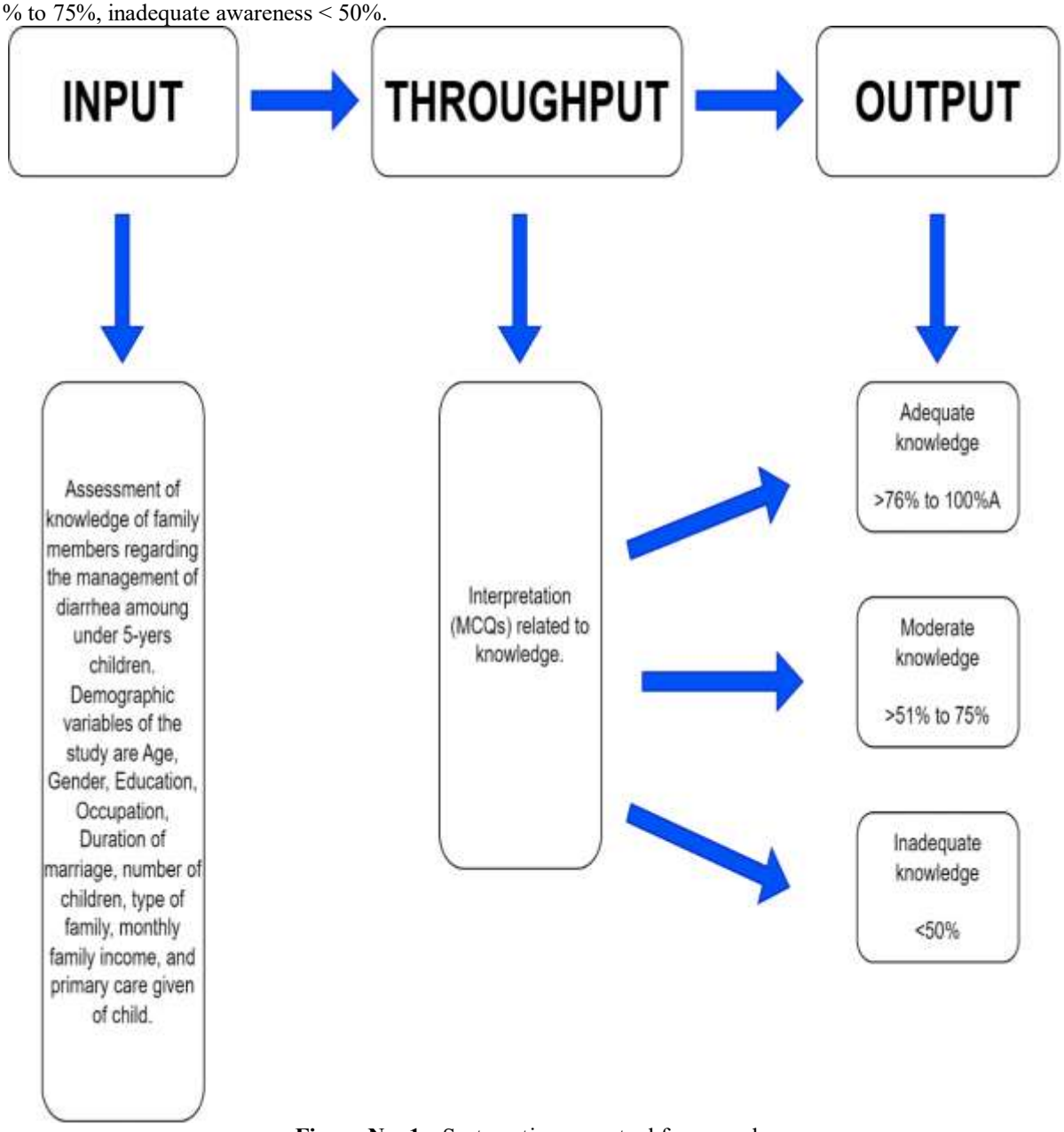

Figure No. 1:- Systematic conceptual framework.

Review of Literature

A literature review is a thorough and critical examination of previous academic publications, research papers, and pertinent literature on a relevant topic or subject. In order to produce a summary of the state of knowledge as of the chosen issue, it entails methodically obtaining, assessing, and synthesizing published data and scholarly sources.

Wambui Leah and Wanjiru Mary (2024):

A cross-sectional descriptive study was carried out to examine the relationship between caregivers' individual factors and the home management of diarrhea in children under five years of age in Ngandu location, Nyeri County. The sample size of 345 respondents was determined using Cochran's Sample Size Formula. Purposive sampling was used to select participants for the study. Data were collected using a researcher-administered, semi-structured questionnaire. Descriptive statistics and chi-square tests were applied for data analysis.Results: The findings revealed that slightly more than half of the respondents, 52.2% (n=180), had low knowledge regarding the management of diarrhea. A significant association was found between the respondents' level of education and their knowledge of home management of diarrhea ($\chi^2 = 4.044$, df = 1, $p < 0.044$). Cross-tabulation further showed that 60.2% of those with a lower level of education also had low knowledge.The study concluded that the overall level of knowledge on home management of diarrhea among caregivers of children under five was low. Furthermore, education level emerged as a significant predictor of knowledge, with low education being associated with low knowledge.

Adedokun T. Sulaimon and Yaya Sanni (2024):

A study was conducted to assess the prevalence of oral rehydration solutions used and its determinants in the treatment of diarrhea among under- fiver children in sub-Saharan Africa. Demographic and Health Surveys (DHS) data sets of 31 countries in sub-Saharan Africa were used in this study. The data involved 30,102 under-five children with diarrhea. The multivariable analysis involved binary logistic regression. Results Prevalence of ORS use was 38% in sub-Saharan Africa with countries such as Namibia (71.8%), Zambia (66.4%) and Malawi (63.8%) having the highest rates. Use of ORS was most common among children whose mothers had secondary or higher education (45%), were exposed to media (41%) and attended antenatal care (41%). This study revealed that 38% prevalence of ORS use during diarrhea episodes in sub-Saharan Africa. This is low as it is less than 44% recorded for developing countries. While this study emphasizes the need for further study on the effects of severity of diarrhea on ORS use and factors determining differences in ORS use among countries, it also calls for interventions that will increase use of ORS in sub-Saharan Africa.

Ali Bahir Maimuna (2024):

A cross-sectional study was conducted to identify the prevalence of diarrhea and its associated risk factors among children aged under five years presenting at Hoima Regional Referral Hospital in Uganda. Data was collected from 241 mother-child pairs using a pretested semi structured questionnaire. The prevalence of diarrhea among under 5 years old in this study was 12.4%. The risk of diarrhea was increased in non-working mothers (OR=8.571; CI=2.889 25.426; p<0.001), child's age between 6 and 24 months (OR=9.098; CI= 3.282-25.220; p<0.001) and unprotected water sources (OR=12.100; CI=3.559-41.133; p<0.001). Christian religion (OR=0.263; CI=0.090-0.768; p=0.015) and not using bottle feeding (OR=0.229; CI=0.104-0.507; p<0.001) showed a reduced risk of diarrhea. They showed a high prevalence of diarrhea among children under five years of age. The long-term solution for decreasing morbidity from diarrhea may include the delivery of improved sanitation and hygiene through efficient health educational programs that concentrate on personal hygiene which lead to full sanitation.

Jagadeesh et.al, (2024):

A cross-sectional study was conducted to assess the knowledge, attitude, and practices (KAP) of mothers regarding the management of diarrhea among under-five children in a rural area of India. Proportionate sampling techniques were employed to select the participants. Data were collected using a pretested and pre-designed structured questionnaire. A total of 382 mothers participated in the study, with a mean age of 25.72 ± 3.98 years.The overall knowledge assessment revealed that 74.6% of the mothers had an average level of knowledge about diarrheal management. A majority (62.6%) demonstrated a positive attitude towards managing diarrhea. In terms of practice, nearly half of the participants (50.3%) exhibited good practices related to diarrhea management.The study concluded that while most mothers had average knowledge and a positive attitude toward managing diarrhea in under-five children, only about half demonstrated good practical application of that knowledge.

Wichita M. and Gathogo L. (2024):
A cross-sectional study was conducted to evaluate the practice of home management of diarrhea among caregivers of children below five years in Ngandu location in Nyeri Country. This study determines the practice of home management of diarrhea among caregivers of children below five years. They used Cochran's Sample Size Formula to calculate a sample size of 345 respondents. Purposive sampling was used to recruit respondents in the study. They found that 67.1% (n=231) of the respondents had poor practices regarding home management of diarrhea. Only 25.8% (n=89) of the respondents indicated that they boiled water while only 15.7% (n=54) indicated they were washing hands. The researcher observed that slightly above half 57.4% (n=198) did not breastfeed their child during diarrhoea. The vast majority 78.7% (n=199) indicated that they did not prepare the ORS themselves. ORS was prepared incorrectly in 67.1% (n=231) of the respondents. They concluded that the study has poor practice of home management of diarrhea among caregivers of children below five years with diarrhea.

Momoh E. Faith et.al, (2022):
A descriptive cross-sectional study was conducted to assess mothers' knowledge, attitude, and practice regarding the prevention and home management of diarrheal diseases among children under five years old in Lagos, Nigeria. The study was carried out in communities within the Kosofe Local Government Area of Lagos State. A multistage sampling technique was employed, using a descriptive cross-sectional study design.. A total of 360 respondents participated in this study. The mean age of the respondents was 32.5 ± 5.5 years. About 59.2% of respondents had good knowledge, 59.2% of them had positive attitude, and 53.1% of them had good practice towards prevention and home management of diarrhoea. Age ($p = 0.007$), occupation ($p = 0.008$) and level of education ($p = 0.001$) were significantly associated with practice of home management of diarrhoea among children under five years old. They concluded that the Educated, employed, and married mothers were more likely to have good prevention and home management practices towards diarrhoea in their children under five years old.

Azwinndini Ndou et.al, (2021):
A Descriptive Cross-Sectional study was conducted for the Assessment of Caregivers' Knowledge and Practices Regarding the Prevention and Management of Diarrhea among Children under the Age of Five in Thulamela B Clinics, South Africa. They conducted study to assess the knowledge and practices of caregivers regarding prevention and management of diarrhea among children under the age of five in the Thulamela Municipality of South Africa. A questionnaire was adopted to collect data from caregivers at thirty primary health-care facilities using convenient sampling. Most of the respondents have fair knowledge about diarrhea, oral rehydration therapy/salt sugar solution and its usage during diarrheal episodes. However, most of them (81.7%) do not use the salt sugar solution when their children have diarrhea. Almost all the respondents practice hand washing hygiene for themselves and their children; 97.2% do not reheat cooked food before feeding their children; 95.5% do not drink untreated water as their source of drinking water is the municipal supply. The practices of these respondents do not reflect their knowledge in terms of the use of oral rehydration solution/salt and sugar solution.

Narahai Bapanpally et.al, (2021):
A cross-sectional study was conducted to assess the Knowledge, Attitude, and Practice of Mothers of Under-Five Children Regarding Diarrheal Illness, Hyderabad. The study was a hospital-based cross-sectional study conducted at Niloufer Hospital attached to Osmania Medical College, Hyderabad, Telangana. In this study, out of 100 mothers, 43% of mothers were in the age group of 21–25 years and 32% of them were in the age group of 26–30 years. All of them were literate. Majority of mothers (37%) belonged to Class III socioeconomic status and 30% belonged to Class IV socioeconomic status. Mothers who belonged to the then 25 years of age group were 52%, 54% of mothers who had college education, and 58% of mothers who belonged to higher socioeconomic status had good knowledge. 82% of mothers who had serious attitude toward diarrheal illness were 82%. Mothers who had serious attitude toward Management measures diarrheal illness were 52%. They concluded that the mother's education, in particular health education should be used as an effective tool to promote knowledge and good practice regarding diarrheal illness in children under 5 years of age.

Gohiya Poorva et.al, (2020):
A cross-sectional study was conducted to identify knowledge, attitude and practices prevalent amongst the caregivers of children below five years presenting with acute diarrhoea in a tertiary care center in Madhya Pradesh. They conducted study in a tertiary center amongst all 356 children between age group 2 months to 60 months admitted with acute watery diarrhea. A pre-tested questionnaire and face-to-face interviews with mothers was used as a data collection tool. Most of the mothers 282 (79.2%) were 20-30-year-old, 51.4% were illiterate, 57.3% were

unemployed and 27.2% were daily wage laborers. 44.6% of people came from rural backgrounds and 78.9% belonged to the lower socio-economic strata. 30.3% were exclusively breastfed and 69.7% were on top feed. Animal milk was taken, 46.6% had dilution and 50.6% used bottles for feeding. 70.5% of mothers washed their hands at the time of feeding their child, 93.8% mother covered food in their houses while only 26.7% of mothers gave freshly cooked food. Mother's outlook on various aspects of diarrhea was sought. Very few mothers considered poor sanitation (2.5%) and contaminated water (12.6%) as a source of diarrhea. Only 8.7% mothers knew about the role of ORS in diarrhea and maximum (53.4%) considered that diarrhea could not be avoided by any measure. They concluded that the mother's knowledge regarding causes, management and prevention of diarrhea needs to be upgraded to allow better utilization of health resources by the families.

Behura Chandra Subas et.al, (2019):
A community based cross-sectional study was conducted to assessed mothers' knowledge and practice regarding prevention and management of Diarrhea among children in Odisha, India. Multi-stage sampling techniques were employed to select the study areas and study units. Among five kebeles, two kebeles were selected by simple random sampling techniques. Pre-test was done in none sampling kebeles. A total of 846 participants were included in the study. Of these, the response rate was 830(98.1%). Five hundred twenty-eight 528(63.6%) of them had good knowledge and 381(45.9%) of them had good practice. Their findings indicated that 63.6% of mothers had good knowledge of Diarrhea management while 54.1% of mothers had poor practice on Diarrhea management.

Kashavva B Andanigouda et.al, (2018):
A Community based cross sectional study was conducted, Assessment of Awareness and Practices in Management of Childhood Diarrhoea among Caregivers of Under Five Children in Urban Field Practice Area of KIMS, Hubballi. They conducted this study among 203 caregivers of under five children residing in urban field practice area of KIMS, Hubballi, during June-July 2018. Study participants were selected by convenient sampling. The prevalence of diarrhoea in under five was 21.8% in preceding two weeks. 78.8% of the caregivers were aware of ORS. 73% of caregivers used ORS and 6.41% used Zinc in the treatment of diarrhoea in their children. Awareness about sanitation and hygiene was not satisfactory in this current study. They concluded that the proper use of ORS and Zinc therapy can reduce the burden of diarrhoea. Awareness regarding safe drinking water, excrete disposal and personal hygiene needs to be improved to reduce diarrhoeal diseases.

Gollar Hanumantagouda Laxmipati, K. Shreedhara Avabratha (2018):
A crosssectional study was conducted in a Medical College Hospital, Mangaluru. A total of 100 mothers were selected randomly. Majority (40%) of them were in the age group of 21–25 years. All of them were literate with 47% mothers completed highschool education. Majority (40%) of mothers belonged to Class III socioeconomic status. Most of the mothers (84%) had good knowledge regarding signs and symptoms, spread, and prevention. Majority of mothers (77%) had a serious attitude toward diarrheal illness. Most of the mothers (76%) practiced good dietary and preventive measures during diarrheal episodes. Rotavirus vaccine was given by 35% mothers to their kids. A strong association is found between age group, educational status, and socioeconomic status and knowledge, attitude, and practices regarding diarrheal illness ($P \leq 0.0001$). They concluded that maternal education, in particular health education, should be used as an effective tool to promote knowledge and good practice regarding diarrheal illness in children under 5 years of age. Inclusion of rotavirus vaccine in national immunization schedule will help in improving its coverage.

Prof. S. Rajathi et.al, (2018):
A cross-sectional study was conducted to evaluate the Knowledge on Home Care Management of Diarrhea among Mothers of Under-Five Children at Arun Multi Super Specialty Hospital, Vellore. They evaluated the knowledge of the mothers of under five children about diarrhea & its management and identify the relation of the knowledge with demographic variables. Through the non-randomized convenient sampling technique, 130 mothers who had at least one child of more than one year old were selected. Out of 130 mothers, 73% had inadequate knowledge, 19% had moderate and the remaining 9% only had adequate knowledge in home care management of diarrhea and its prevention. The chi square value depicts that, mother's age, occupation and number of the children had significant relationship with knowledge score at $P < 0.05$. Their results revealed that, majority (73%) of mothers had inadequate knowledge about management and prevention of diarrhea. Educational instructional and interventional programs must be a vital part in promoting their knowledge in order to reduce mortalities and morbidities related to diarrhea.

Padhy S. et.al (2017):
A hospital based observational study was conducted to assess the mother's knowledge, attitude and practice regarding prevention and management of diarrhoea in children in Southern Odisha. A hospital-based observational study was carried out in the Department of Pediatrics, M.K.C.G. Medical College. 47% mothers had knowledge about diarrhoea, 52% about etiology and 58% about risk factors of diarrhoea. Regarding role of breastfeeding in diarrhoea 48% mothers had good knowledge and regarding adverse effects of bottle feeding 56% mothers were aware. In this study only 34% of mothers were aware of assessment of danger signs and dehydration and 27% about treatment of dehydration. 33% of mothers had good knowledge of sanitary latrine and safe drinking water used in prevention and treatment of diarrhoea. Regarding preparation of ORS only 19% mothers had good knowledge, 65% mothers had average knowledge. They concluded that study among mothers, knowledge about diarrhoea along with the importance of breastfeeding and the adverse effects of bottle feeding is significantly lacking. Also, their knowledge about assessment, management and practices about diarrhoeal diseases among mothers was significantly less.

Rudra Das et.al, (2016):
A cross-sectional study was conducted to assess the Perception of caregivers regarding danger signs of childhood diarrhea and attitude towards its management in rural Lucknow, UP, India. To assess the knowledge of caregivers regarding childhood diarrhoea and signs of dehydration and danger signs and to assess the mothers' approach towards their home-based management and health seeking behaviour. A total of 240 households were interviewed to achieve the targeted sample size of 410 children of the less than five years age group. They showed that 74.2 per cent of caregivers recognized diarrhoea correctly i.e. increased frequency of watery stools or blood and mucus in stool or both. Decreased urination or dis-colored urine (89.6%), thirsty or eagerly drinking (55.7%), dry mouth and tongue (37.7%) etc. were recognized by caregivers as major signs of dehydration. Caregivers recognized child getting seeker/unconscious (94.9%), not able to drink or breast feed (66.7%), blood in stool (59%) etc. as danger signs developing during diarrhoea episodes of child. They concluded that the caregiver's knowledge regarding recognition of childhood diarrhoea in proper and early detection of signs of dehydration and development of danger signs at community level are keys to prevention of diarrhoea related death in less than five years age group.

Gaikwad G. Sujata et.al, (2015):
A descriptive study was conducted to assess the knowledge regarding diarrhea among the mothers of under five children in a selected area of Aurangabad city. Diarrhea is the major health problem for children under five. Worldwide, about 1.5 million children die of diarrhea, while 38% deaths occur in Asia. About 2 million episodes of diarrhea occur each year in India. 6.6 million deaths among children aged 28 days to 5 years. 30 mothers of under-five children were included by nonprobability purposive sampling technique. Their study results indicated that the majority 23(76.66%) of the mothers of under five children had moderately adequate knowledge on diarrhea, followed by 4(13.33%) mothers had adequate knowledge and 3(10%) had inadequate knowledge regarding diarrhea.

Lamberti M. Laura et.al, (2015):
A cross-sectional study was conducted to examine the relationship between episode severity and caregiver recall, care-seeking behavior, and treatment of diarrhea among children aged 2–59 months in Bihar, Gujarat, and Uttar Pradesh, India. The study found that recall error was significantly higher for episodes that began 8–14 days prior to the survey (31.2%) compared to those occurring 1–7 days before (4.8%). Logistic regression analysis indicated a trend of increased perceived severity in less recent episodes compared to more recent ones.The findings suggested that using a two-week recall period in data collection tends to underestimate the actual prevalence of diarrhea while overestimating the proportion of severe cases. A strong association was observed between care-seeking behavior and symptoms such as dehydration, fever, vomiting, and increased stool frequency and duration. Treatment with oral rehydration salts (ORS) was positively associated with the presence of dehydration, vomiting, and higher stool frequency. Similarly, therapeutic zinc supplementation was more commonly administered in cases with longer duration and more frequent stools.However, the study concluded that the care-seeking sector was a more influential determinant of treatment received than episode severity, highlighting the need to address disparities in treatment quality across different regions and healthcare delivery channels.

Research Methodology:-

Research methodology refers to the specific approaches or procedures used to identify, select, organize, and analyze data related to a particular topic. The methodology section of a research article allows readers to critically evaluate the overall validity and reliability of the study.

Research Approach
Research methodology is a systematic approach that outlines the overall strategy and specific methods used for collecting, analyzing, and interpreting data to address a research problem or hypothesis.

The present research chose to focus on a quantitative method.

Research Design
Research design refers to the framework of research methods and strategies chosen by a researcher to conduct a study. It enables scholars to effectively structure their investigations and refine methodologies that are best suited to the subject matter.

The type of research design used in this study was **descriptive**.

Research Variables
Variables are any characteristics quantity that can be measured or counted.

Dependent Variable
Awareness and knowledge regarding management of diarrhea in children under 5 years.

Demographic Variable
Age, Gender, Education, Occupation, Duration of marriage, Numbers of children, Type of family, Monthly Family Income, Primary care giver of child.

Research Setting
The research was conducted in the Uttarakhand village of Shankarpur, Shashpur, Dehradun. The feasibility and availability of the sample were taken into consideration when choosing the area.

Sampling Technique
Sampling is the process of choosing participants from the population who meet the inclusion requirements. In the current study, family members of children under five were selected using purposive sampling approaches.

Target Population
It outlines the entire scope of all the topics that the researcher is considering. Families with children under five who live in Dehradun community areas make up the study's population.

Sample And Sample Size
The total sample size for the present study consists of 60 family members of children under 5-year.

Sampling Criteria
1. **Inclusion Criteria:** All willing family members of children under five who are having age from 23-44 and above met inclusion criteria.
2. **Exclusion Criteria:** Eligible couples who met the exclusion criteria, such as who are less than 23 years old, and who refused to take part. Excluding newly married couples. Couples who are married but do not having under 5-year children.

Description Of The Tool
The tool consists of 2 sections:
1. **Section 1:** it consists of an interview schedule to assess the demographic characteristics such as Age, Gender, Education, Occupation, Duration of marriage, Numbers of children, Type of family, Monthly Family Income, Primary care giver of child.
2. **Section 2:** Multiple choice question to assess the level of knowledge of family members regarding the management of diarrhea in under 5-year children.

Criteria For Scoring
1. **Section 1:** No scoring

2. **Section 2:** The awareness questionnaire consists of 30 questions in total. Each question with the correct answer carries **one mark** and an incorrect answer carries no or **zero mark**. The total scoring for overall awareness was 30.
3. To interpret the knowledge of diarrhea management in under five-year children, the scores were converted to percentage and were classified as follows.

Level of knowledge

Adequate	>76% to 100%
Moderate	>51% to 75%
Poor	<50%

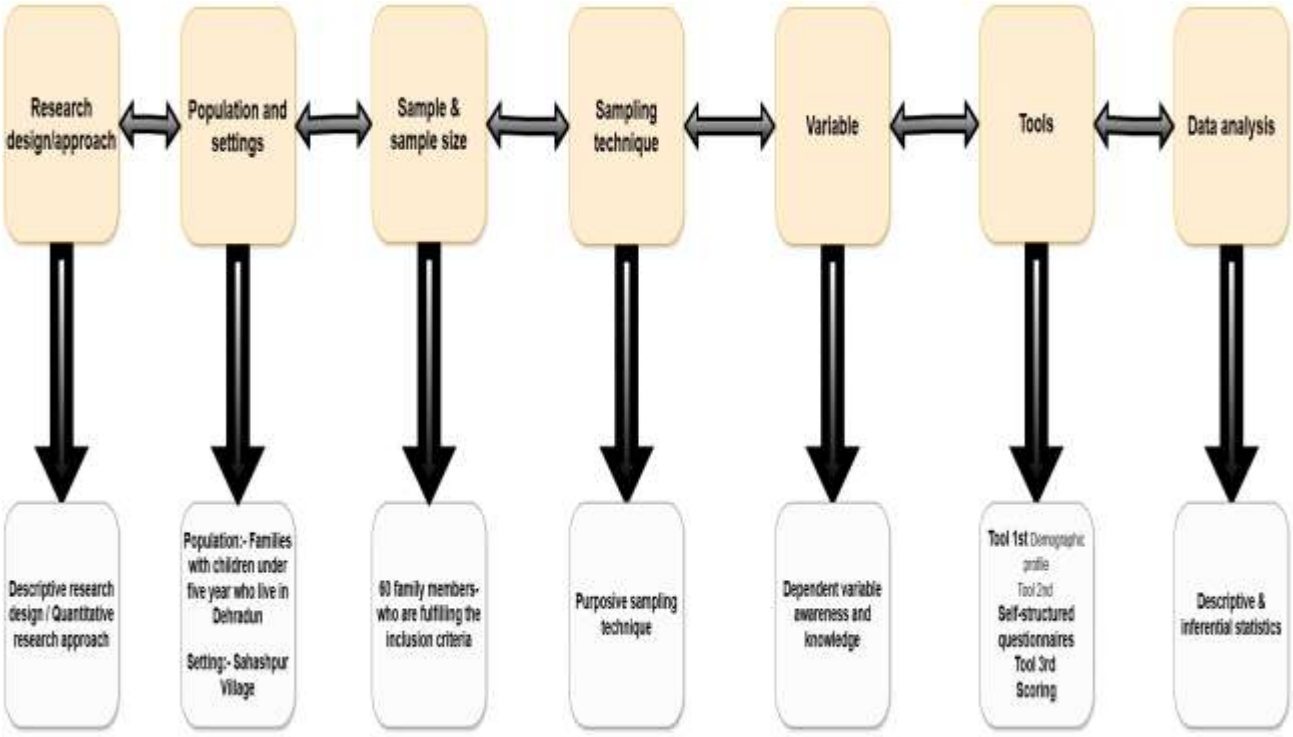

Figure No. 2:- Systematic representation of research methodology.

Data Collection Tool

In the present study, the subsequent tools were used for data collection.

Study Tool

1. **Section 1** - Self structured questionnaire to collect socio demographic data of family members of under 5-year children.
2. **Section 2** - Self structured questionnaire to assess the knowledge regarding the management of diarrhea in under five-year children.

Study Tool

1. **Section 1:** Self structured questionnaire to collect socio demographic data of family members of under 5-year children. This tool was developed to collect personal information from subjects. It includes Age, Gender, Education, Occupation, Duration of marriage, Numbers of children, Type of family, Monthly Family Income, Primary care giver of child.
2. **Section 2:** Self-structured questionnaire to assess the knowledge regarding the management of diarrhea in children under five years.

This tool was developed for Awareness or knowledge assessment of family members of under five-year children regarding management of diarrhea. It consists of 30 items.

Score Interpretation
The respondent was required to select the choice that they believed to be accurate out of the available possibilities for each item. The correct answer received a score of 1, while the incorrect response received a score of 0.

Pilot Study
A pilot study is intended to be conducted by the researcher in order to identify any significant defects or issues in the design employed, assess the viability of the study, and address any issues that need to be addressed in the preliminary work for a larger research project. It also aids in deciding on the statistical analysis plan. Pilot study research is carried out in a Shankarpur, Dehradun community area involving 10 families with children under the age of five. In terms of technique, tool, data collecting, and data analysis approach, the results of the pilot study were deemed realistic, workable, as well acceptable and the value was 7.763.

Formula Cronbach's alpha:

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\sum_{i=1}^{k} \sigma_y^2}{\sigma_x^2}\right)$$

Process Of Data Collection
Data collection was done from family members of under 5-year children, community area of Dehradun, Uttarakhand, prior permission was taken from principal, prior permission was taken from Gram Pradhan and written permission from the authority and sample was selected according to purposive sampling techniques. Explain the need of the study along with their purpose to the participants and then writing consent was obtained. Who fulfilled the inclusion criteria, socio demographic data was obtained, and self-structured awareness questionnaires were used to assess the level of knowledge. On the same day booklets were also distributed.

Data Analysis And Interpretation
The analysis and interpretation were completed in compliance with the study's established objectives. The aim of the analysis is to transform the data into a comprehensible and significant format, enabling comparisons and identification of importance. The data collection, analysis, as well as interpretation is covered in this chapter. In order to analyze the data, scores for frequency, percentage, mean, standard deviation, & chi-square were computed.

Problem Statement
A descriptive study to assess knowledge of family members regarding the management of diarrhea among children under 5-year children in the selected village of Sahashpur.

Objectives of the Study:-

1. To assess the knowledge of family members regarding the management of diarrhea in children under five-year children.
2. To find out the association between level of knowledge and selected demographic variables.

Plan Of Analysis
Analysis and interpretation of data was done according to the objectives using descriptive and inferential statistics. The level of significance chosen was at $p \leq 0.05$.

Organization Of Analyzed Data
The data analyzed was organized according to the objectives and presented under the following section:

Description Of Demographic Profile
This section describes the demographic characteristics of the sample under study. The data obtained describes the characteristics pertaining to Age, Gender, Education, Occupation, Duration of marriage, Numbers of children, Type of family, Monthly Family Income, Primary care giver of child.

Table No. 1:- Demographic profile of the subjects.

Variables	Options	Percentage (%)	Frequency (f)
Age	23-27 years	21%	13
	28-32 years	22%	14
	33-38 years	22%	14
	39-44 years and above	35%	19
Gender	Male	36%	22
	Female	64%	38
Education	Uneducated	19%	12
	Primary Education	29%	17
	Intermediate	34%	20
	Graduate	18%	11
Occupation	Unemployed	71%	43
	Self-employed	3%	2
	Govt. sector	5%	3
	Private sector	21%	12
Duration of marriage	One year	9%	5
	More than 1 year	20%	12
	More than 3 years	43%	26
	More than 5 years	28%	17
Numbers of children	1	15%	9
	2	44%	26
	3	35%	21
	4 or more	6%	4
Type of family	Nuclear	37%	22
	Joint	29%	17
	Single parent family	12%	8
	Grandparent Family	22%	13
Monthly Family Income	Below 10,000	10%	6
	10,000-20,000	25%	15
	20,000-30,000	44%	26
	30,000 and above	21%	13
Primary care giver of child	Mother	72%	43
	Father	11%	7
	Caretaker	2%	1
	Grandparents	15%	9

Table No. 1:- The findings were as follows:

Shows the frequency and percentage distribution of eligible family members, illustrate that majority of the subjects are between age 39-44 years (35%) and others between 28-32 years (22%), between 33-38 years (22%) and lowest 23-27 years (21%). In the sample of 60 subjects maximum are females (64%) while males are (36%). The show shows that subjects' education background is majorly intermediate (34%) and uneducated are (19%) and primary education (29%) while graduate is (18%). The table outlines that their occupation status is majorly unemployed (71%) and private sector (21%) and self- employed (3%) a while in government sector (5%). The shows that the subject's duration of marriage is majorly more than 3 years (43%), and more than 5 years (28%), more than 1 year (20%) while just one year is (9%). The table shoes that number of children majorly in 2 (44%), 3 children (35%), 1 child (15%) and lowest is 4 or more children (6%). The type of family is majorly nuclear (37%), joint (29%), single

parent family (12%) and grandparent family (22%). The table shows the monthly family income is majorly between 20,000-30,000 (44%), and lowest between 30,000 and above is (21%), while below 10,000 is (10%) and 10,000-20,000 is (25%). The table depicts the majority of primary care giver of child is between mother is (72%), father (11%), grandparents (15%) and lowest, father (

Figure No. 3:- The Bar Graph diagram showing the percentage distribution according to their Age.

Showing percentage distribution of age in year of eligible family member in which the majority (35%) of the subjects is between 39-44 years of age, 22% between 28-32 years, 22% between 33-38 years of age and 21% between 23-27 years of age.

Figure No. 4:- The Bar Graph diagram showing the percentage distribution according to their Gender.

Showing percentage distribution according to their gender in which majority (64%) is of females and the males are of 36%.

Figure No. 5:- The Bar Graph diagram showing the percentage distribution according to their Education.

Showing the percentage distribution according to their education background, 34% is intermediate, 29% is primary education, 19% is unemployed and 18% is graduate.

Figure No. 6:- The Bar Graph diagram showing the percentage distribution according to their Occupation.

Showing the percentage distribution according to their occupation in which majority (71%) is unemployed, 21% is private sector, 5% is govt. sector and 3% are self-employed.

Figure No. 7:- The Bar Graph diagram showing the percentage distribution according to their Duration of Marriage.

Showing percentage distribution according to their duration of marriage status in which majority (43%) if of more than 3 years, 28% is more than 5, 20% is more than 1 year and 9% is one year.

Figure No. 8:- The Bar Graph diagram showing the percentage distribution according to their Number of Children.

Showing the percentage distribution according to their number of children in which majority (44%) is of two, 35% is three, 15% is one and 6% is four or more.

Figure No. 9:- The Bar Graph diagram showing the percentage distribution according to their Type of Family.

Showing the percentage distribution according to their family type in which majority (37%) is of nuclear family, 29% is joint family, 22% is grandparent family and 12% is single parent family.

Figure No. 10:- The Bar Graph diagram showing the percentage distribution according to their Monthly family Income.

Showing the percentage distribution according to their family income in which majority (44%) is between 20,000-30,000, 25% is between 10,000-20,000, 21% is between 30,000 and above and 10% is below 10,000.

Figure No. 11:- The Bar Graph diagram showing the percentage distribution according to the primary caregiver.

Showing the percentage distribution according to their primary care giver of child in which majority (72%) is mother, 15% is grandparents, 11% is father and 2% is caregiver.

Main analysis and interpretation of data

Table No. 2:- Frequency and percentage distribution of level of knowledge.

CRITERIA MEASURE OF KNOWLEDGE SCORE		
LEVEL OF SCORE	**PERCENTAGE**	**FREQUENCY**
ADEQUATE KNOWLEDGW (21-30)	**63.33%**	**38**
MODERATE KNOWLEDGE (11-20)	**23.33%**	**14**
INADEQUATE KNOWLEDGE (0-10)	**13.33%**	**8**

Maximum= 30
Minimum= 0

Adequate Knowledge (21-30):
1. **Percentage:** 63.33%
2. **Frequency:** 38 individuals
3. Individuals in this category demonstrate a high level of knowledge, scoring between 21-30.

Moderate knowledge (11-20):
1. **Percentage:** 23.33%
2. **Frequency:** 14 individuals
3. Individuals in this category demonstrate a moderate level of knowledge, scoring between 11-20.

Inadequate Knowledge (0-10):
1. **Percentage:** 13.33%
2. **Frequency:** 8 individuals
3. Individuals in this category demonstrate a inadequate level of knowledge, scoring between 0-10.

These criteria provide a clear breakdown of the distribution of knowledge levels within the surveyed population. The majority pf individuals have adequate knowledge, while a smaller percentage demonstrates either moderate or low level of knowledge. This breakdown can guide further analysis and interpretations to address specific knowledge gaps among different segments of the population.

Figure No. 12:- Bar graph showing percentage distribution level of knowledge.
Showing the percentage of level of knowledge in which majority (63.33%) is of adequate knowledge, 23.33% is moderate knowledge and 13.33% is inadequate knowledge.

Table No.3:- Descriptive statistics of Knowledge. N= 60

Descriptive Statistics	Mean	Median	S.D.	Maximum	Minimum	Range	Mean %
Knowledge Score	15.32	15.5	3.21	24	07	17	63.83%

Table No.3 represents the descriptive statistics of knowledge, it was found that the mean value is 15.32, median score is 15.5, maximum value is 24, minimum score is 07. Range of score is 17 and mean percentage is 63.83%.
1. **Mean:** The average knowledge is 15.32, indicating the typical score of the surveyed individuals.
2. **Median:** The median score is 15.5, suggesting that the distribution of knowledge is balanced.
3. **Standard Deviation (S.D.):** The standard deviation is 3.21. reflecting the degree of variability or dispersion in knowledge scores.
4. **Maximum:** The highest knowledge score in the dataset is 24.
5. **Minimum:** The lowest knowledge score recorded is 07.
6. **Range:** The range, which is the difference between the maximum and minimum score is 17.
7. **Mean Percentage:** The mean percentage score is 63.83, providing a sense of the average percentage of correct answers.

These statistics collectively offer a summary of the distribution, central tendency, and variability of knowledge scores among the surveyed population. The mean and median scores give a sense of the average knowledge level, while the standard deviation and range provide insights into the dispersion of scores. The maximum and minimum values indicate the range of knowledge levels observed in the dataset.

Table No.4:- Table showing Association of Scores and Demographic Variables.

DEMOGRAPHIC DATA		LEVELS OF KNOWLEDGE (N=110)			ASSOCIATION WITH KNOWLEDGE SCORE				
Variables	Opts	ADEQUATE KNOWLEDGE	MODERATE KNOWLEDGE	INADEQUATE KNOWLEDGE	Chi Test	P Value	df	Table Value	Result
Age	23-27 years	4	5	4	9.280651	0.158399	6	12.591587	Not Significant
	28-32 years	6	4	4					
	33-38 years	9	4	1					
	39-44 years	10	6	3					
Gender	Male	11	5	6	0.877183	0.644941	2	5.991465	Not Significant
	Female	16	13	9					
Education	Uneducated	7	4	1	1.553135	0.955887	6	12.591587	Not Significant
	Primary Education	9	6	2					
	Intermediate	13	5	2					
	Graduate	5	5	1					
Occupation	Unemployed	5	3	4	3.452831	0.750234	6	12.591587	Not Significant
	Self-employed	8	5	4					
	Govt. sector	12	6	2					
	Private sector	4	4	3					
Duration of marriage	One year	2	2	1	1.984207	0.921145	6	12.591587	Not Significant
	More than 1 year	6	3	3					

The Chi-square test indicates no significant association between the level of knowledge and below mentioned demographic variables:

1. **Age:** The p-value (0.158399) is greater than the significance level (0.05), suggesting that age does not significantly impact knowledge levels.
2. **Gender:** The p-value (0.644941) is greater than the significance level (0.05), suggesting that gender does not significantly impact knowledge levels.
3. **Education:** The p-value (0.955887) is greater than the significance level (0.05), suggesting that education does not significantly impact knowledge levels.
4. **Occupation:** The p-value (0.750234) is greater than the significance level (0.05), suggesting that occupation does not significantly impact knowledge levels.
5. **Duration of Marriage:** The p-value (0.921145) is greater than the significance level (0.05), suggesting that duration of marriage does not significantly impact knowledge levels.
6. **Number of children couple have:** The p-value (0.96118) is greater than the significance level (0.05), suggesting that number of children couple have does not significantly impact knowledge levels.
7. **Family type:** The p-value (0.546876) is greater than the significance level (0.05), suggesting that family type does not significantly impact knowledge levels.
8. **Family Income:** The p-value (0.834191) is greater than the significance level (0.05), suggesting that family income does not significantly impact knowledge levels.
9. **Primary caregiver:** The p-value (0.778498) is greater than the significance level (0.05), suggesting that primary caregiver does not significantly impact knowledge levels.

In summary, most demographic variable does not show a significant association with knowledge levels.

Table No. 5:- Table showing Descriptive state of Demographic variables.

VARIABLES	OPTIONS	MEAN%	MEAN	SD	N
AGE	23-27 years	44.29%	10.63	1.8	13
	28-32 years	44.83%	10.76	1.9	14
	33-38 years	44.58%	10.7	1.7	14
	39-44 years	44.17%	10.6	1.6	19
GENDER	Male	43.75%	10.5	1.7	22
	Female	44.83%	10.76	1.9	38
EDUCATION	Uneducated	44.71%	10.73	1.9	12
	Primary Education	45.00%	10.8	2.1	17
	Intermediate	45.00%	10.8	2.0	20
	Graduate	44.58%	10.7	1.6	11
OCCUPATION	Unemployed	44.46%	10.67	2.0	43
	Self employed	44.71%	10.73	2.2	2
	Govt. sector	45.00%	10.8	1.8	3
	Private sector	44.58%	10.7	2.0	12
DURATION OF MARRIAGE	One year	44.17%	10.6	1.5	5
	More than 1 year	44.58%	10.7	1.8	12
	More than 3 years	44.17%	10.6	2.0	26
	More than 5 years	45.00%	10.8	1.7	17
NUMBER OF CHILDREN COUPLE HAVE	1	44.83%	10.76	1.9	9
	2	45.00%	10.8	1.7	26
	3	44.46%	10.67	2.0	21
	4 or more	44.17%	10.6	1.8	4
FAMILY TYPE	Nuclear	44.50%	10.86	1.8	22
	Joint	44.88%	10.77	1.9	17
	Single parent family	44.83%	10.76	2.1	8
	Grandparent family	45.00%	10.08	1.7	13
FAMILY INCOME	Below 10,000	44.58%	10.7	1.9	6
	10,000-20,000	44.92%	10.78	2.0	15
	20,000-30,000	44.46%	10.67	2.2	26
	30,000 and above	45.00%	10.8	1.8	13
PRIMARY CAREGIVER	Mother	44.50%	10.86	2.2	43
	Father	44.88%	10.77	2.0	7

	Caretaker	45.00%	10.68	1.9	1
	Grandparents	44.50%	10.68	1.8	9

1. **Age:** Highest mean value has been observed in the age group of 28-32 years (10.76).
2. **Gender:** Females have a slightly higher mean (10.76) compared to males (10.5) in the dataset.
3. **Education:** Primary education and intermediate tend to have higher mean value compared to those with lower educational backgrounds.
4. **Occupation:** Individuals in the government sector have the highest mean value (10.8) compared to other occupational categories.
5. **Duration of Marriage:** More than 5 years of marriage shows the highest mean value (10.8) compared to other durations of marriage.
6. **The number of children couples have:** Those who have 2 children have the highest mean value (10.8) compared to those with one or more children.
7. **Family Type:** Those who have nuclear families have the highest mean value (10.86) compared to joint families and other types of families.
8. **Family Income:** Higher income brackets tend to have higher means, with the highest mean in the "30,000 and above" category.
9. **Primary caregiver:** Mother shows the highest mean value (10.86) compared to other primary care givers.
   In summary, the data suggests that certain demographic factors such as age, gender, education, occupation, duration of marriage, the number of children couples have, family type, family income and primary caregiver are associated with variation in mean values across different categories.

Summary

The focus of the study is to assess the knowledge of family members regarding the management of diarrhea among children under 5 years.

Objectives:-

1. To assess the knowledge of family members regarding the management of diarrhea in under five-year children.
2. To find out the association between level of knowledge and selected demographic variables.

Assumption

1. Family members have insufficient level of knowledge about the management of diarrhea of under 5-year children.
2. Family members are aware of the management of diarrhea of under 5-year children.

Limitations

1. The sample size is limited to 60 participants.
2. Excluding newly married couples.
3. We include only family members with children under 5 years of age

Major Findings of the Study:-

1. 35% of the individuals were within the age group of between 39-44 years of age, 22% individuals belonged to the age group between 28-32 years, 22% between 33-38 years of age and 21% individuals belonged to the age group between 23-27 years of age.
2. 64% individuals were females, and the males are of 36%.
3. 34% of individuals were intermediate, 29% individuals were primary education, 19% individuals were unemployed and 18% were graduated.
4. 71% of individuals were unemployed, 21% of individuals were working in the private sector, 5% of individuals were working in the government sector and 3% were self-employed.
5. 43% of individuals were married for more than 3 years, 28% of individuals were married for more than 5, 20% is more than 1 year and 9% is one year.
6. number of children in which majority (44%) is of two, 35% is three, 15% is one and 6% is four or more.
7. 37% of individuals have nuclear families, 29% of individuals have joint families, 22% of individuals have grandparent family and 12% of individuals have single parent families.

8. 44% of individuals' family income was between 20,000-30,000, 25% of individuals family income were between 10,000-20,000, 21% of individuals family income were between 30,000 and above and 10% of individuals family income were below 10,000.
9. 72% of individuals primary caregivers were mothers, 15% of individuals primary caregivers were grandparents, 11% of individuals primary caregivers were fathers and 2% of individuals primary caregivers were caregivers.
10. 63.33% of family members had adequate knowledge regarding the management of diarrhea under 5-year children.
11. 23.33% of family members had moderate knowledge regarding the management of diarrhea under 5-year children.
12. 13.33% of family members had inadequate knowledge regarding the management of diarrhea under 5-year children.

Implimentation

The tools of the study can be used as feedback to assess the level of knowledge of family members regarding management of diarrhea under 5-year children.

The research can be used as feedback and furthermore research into a large number of populations and in various different areas.

Nursing Administration

The community health nurse administrator should collaborate with governing bodies, creating an affiliation with non-government organizations to provide knowledge regarding management of diarrhea under 5 years children. Nursing administrator along with governing bodies to formulate programmes to focus on providing adequate knowledge and information regarding management of diarrhea under 5-year children. The nursing administrator should take the initiative in arranging knowledge programmes.

Nursing Practice

The community health nurse plays a vital role in educating and motivating individuals, family members and community members for management of diarrhea under 5-year children. To improve the health status of rural community who were unattended and unnoticed, to improve their health status and to change the knowledge regarding the management of diarrhea under 5- year children. Community health nurses can conduct awareness programmes to improve their knowledge regarding management of diarrhea under 5- year children.

Nursing Education

The community health nurse as an educator encompasses the major study findings in Nursing curriculum at all levels to properly prepare the students to address the inadequate knowledge related to health outcomes. Since there are more people in India, health professionals like Multipurpose Health Workers and Auxiliary Nurse Midwives should continue to be taught how to treat diarrhea in children under five. These results will assist the nursing faculty in prioritizing the treatment of diarrhea in children under five.

Nursing Research

Nurse practitioners, student nurses, and community health nurses can all benefit from the study's findings, which can be shared online, in journals, and in other formats. The results of the research will assist nursing students and professional nurses in learning how to trat diarrhea in children under 5 years of age.

Recommendationa for the Future Study:-

The study's findings have led to the following suggestions. The study can be repeated with more samples to produce results about the treatment of diarrhea in children under the age of five. The results of the investigation have shed new light on the implications for the future. Nursing education, nursing administration, nursing practice, nursing research, and other areas are all influenced.

Conclusion:-

The study concluded that the majority of the family members had accurate knowledge regarding the management of diarrhea under 5-year children. 63.33% of the family members had adequate knowledge, 23.33% of family members

had moderate knowledge and 13.3% of family members had inadequate knowledge regarding the management of diarrhea under 5-year children.

There is no significant association between the score level and demographic variables. The majority of the family members had accurate knowledge (63.33%) and (23.33%) had moderate knowledge while 13.33% had inaccurate knowledge. It is the responsibility of the community health nurse to motivate, educate and give information for management of diarrhea under 5- year children. Therefore, the researcher fulfilled this role by imparting knowledge through group teaching, giving booklets and pamphlets.

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Annexure

Section: 1 Demographic Information

- Age?
  a. 23-27 b. 28-32 c. 33-38 d. 39-44 and above
- Gender?
  a. Male b. Female
- Education?
  a. Uneducated b. Primary-Education c. Intermediate d. Postgraduate
- Occupation?
  a. Unemployed b. Self-employed c. Government sector d. Private sector
- Duration of marriage?
  a. One year b. More than 1 year
  c. More than 3 years d. More than 5 years
- The number of children couple have.
  a. Nil b. 1 c. 2 d.3ormore
- Family Type?
  a. small b. nuclear c. Joint d. Single parent family
- Family income?
  a. Below 10,000 b. 10,000-20,000 c. 20,000-30,000 d. 30000 & above
- Primary care giver of child?
  a. Mother b. Father c. Caretaker d. Grandparents

Section: 1 Knowledge Assessing on diarrhea

- What is diarrhea?
  - Diarrhea is the passage of 3 or more loose watery stools in a day.
  - Diarrhea is the passage of 2 or more watery stools in a day.
  - Diarrhea is the passage of more than 1 water stool in a day.
  - Diarrhea is simply the passage of watery stools.
- What is the main cause of diarrhea in children?
  - Contaminated food or water
  - Viral infection
  - Intolerance to milk
  - Food poising
- Out of the following options mentioned below what is the common reason for diarrhea that is not caused by bacteria/germs?

- Eating too many sweets
- Eating too much Salty food
- Food allergies
- Eating too much savory and spicy food

- What is the most common source of germs that can lead to diarrhea in children?
  - Contaminated food and water
  - Sleeping on dirty bed sheets
  - Playing with dirty toys and items.
  - Wearing the same clothes for more than a day
- What is the common feature of diarrhea?
  - Loose & watery stools
  - Frequent bowel movements
  - Abdominal pain
  - All of the above
- Which symptom other than frequent loose stools is present in a child during an episode of diarrhea out of the following?
  - Nausea and watery eyes
  - Bloating, rashes, cough
  - Nausea, Abdominal pain, dehydration
  - Fever and frequent urination
- What is the common sign of dehydration due to diarrhea?
  - Dry mouth and decreased urine output
  - High fever
  - Bright red eyes
  - Swollen legs
- Which symptom of diarrhea makes children feel tired and weak?
  - Excessive fluid loss
  - Increased sleep
  - Nausea and vomiting
  - Abdominal pain
- Which symptom suggests the presence of infection along with diarrhea?
  - Mild stomach discomfort
  - Mood changes
  - Clear urine
  - Fever
- The most common complication seen in diarrhea among children is_____.
  - Insomnia
  - Dehydration
  - Weight loss
  - Infection
- Q11. The child experiencing diarrhea should be taken to a doctor when/if _____.
  - Child refuses to eat
  - The number of stools in a day is more than 3.
  - Blood is present in stool
  - Child start to have mild stomach pain
- Vaccine given for prevention of diarrhea is _____.
  - Rota Virus Vaccine
  - BCG
  - MMR
  - OPV

- Name the supplement distributed by the government to prevent diarrhea?
  - Vitamin supplements

- Iron supplements
- Calcium supplements
- Zinc supplements

- Which of following measures are important in preventing diarrhea?
  - Keeping the anal-rectal area clean
  - Frequent hand washing
  - Taking plenty of fluids
  - All of the above
- What practice is important for preventing the spread of diarrhea in the child's surrounding?
  - Ensuring proper hygiene and cleanliness
  - Allowing the child to share snacks
  - Limiting the bathroom breaks
  - By reducing the playing hours
- What is the primary goal of managing diarrhea at home?
  - To stop diarrhea immediately
  - To treat the main cause of diarrhea
  - To reduce stool frequency
  - To prevent dehydration
- What is the most effective way of preventing diarrhea in infants and young children?
  - Routine use of antibiotics
  - Exclusive breastfeeding for first 6 months
  - Giving supplementary multi-vitamins
  - Early introduction of solid food
- Which form of rice is given to a child who has diarrhea?
  - Fried rice
  - Boiled white rice
  - Brown rich
  - Basmati rice

- What is the correct proportion of water and electrolyte powder for preparing ORS at home?
  - 1L water to 1 packet of powder
  - 1L water to 1 ½ packet powder
  - 1L water to 2 packets of powder
  - D) 1L water to 2 ½ packet powder
- How does ORS help in preventing diarrhea?
  - By reducing the passage of stool
  - By treating the underlying cause of diarrhea
  - By replacing the fluid and electrolyte
  - By preventing bowel movements
- How much ORS (in ml) should be given to a child above 2 years after each loose stool?
  - 50-100 ml
  - 100-200 ml
  - 200-250 ml
  - 500ml
- How many doses of rotavirus vaccine are administered to a child?
  - 2 Doses
  - 3 Doses
  - 1Doses
  - 4 Doses
- How many weeks old is a child when he/she receives his/her last dose of rotavirus vaccine?
  - 12 weeks
  - 14 weeks
  - 18 weeks

- 20 weeks
- What is the most effective method for administering ORS to infant with diarrhea at home?
  - Using a spoon
  - Using a bottle
  - Using a dropper
  - Using a syringe
- After how many hours ORS is discarded if stored in refrigerator?
  - A)10 hours
  - B)15 hours
  - C)48 hours
  - D)24 hours
- What are the methods of keeping water safe in order to prevent diarrhea?
  - Boiling
  - Filtering
  - Adding chlorine
  - All of the above
- Recommended home remedy for soothing effect on digestive system during diarrhea among children?
  - Green tea
  - Chamomile tea
  - Lemon tea
  - Black tea
- What should be avoided as a part of home remedy for diarrhea management?
  - Drinking plenty of water
  - Eating high fiber food like raw vegetables
  - Adequate resting
  - Keeping the anal-rectal area clean
- Which fruit is advice to eat to treat diarrhea?
  - Mangoes
  - Oranges
  - Bananas
  - Pear
- What type of diet is usually given to a child experiencing diarrhea?
  - Bland easy-to-digest diet
  - Only liquid diet until diarrhea stops
  - Protein rich diet
  - Vitamin and mineral rich diet

Answer Keys

- **A**
- **B**
- **C**
- **A**
- **D**
- **C**
- **A**
- **A**
- **D**
- **B**
- **C**
- **A**
- **D**
- **D**
- **A**

- **C**
- **B**
- **B**
- **A**
- **C**
- **B**
- **B**
- **B**
- **A**
- **D**
- **D**
- **B**
- **B**
- **C**
- **A**

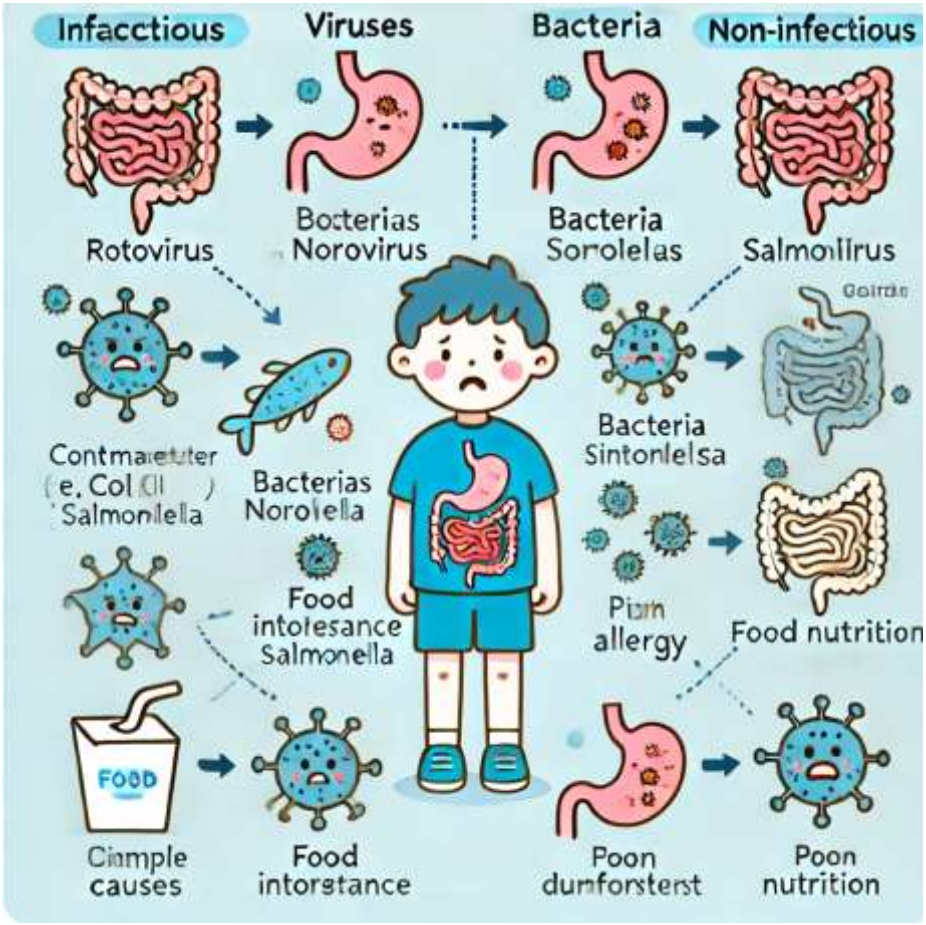
- **INFORMATION BOOKLET ON MANAGEMRNT OF DIARRHEA UNDER 5 YEAR CHILDREN.**

What is DIARRHEA?

Diarrhea is a leading cause of malnutrition in children under 5 years old. Diarrhea disease is the third leading cause of death in children under 5 years old and is responsible for death.

Diarrhea in children under 5 years old is defined as the passage of three or more loose or liquid stools per day.

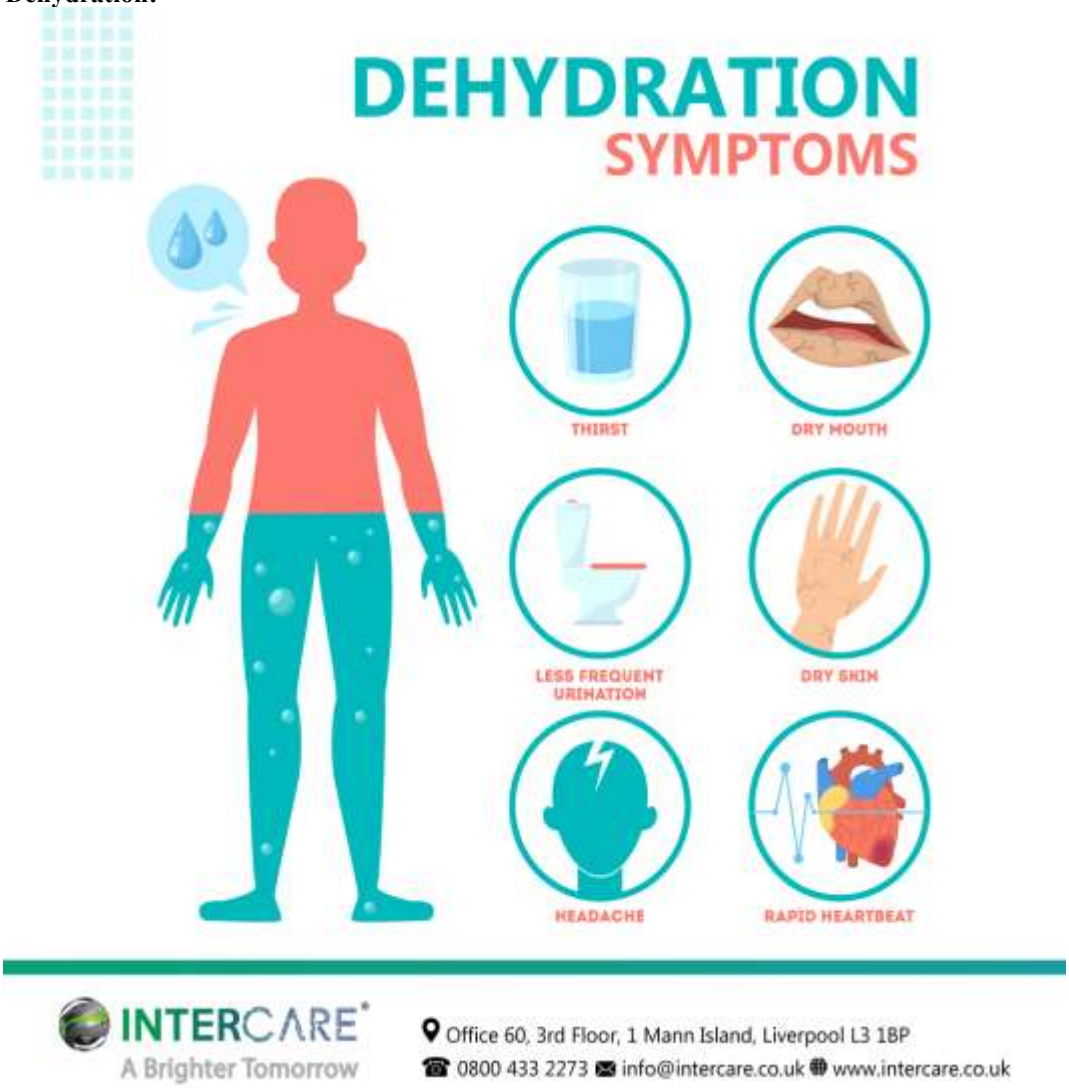
Causes



Symptoms


ABDOMINAL PAIN
DIARRHEA
FEVER
VectorStock
Nausea and vomiting
-LETHARGY-
LACK OF APPETITE

Signs of Dehydration:



How To Make Ors At Home?
Ingrediants:

- 1 liter of clean water (about 5 cups)
- 6 teaspoons of sugar
- 1/2 level teaspoon of salt

Instructions:

- Boil the water: If the water isn't clean, boil it for at least 10 minutes and let it cool to room temperature.
- Mix the ingredients: In the cooled water, add 6 teaspoons of sugar and 1/2 teaspoon of salt.
- Stir well: Make sure the sugar and salt dissolve completely.
- This solution should be consumed within 24 hours.

ORAL REHYDRATION SOLUTION helps to replace the electrolytes that the body loses during diarrhea.

Homemade ORS is best for children under 5 years.

Rotavirus Vaccine

- RotaTeq: This vaccine is given in three doses at 2 months, 4 months and 6 months of age.
- Rotarix: This vaccine is given in two doses at 2 months and 4 months of age.