

Children Caregivers Knowledge, Attitudes and Practices on Management of Diarrhoea in Children Under the Age of Five Years At Intermediate Hospital Rundu, Kavango East Region, Namibia

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ABSTRACT

The prevalence of diarrhoea among rural children remain a big problem for the rural Namibian population, living on the verge of poverty. In most cases diarrhoea denotes to the passage of unformed watery, bloody or mucoid stools three or more than three episodes a day. In most developing and rural countries diarrhoea remain one of the leading cause of death among children underage of five globally.

This study aimed to assess and establish the knowledge, of the children caregivers on home-based management of diarrhoea among children under the age of five at the outpatient department, Intermediate Hospital Rundu, Kavango East Region.

This was a quantitative, descriptive, cross-sectional and analytical designs which employed on 400 caregivers at Intermediate Hospital Rundu Outpatient Department using a systematic sampling method. Knowledge, of caregivers were assessed by means of the five rating Likert's scaled questionnaires. Data was prepared and entered through SPSS version 29 for analysis. Inferential and descriptive analysis were employed.

The study shows, that out of 400 caregivers, 385 (96.3%) had good level of knowledge, 326 (81.5%) had negative attitudes, while 351(87.7%) had poor level of practice on homebased management of diarrhoea. Age was found to be significantly negatively correlated to the practice ($r = -0.191$; $p < 0.001$). However, there was no significant correlation between age and attitudes and knowledge ($r = -0.008$; $p < 0.879$) and ($r = -0.019$; $p < 0.710$) respectively. In addition, attitude was found to be positively correlated to practice ($r = 0.341$; $p < 0.001$). Knowledge was found to be positively correlated to the attitude ($r = 0.206$; $p < 0.001$). Furthermore, the study discovered a significant positive correlation among knowledge and practices of the respondents ($r = 0.322$; $p < 0.001$). In conclusion, it was recommended that the caregivers should be educated on home-based management of diarrhoea, in order to improve their knowledge, attitudes, and practices on homebased management of diarrhoea in children.

Key words: Diarrhoea, Homebased Management, Children, Caregivers.

BACKGROUND

Diarrhoea-home-based management among children who are under the age of five years is recommended worldwide. The Namibia Ministry of Health and Social Services [MoHSS] recommended the Integrated

Management of Neonatal and Childhood Illnesses [IMNCI] guideline. The knowledge, and management practices of the caregivers on home-based management of diarrhoea have a significant fragment in the prevention and treatment of diarrhoea in children. Diarrhoea remained a foremost cause of children related deaths globally and predominantly in emerging countries, accountable for children mortality of 525 000 worldwide (WHO, 2024). In addition, diarrhoea illnesses are responsible for about 1 800 000 mortalities among people of all ages in developing countries, and 80% mortality cases of children under the age of five years (WHO, 2024). Shewangizaw, Mekonnen, Feku, Hoyiso, Borie, Yeheyis and Kassahun (2022) reported that one of the ten children in developing countries does not reach his or her fifth birthday due to diarrhoea mortality; eight of ten deaths before five years of age occur in the first two years of life and on average under three years children experience diarrhoea three times annually. The prevalences of diarrhoea cases may varies from place to place due to variances in cultural knowledge, attitudes and practices among the caregivers (Shewangizaw et al., 2022).

In sub-Saharan Africa, the caregivers know little about diarrhoea signs, symptoms and management, as a result diarrhoea is believed to be responsible of more than 90% of deaths among children aged 0-59 months and it is encountered for about 88% of the healthcare system (Demissie, Yeshaw, Alemineu & Akalu, 2021). In addition, the attitudes and practices of caregivers on management of diarrhoea depend on the perceived susceptibility and severity of diarrhoea among children under the age of five years (Shewangizaw et al., 2022).

In Namibia, diarrhoea is the second and third leading cause of diarrhoea related morbidity and mortality in children under the age of five years in 2016 and 2017 respectively, with 17% prevalence and 5% of deaths in children under five years (Statistics Agency [NSA] 2018; MoHSS, 2021).

Bauleth, Mitonga and Pinehas (2020) conducted a research study in Ohangwena region, Engela district, and indicated that the incidence of diarrhea diseases in children under the age of five years were at 23.8%. Maternal socio-economic statuses, education, immunisations, improper sanitations, water supply, feeding and the child age are determinants of diarrhoea illnesses in children under the age of five years (Bauleth et al., 2020). It is imperative to mention that no research study on the knowledge, attitudes and practices of the caregivers on home-based management of diarrhoea in children under the age of five years was conducted in Kavango regions.

WHO (2019) postulated that the management of diarrhoea illnesses should be initiated at home, before parents' present children to the health facilities. Importantly, the parents and caregivers' attitudes and practices on managing of diarrhoea in children have a significant effect on the recovery of children. Therefore, the study assessed the knowledge, attitudes and practices of the caregivers on home-based management of diarrhoea in children under the age of five at Intermediate Hospital Rundu (IHR), Outpatient Department (OPD) in Kavango region.

Problem Statement

Globally, there are limited studies which investigated the level of home-based management of diarrhoea among caregivers of children under the age five years (Abate et al., 2024).

In Namibia, prevalence of diarrhoea disease in children under the age of five years at Engela District Hospital was at 23.8 % (Bauleth et al., 2020). The researchers noted high prevalence of diarrhoea at IHR OPD. Children had more than three episodes of diarrhoea in a year, with majority of morbidity cases among children age 0-24 months. Despite health educations, recommended practices and attitudes on diarrhoea illnesses in children, the diarrhoea prevalence and deaths among children under the age of five years had been steadily high in Namibia, particularly at Intermediate Hospital Rundu OPD, Kavango East region.

Therefore, it was against this context that the study sought to complement the knowledge gap by assessing the knowledge, attitudes and practices of caregivers on home-based management of diarrhoea in children under the age of five years at OPD, IHR, Kavango East. The study intended to assess the knowledge, attitudes and practices of caregivers on home-based management of diarrhoea in children under the age of five at Intermediate Hospital Rundu OPD, Kavango East Region.

Research Method And Design

A quantitative design is a recognized, impartial, organised procedure in which numerical data are used to acquire evidence from a large population (Burns & Grove, 2020). The researcher employed a quantitative design, as it

is more objective, collected numerical data from a large population size, thus enhancing generalisation of the results (Goyal, 2023). Therefore, the researcher presented numerical data, graphs, charts and photographs in the study.

The researcher used the descriptive to gain an understanding and describe the knowledge, attitudes and practices of the caregivers on home-based management of diarrhoea in children under five years old.

The data was collected once from January 2024 to March 2024 without influencing the parents and caregivers, conversely to examines the correlation between the study variables in order to describe the characteristics in a population.

The researchers analysed patterns in data, examined the correlations and associations between the knowledge, attitudes, practices and the sociodemographic variables.

The study was facility based, at IHR, OPD located in Kavango East Region, in the town of Rundu. The Rundu hospital is one of the three referral hospitals in Namibia, which serves the community of Zambezi region, Kavango East and West region. The children under the age of five years who have diarrhoea are attended to at the paediatric OPD and in Casualty depending on the conditions of the patient. The total under five outpatient attendance in 2022 was 11 123 and 5128 (46%) experienced diarrhoeal diseases. IHR was chosen because of the high incidences of childhood diarrhoea according to hospital statistics. Diarrhoea remains one of the top three health conditions for outpatient attendance among children under the age of five years old and it was very important to investigate matters surrounding its management at home.

Population And Sample Size

Population refers to the individuals and matters that meet stipulated standards for inclusion in a specified world (Burns & Grove, 2020). The target population was the caregivers of children under the age five years. The catchment population of Rundu OPD has around 13953 children under the age of five years, and an average of 4128 were reported to have diarrhoea illnesses annually (Intermediate Hospital Rundu Health Information System, 2023). Therefore, the population of the study consisted of 4128 caregivers of children under the age of five years.

Burns and Grove (2020) defined a sample as a subclass of a population that is nominated for a specific study and the number of samples are called subjects. The sample size was determined by means of a sample size formula for estimating a single population proportion with a margin of error of 5%, confidence interval of 95% and expected non-response rate of 5%.

The sample size was determined by means of the Yamane formula below:

$$n = \frac{N}{1 + N(a^2)}$$

n = sample size

N = population size

a = level of significance or acceptable sampling error, which is (5%)

Equation: Yamane Formula (1968)

Substitutions:

$$n = \frac{4128}{1 + 4128 (5\%)^2}$$

$$n = \frac{4128}{1 + 4128 (0.0025)}$$

$$n = \frac{4128}{10.3225}$$

$$n = 399.90 \approx 400$$

Therefore, $n = 400$

Data Analysis

The study analysed data using the descriptive and inferential statistics. Categorical variables such as gender, marital status, religion were summarised using frequencies and percentages, while continuous variables such as age and knowledge score were analysed using means and standard deviations. This approach enabled the researcher determine average knowledge, attitude and practice scores of the respondents and establish the categories of respondents with poor or good knowledge, positive or negative attitudes and poor or good practices.

The Pearson correlation was used to assess relationships between knowledge, attitude, practice and age, while Chi-Square tests examined associations between demographic categorical variables and the knowledge, attitude and practices of the parents and caregivers of parents and caregivers using cross tabulations. This analysis helped to identify characteristics associated with certain knowledge, attitudes and practice levels among parents and caregivers. The independent t-tests examined associations between two continuous demographic variables and knowledge, while ANOVA examined the relationship between more than two continuous demographic variables and knowledge among parents and caregivers. A significance level of 0.05 was applied for all the statistical tests.

Ethical Consideration

Smeltzer and Brunner (2021) explained ethics as the branch philosophical knowledge and moral standards and theoretical rules founded on what is right and human.

Helsinki declaration (2024) advised that all research studies involving human participants must be publicly registered and permission gained from the relevant authorities. Therefore, the researcher had obtained the approval and ethical clearance from UNAM Decentralised Ethics Committee and obtained permission from the MoHSS to conduct the research. In addition, approval to carry out a research study was gained from the medical superintendent of the Intermediate Hospital Rundu and from the OPD supervisors' prior data collection. Moreover, the researcher took the fundamental ethical principles of respect, beneficence, and justice into great consideration throughout the research process.

RESULTS

This chapter will present the results of the current study, the description of sociodemographic characteristics of the respondents, level of knowledge, attitudes and practice of caregivers on homebased management of diarrhoea. In addition, the statistical associations of sociodemographic characteristics with knowledge, attitudes and practice by means of the Chi-Square test, cross tabulations and the Pearson's correlation for between the continuous variables and knowledge, attitudes and practice of respondents on homebased management of diarrhoea in children under the age of five years at IHR, OPD, Kavango East Region are presented and interpreted in this chapter. All in all, the t-test for independent samples and ANOVA to compare the knowledge scores of the different groups as determined by the demographic characteristics will also be presented in this chapter.

Description Of the Research Results

Socio-demographic characteristics of the respondents

The sample size of the study consisted of 400 caregivers and the response rate was hundred percent (100%). Respondents provided data on their gender, age, marital status, religion, highest educational level, employment status, residential data, number of children at home that are under five years old, the ages of the children with

episodes of diarrhoea and to indicate whether the respondents had ever lost a child under five years related to diarrhoea illnesses. Hence, below are the research sociodemographic results.

Gender of the respondents

The study included both male and female respondents. Out of 400 respondents, the majority were female (285) 71.25% and the minority were male (115) 28.75%.

Figure two illustrates the analysis output, which revealed the mean response for the male respondents at 11.48, while for female was 12.24. The standard deviation of the male respondents was 2.247 and for female was 2.113. This indicates that most of the children under the age of five years with diarrhoea were taken to IHR by the female caregivers.

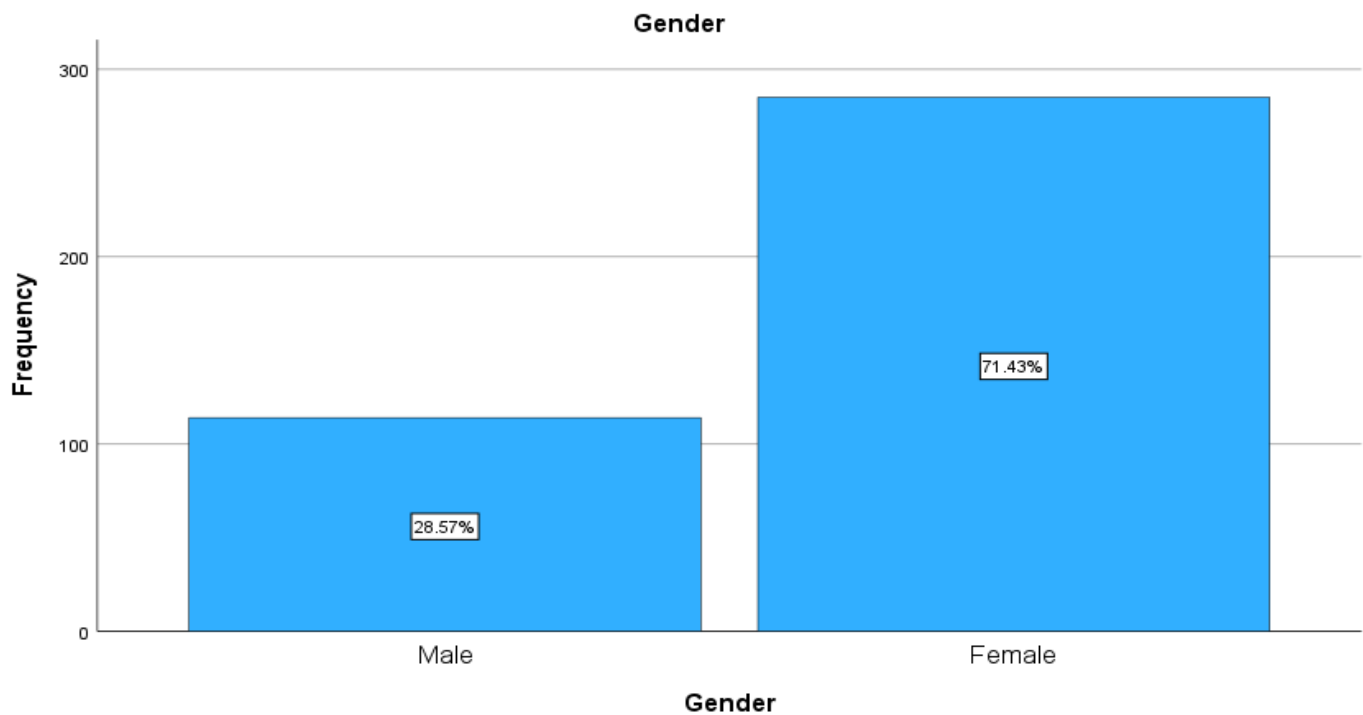


Figure 2: Gender of the respondents

Ages of the respondents

The respondents of this study were from different age groups. The graph illustrates that 388 respondents correctly indicated their age. The maximum age of the respondents was 65 years old and the minimum was 14 years. In addition, the study discovered that the mean of the respondents' age was 31.38 and the determined respondents' standard deviation was 10.089.

Marital status

Figure 3 depict the marital status of the respondents. Results reveal that (263) 65.6% respondents were single, while 111 (27.7%) were married. In addition, 14 respondents accounting for 3.4% were divorcees, whereas 13 respondents accounting for 3.2% were minors under the age of 18 years old.

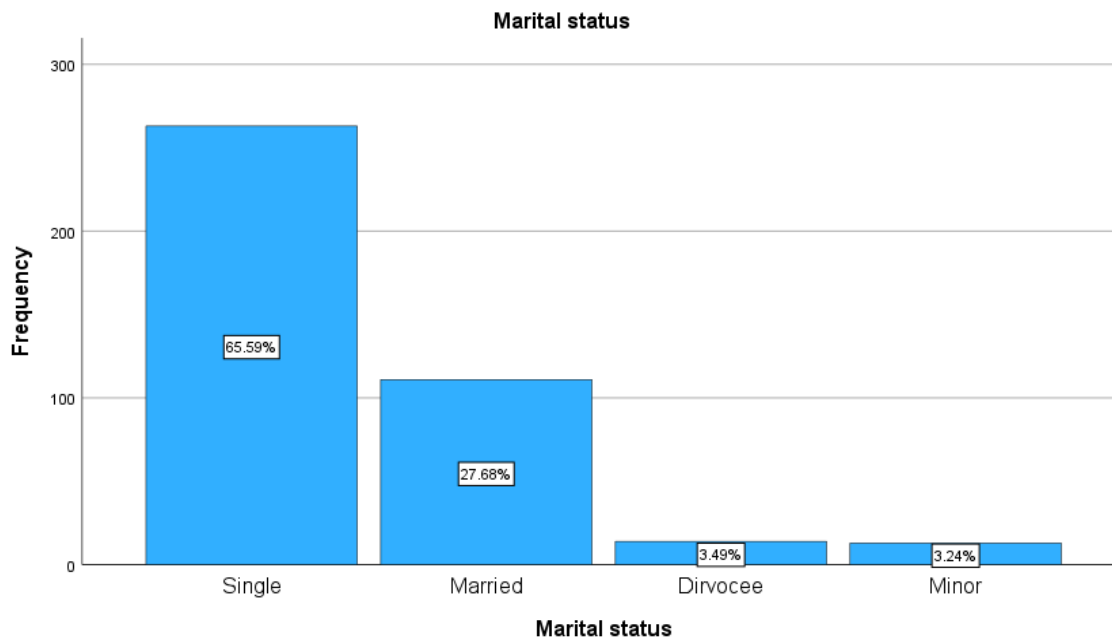


Figure 3: Marital statuses of the respondents

Religion

The results of the study indicated that 385 respondents (96 %) were Christians and only 15 respondents (4%) were Islamic. The statistical response mean of the Christians was found to be 12.12, standard deviation of 2.162 and the Islamic response mean was 10.50 with a standard deviation of 2.098. Figure 4 illustrates the statistical results of the respondents' religion.

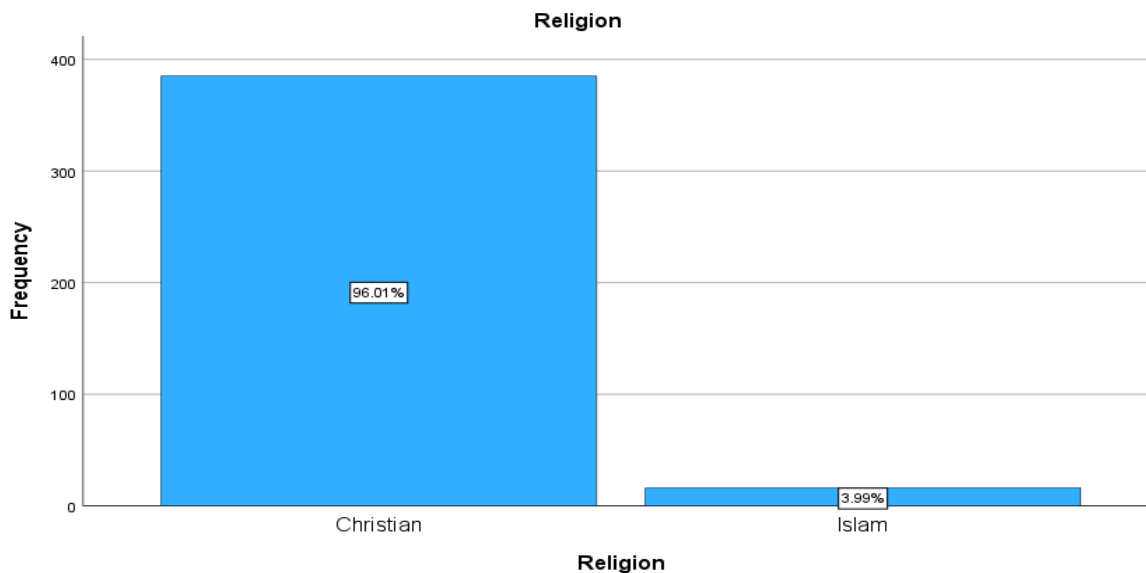


Figure 4: Religion of the respondents

Educational level of the respondents

Out of the 400 respondents, majority of the caregivers 209 (52.3%) had attended tertiary institutions, 150 (37.5%) respondents had attended secondary education, while 26 (6.5%) had completed primary education and 15 (3.8%) of respondent did not have formal education. Figure five presents the statistical distributions of the respondents' educational level. The mean for respondents who had no formal education, attended primary, secondary and tertiary education were 11.0; 10.76; 11.55, and 12.28 respectively.

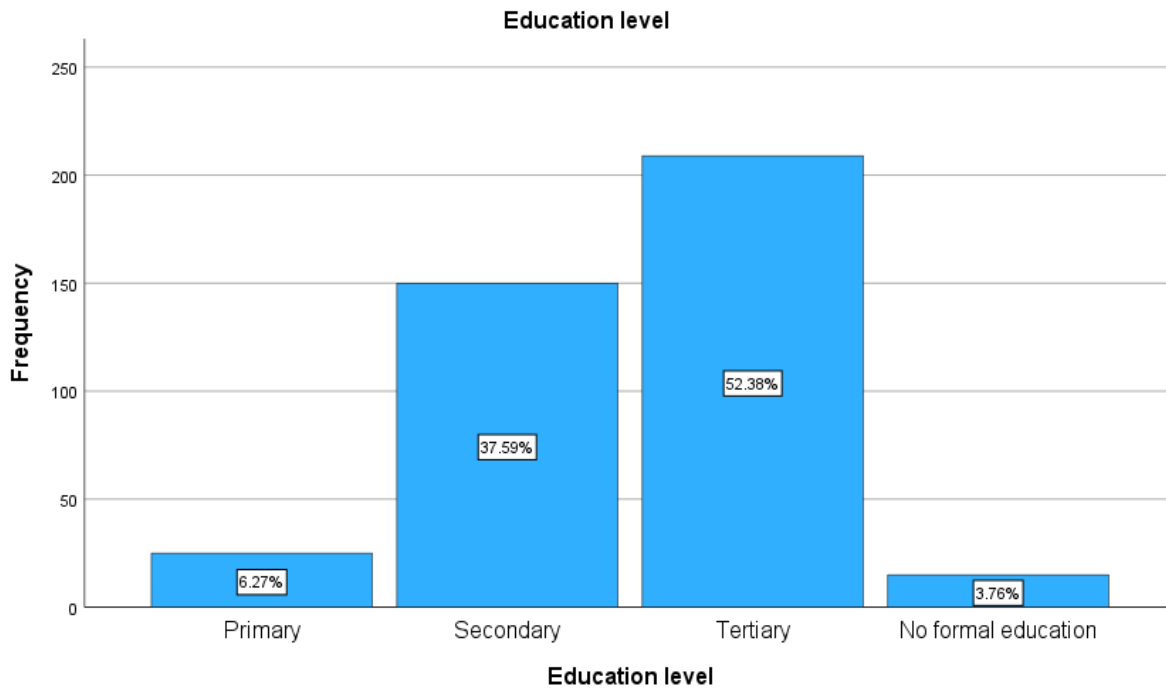


Figure 5: Educational level of the respondents

Respondents employment status

The respondents were 400 and 117 (29.2%) were employed and the mean value was analysed at 12.44 and the standard deviation of 1.963. On the contrary, majority of the respondents were unemployed 283 (70.8%). The mean response was less than that of the employed respondents (11.90) and the standard deviation was 2.234.

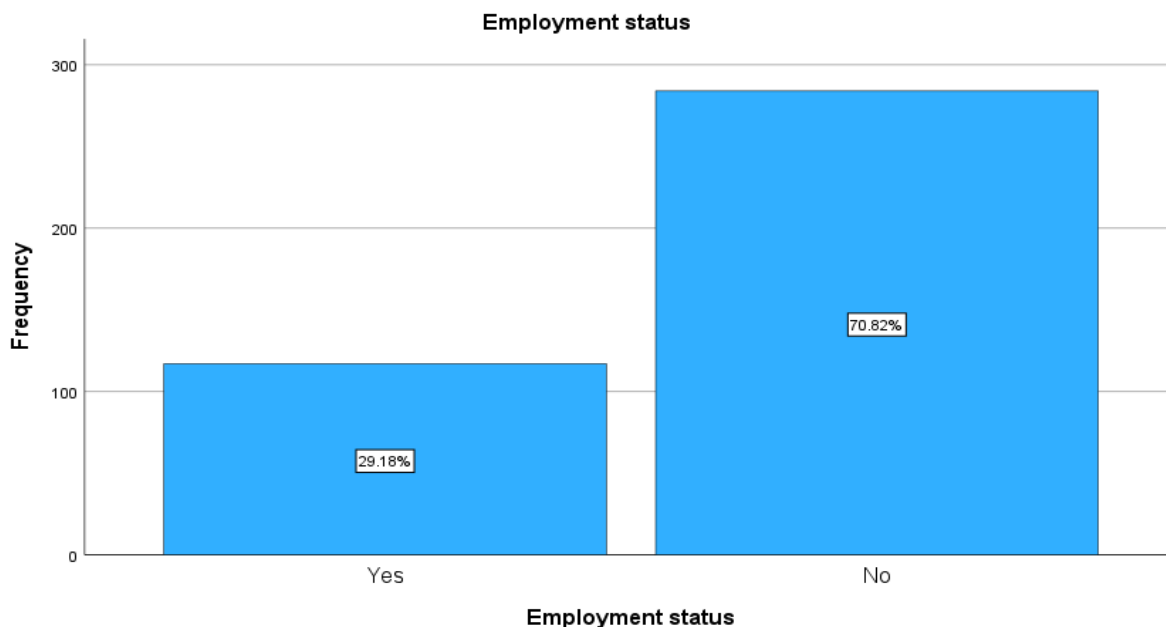


Figure 6: Employment status of the respondents

Respondents residence

The bar graph (figure 7) illustrates that 257 (64.2%) of 400 respondents reside in urban area, while 143 (35.8%) of respondents reside in rural areas. The mean of the respondents from rural areas is at 11.55, lower than that of the respondents from urban areas, which was 12.32. the standard deviation of the rural areas respondents was 2.306, while the respondents from urban areas had a standard deviation of 2.061.

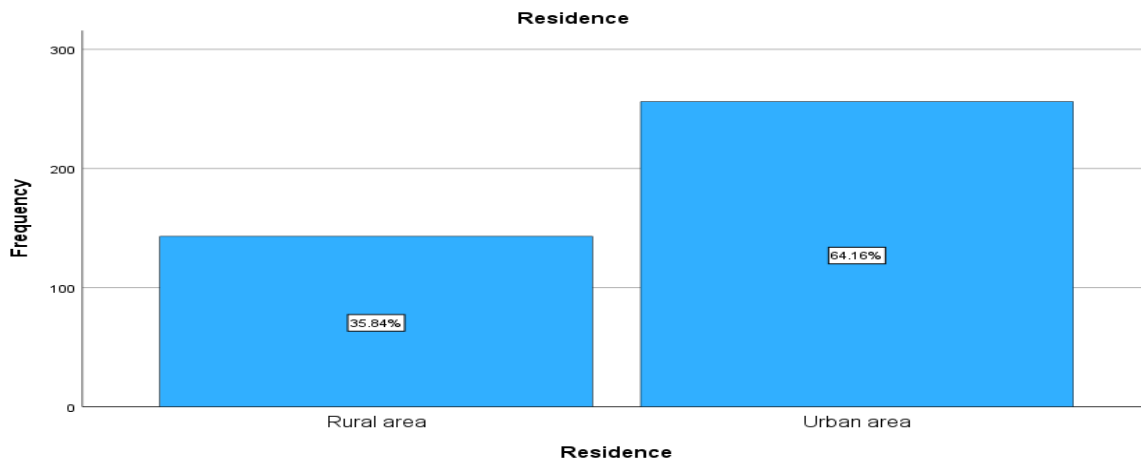


Figure 7: Residence of the respondents

Number of children under five years in the respondent houses

The respondents were caregivers of children who had diarrhoea during the data collection process. The table one (1) illustrates the number of children in their houses. Majority of respondents 155 (38.7%) had only one child under the age of five years, 98 (24.4%) respondents had two children, followed by 57 (14.2%) of respondents with three children in their households, 45 (11.2%) of respondents had four children under five years and 25 (6.2%) respondents had five children under five years in their households. On the other hand, a minority group of respondents had six, seven, eight, nine and whose percentages were 2.5%; 1.7%; 0.5%; 0.2% and 0.2% respectively.

Table 1: Number of children in the respondent houses

Number of children	Frequency	Percentages (%)
One	154	38.5
Two	98	24.5
Three	57	14.3
Four	45	11.3
Five	25	6.3
Six	10	2.5
Seven	7	1.8
Eight	2	0.5
Nine	1	0.3
Twelve	1	0.3

Age of the children

The research found out that 128 (31.9%) children under the age of five years that had diarrhoea during the data collection process were 12-23 months, followed by the children age group of 0-11 months reported at 111 (27.7%), 48-59 months with frequency of 65 (16.3%) then, 24-35 months were 57 (14.2%), then and the least presented age group was 36-47 months with frequency of 39 (9.8%).

Table 2: Age groups of children who had diarrhoea during the data collection exercise

Age groups of children	Frequencies	Percentages
0-11 months	119	29.8
12-23 months	125	31.3
24-35 months	57	14.3
36-47 months	38	9.5
48-49 month	61	15.3

Respondents responses on children diarrhoea related mortality

Respondents were requested to indicate whether they had ever lost a child related to diarrhoea illnesses.

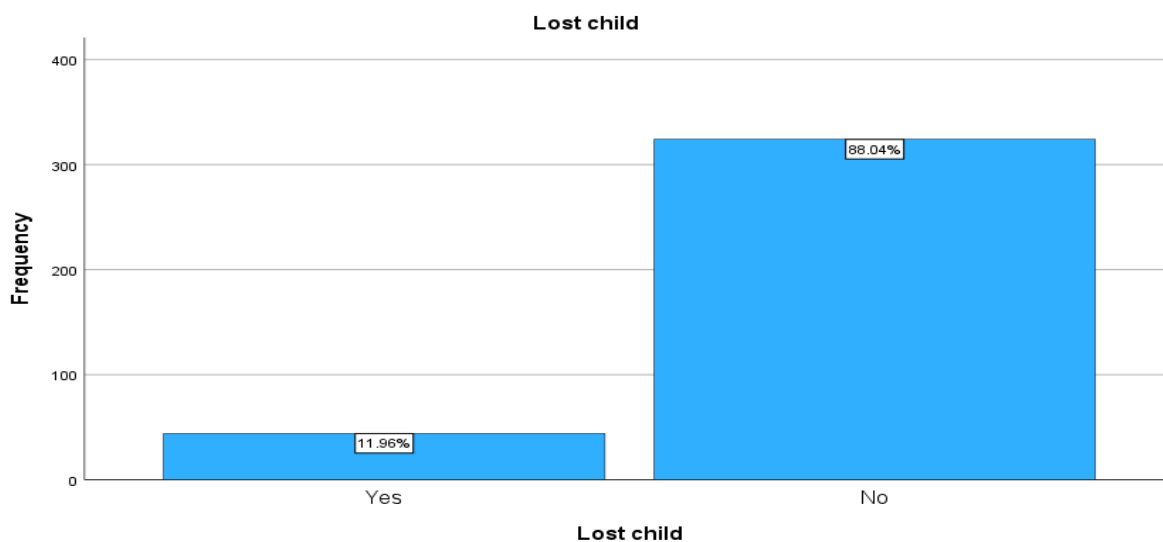


Figure 7: Respondents responses on children diarrhoea related mortality

The findings revealed that children were susceptible to diarrhoea and the disease was responsible for high mortality cases. Forty-four respondents (11.9%) reported to have lost children under the of five years due to diarrhoea, while (354) 88.04% indicated no diarrhoea related death in children.

The Knowledge Of The Caregivers On Homebased Management Of Diarrhoea In Children Under The Age Of Five Years At Ihr Opd, Kavango East Region, Namibia

The mean knowledge average scores

The sample size of the study included four hundreds (400) caregivers and the response was equivalent to the sample size. The average knowledge score of the parents and caregivers was 17.40. The maximum score was 23, the minimum score was 0 and the standard deviation was 3.590.

The study highlighted that 375 (93.8%) of the caregivers knew what diarrhoea was and only 25 (6.25%) of the care givers were not aware of what diarrhoea is. Respondents were questioned if diarrhoea can be prevented and managed at home and 100 (25.1%) disagreed and 300 (74.9%) were correct when they agreed that diarrhoea may be prevented and treated at home. In addition, out of the 400 caregivers only 44 (10.8%) disagreed that children under five years suffered more from diarrhoea, however majority of the caregivers believed that children are more susceptible to diarrhoea illnesses. Respondents were questioned about the root causes of diarrhoea

illnesses in under five children and the study revealed that 341 (85.4%) respondents provided correct responses and 59 (14.6%) were incorrect to disagree that bacteria, viruses and intestinal worms are the major causes of diarrhoea in children. Furthermore, 153 (38.3%) indicated that diarrhoea may be caused by spiritual power, while 247 (61.1%) of the parents and caregivers were correct to disagree that diarrhoea cannot be caused by spiritual power.

When questioned on whether drinking contaminated water and eating contaminated food may cause diarrhoea; 41 (10.1%) of the caregivers provided incorrect responses and 359 (89.9%) of the caregivers scored it correctly. Out of 400 respondents, 94 (23.3%) indicated that teeth eruption in children cause diarrhoea, conversely 306 (76.6%) indicated that, teeth eruption in children does not cause diarrhoea. In addition, majority of the parents and caregivers were aware of the signs of diarrhoea in children as 339 (84.7%) indicated correctly that, unconsciousness in children, dry, sunken eyes, frequent passing of stools, and difficulties in breathing is a danger signs of diarrhoea in children. Subsequently, 61 (15.3%) of the respondents provided incorrect responses on the signs of diarrhoea in children.

In addition, 285 (71.2%) of respondents correctly indicated that eagerness to drink or suck, and dryness of the skin and lips is a common sign and symptom of dehydration in children, only 115 (28.8%) of respondents were not aware of these signs of dehydration in children.

Furthermore, respondents were questioned if ORS is the first line treatment of diarrhoea. Majority of the respondents 294 (73%) correctly scored the question, while 109 (27%) provided incorrect responses to question. Regarding the preparation of sugar salt solution, 252 (63.5%) participants indicated correctly that the SSS is prepared by mixing 8 teaspoons of sugar with ½ teaspoon of salt in a 1 litre of clean, boiled, water, while 148 (36.5%) respondents provided incorrect responses. The results also indicated that 326 (81.6%) of respondents were aware that giving ORS and sugar salt solution replace the body salts and water lost through diarrhoea, 74 (18.4%) respondents revealed that it does not replace salts and water lost through diarrhoea.

Out of 400 respondents, 337 (84.2%) parents and caregivers reported that they were taught management of diarrhoea by friends, elders, however 63 (15.8%) were not taught homebased management by elders neither friend. The study indicated that 350 (87.8%) respondents believed and knew that diarrhoea is a serious disease, that can lead to diarrhoea, however 49 (12.2%) believed that it is not dangerous and may not lead to death.

Knowledge categories of the caregivers

It is imperative to note that the total knowledge score was 18, a score of 8 and below was considered as poor knowledge and a score of 9 and above was considered as good knowledge. This categorisation was determined based on the Likert scale where a strongly agree and agree were considered as good knowledge and carried a score of 4 and 5 respectively.

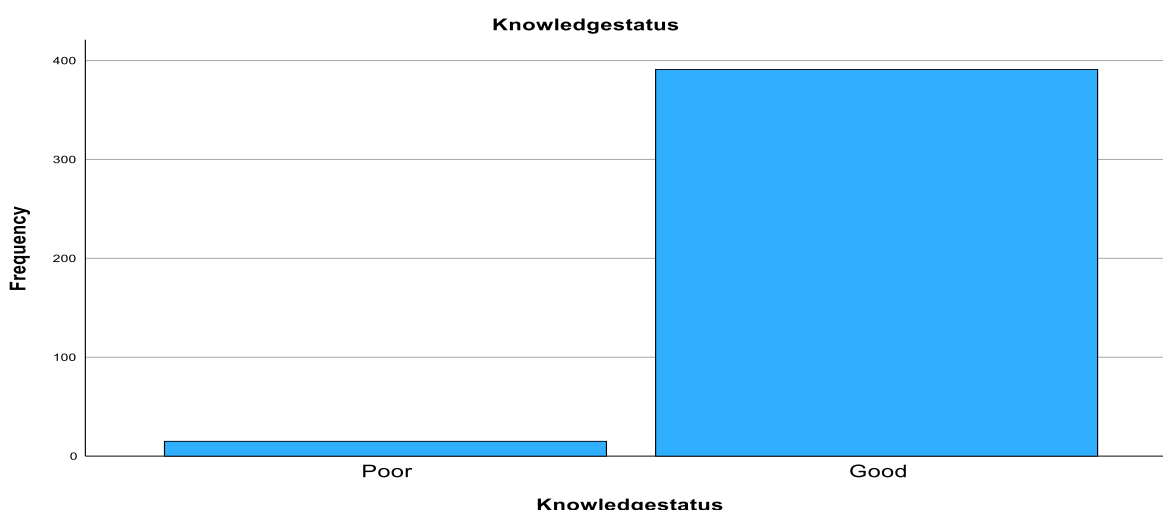


Figure 8: Knowledge status of the respondents

The study found out that 385 (96.3%) caregivers, were found to have good level of knowledge on homebased management of diarrhoea in children under five years. Subsequently, only 15 (3.7%) of the caregivers had indicated poor level of knowledge on homebased management of diarrhoea in children under five years old.

The T-Test For Independent Samples And Anova

Knowledge score and respondents' gender:

The female caregivers reported a mean knowledge score of 12.28 higher than the mean male caregivers. The Levenes' test significant was <0.217 , hence the study found out an equal variance of both female and male caregivers on knowledge score. The t-test for equality of means indicated a statistically significant p value of <0.001 . This significance concludes a statistically significant difference between the mean knowledge scores of the employed caregivers and the unemployed caregivers. The female respondents demonstrated better knowledge on homebased diarrhoea in children and the male respondents demonstrated low level of knowledge on homebased management of diarrhoea in children. The results of this study were similar to the results of the study conducted in Engela district, where the female caregivers demonstrated higher level ($p<0.005$) of knowledge on management of diarrhoea in children compared to the male caregivers (Bauleth et al., 2020). This suggest that women are often the primary caregivers in many households, may have lived more exposure to children health information and practical experience in managing childhood diarrhea illnesses.

Knowledge and employment status:

The study variances in the employment statuses were equal ($p< 0.153$). However, the shows a statistically significant p value (<0.001) on the t-test for equality of means. Employment status has been identified as a key socio-demographic factor influencing the knowledge of the caregivers on management of diarrhoea in children under five years old. The employed caregivers indicated better knowledge on management of diarrhoea than the unemployed caregivers. Similarly, Mwaro (2020) reported a significant association between knowledge level and the employment status of the participants, whereby the respondents who were employed demonstrated better knowledge on diarrhoea management compared to the unemployed respondents. Bauleth et al. (2020) reported that the caregivers who were employed, particularly in the formal jobs, tend to have higher level of knowledge compared to the unemployed caregivers.

This relation is likely to the several factors: employed caregivers may have greater access to health information through workplace health programmes, social networks, or financial resources to access educational and healthcare services. Conversely, the unemployed caregivers often have limited exposer to structured health education, which may constrain their knowledge regarding home-based management of diarrhoea in children under five years old.

Knowledge and the residence:

The group description statistic of the residence demonstrated high mean knowledge score of 12.32 from caregivers staying in urban areas compared to mean score of 11.90 of caregivers staying in rural areas. The Levenes' test of the independent test had the p value (0.102) which was not significant, thus the variances in the two groups were equal. However, the statistical t-test for equality of means was significant P-value of <0.001 . This reveals statistically significant difference between the mean knowledge scores of the caregivers from urban areas and those who resides in urban areas.

This infers that caregivers from urban areas got better knowledge on homebased management of diarrhoea than those in rural areas. The results of this study are in agreement with the results of the study conducted in Kenya, affirming that respondents who live in towns had better knowledge, attitudes and practices regarding home management of diarrhoea in children under five years (Mwaro, 2020). The results affirm to the study done in River State, Nigeria that the caregivers from urban area have good knowledge compared to the caregivers residing in rural areas (West & Okari, 2023). There are usually many accessible health facilities in urban areas where the caregivers are likely to receive counseling from healthcare workers on diarrhoea management. In

addition, there are greater exposure to health educational campaigns and proximity to community health programmes.

The knowledge score and Marital status

The ANOVA test determined the analysis of statistical variances between more than two groups in relation to the knowledge score of the sociodemographic characteristics of the caregivers such as their marital status, religion, educational level and ages of the respondents' children.

Knowledge and marital status:

The study found out that the single caregivers had a mean knowledge score of 12.35, married caregivers had a mean of 11.71, divorcee mean knowledge score was 11.07, while the minor caregivers who were in this study referred to all caregivers and under the age of eighteen years had a mean of 10.31. On the other hand, ANOVA test had a statistically significant p value of $p < 0.001$. These statistical descriptions infer that the single respondents have good level of knowledge, married respondents got better level of knowledge on diarrhoea management and followed by the divorced caregivers. However, the caregivers under the age of eighteen years demonstrated low level of knowledge regarding homebased management of diarrhoea in children under the age of five.

Knowledge and religion:

The group description highlighted the mean knowledge score of the Christian caregivers at 12.12, higher than the mean knowledge score of the Islamic religion which is 10.50. Conversely, statistical analysis of ANOVA significance value was < 0.003 . This concludes on the significant differences between the religion of the caregivers and the knowledge score. These revealed that Christian caregivers have more frequency, which statistically convey that they got better level of knowledge than the caregivers from the Islamic religion. In essence, West and Okari (2023) elucidated that the Christian caregivers have higher knowledge level compared to the other religions. This may be attributed to greater exposure to health educational programmes run by faith-based organisations.

Knowledge and educational level:

The caregivers with tertiary education obtained a higher mean knowledge score, then secondary and primary educated caregivers. On the other hand, the parents and caregivers who did not get formal education had the lowest mean score.

The significance value of the ANOVA test was $p < 0.001$. This reveals a statistically significant differences between the group means of the respondents who never had formal educations, respondents who attended primary, secondary education, tertiary education and answering the knowledge-based question on homebased management of diarrhoea in children. In this study, the tertiary educated parents had good level of knowledge. This gives inferences that the more we educate the caregivers, the higher their level of knowledge get.

Education level appears to be an important factor influencing the knowledge level of the caregivers on diarrhoea management. Bauleth et al. (2020) found educational level to be significantly linked with the knowledge of the caregivers. The caregivers with highest level of education have good knowledge. Ssebuliba and Sania (2022) found out that the caregivers with higher formal education generally demonstrated better knowledge on diarrhoea management, while caregivers with only primary or no formal education demonstrated poor knowledge on diarrhoea management. The results were consistent with other studies in similar contexts indicating that formal education enhances the ability of the caregivers to interpret health information and implement appropriate healthy practices when managing diarrhoea in children under five years old (Liheluka et al., 2023; West & Okari, 2023).

Knowledge and age of the children:

The age of children is found to have minimal mean differences on the knowledge scores of the caregivers. The caregivers of children age 36-47 months had high response rate (12.71), seconded by the caregivers of children age 24-35 months (12.36), caregivers of 48-59 months (12.19), caregivers of the children age 12-23 months, while the caregivers of the children aged 0-11 months got low knowledge response mean (11.26). In addition, the ANOVA statistical analysis found out a mean significance value of <0.001 between the ages of children variances to the knowledge scores. This showed a statistically significant differences among the group means of the respondents' children' ages and answering the knowledge-based question on homebased management of diarrhoea in children. All in all, the younger the child, the lower the knowledge score of the caregivers. As the children grow old, the knowledge level of the caregivers improve. The caregivers learn and become better experience with the child care as the children age, hence the knowledge on management of diarrhoea improve.

CONCLUSION

Generally, the study has found paradoxical knowledge level with practices of caregivers of children under the age of five years. This means that the caregivers of children under the age of five years are aware of the causes, risk factors, severity of diarrhoea, however there have been limited cultural changes, behaviours towards practical applications of the knowledge.

Majority of the caregivers 385 (96.3%) demonstrated substantial knowledge on home-based management of diarrhoea in children under the age of five years and the minority group 15 (3.7%) caregivers had poor knowledge regarding home-based management of diarrhoea in children under five years old.

In essence, the study found age to be negatively correlated to the practice. This meant that as the caregivers grow older, the practices on diarrhoea management in children becomes poorer. Knowledge was found positively correlated to the practices. Therefore, caregivers need proper education about diarrhoea illness, in order to improve the practices on homebased management of diarrhoea.

The study has found educational level to be significantly associated to the knowledge of the caregivers of children under the age of five years old. In addition, the knowledge of the respondents is significantly associated with the residences of the caregivers. Furthermore, the study found a noteworthy association between the practices and the respondents' educational level, the marital status and the employment status.

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