COLLEGE OF MEDICINE AND HEALTH SCIENCE

DEPARTMENT OF nursing

Knowledge, attitude and practice of mothers (care givers) towards oral rehydration solution for diarrhea treatment among under five children at WKUSTH Gurage zone, south west, Ethiopia, 2022

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June 2022 Wolkite, Ethiopia

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A thesis result submitted to Wolkite University College of medicine and health science Department of nursing for partial fulfillment of requirement for the degree of Bachelor of Science in nursing

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Acknowledgment

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ABBREVATIONS & ACRONYMS

KAP - Knowledge, Attitude & Practice

ORS – Oral Rehydration Salt

ORT -Oral Rehydration Therapy

PHO - Public Health Officer

UNICEF –United Nations International Children Emergency Fund

WHO - World Health Organization

WKUSTH: Wolkite University specialized teaching hospital

OPD: outpatient diagnosis

SAM: sever acute mal nutrition

Abstract

Background: Oral Rehydration solution is a type of fluid replacement that is used to prevent and treat dehydration particularly when it is caused by Diarrhea containing a little amount of sugar and salt particularly sodium and potassium.. The value of ORT in treating diarrhea and prevent it's complication but still mortality rate from diarrheal disease is still high so this study to assess the knowledge, attitudes and practices of mothers/caregivers was having under five children regarding oral rehydration therapy at Wolkite university specialized hospital (WKUSTH)

Objective: the aim of this study was to assess the knowledge, attitude and practice of mothers (caregivers) regarding ORT utilization for under-five children with acute diarrheal disease in Gurage zone WKUSTH

Method institutional based cross sectional study was used from may 10 June 5 2022 G.C systematic random sampling method was used to select 250 mothers that had under five children data was collect using pretested structured questioner by member of this study and the data was analyze by SPSS 2022 by using table and graph method.

Result The study finding revealed that out of 250 caregivers 158(63.2%) had good knowledge about ORS utilization for acute watery diarrheal disease case management w. In other hand 138 (55.2%) of care givers had good practice on case management while, to manage the disease and 160(64%) were positive attitude

Conclusion: The present study concludes that mothers had knowledge in the management of diarrhea. However, several gap existed between knowledge and practice of mothers in managing the disease. The high knowledge revealed in this study had influenced the practice of mothers in managing the disease. Thus, there was a need for public health educational intervention.

Recommendation; based on our fending we was recommend different thing at different level

Key words: Knowledge, attitude, practice, oral rehydration solution treatment g under five children.

INTRODACTION

1.1 BACKGRAOUND0

Diarrhea is the unusual passage of three or more loose of watery stools per day. (1) This loss of water and salts treated by through The use of oral rehydration solution (ORS) it was revolutionized the management of acute diarrhea. And it takes great success in the treatment of diarrheal illness. (4) (ORS) has been used to replace water and electrolytes lose in stool simply it is rehydration of the patient because of improved hydration status.(1) The implementation of the standard World Health Organization ORS (WHO-ORS) has resulted in decreased mortality and morbidity associated with acute diarrheal illnesses in under five children, have occurred.(7) Various modifications to the standard ORS have been derived These modifications have included hypo-solar or hyperosmolar solutions, use of rice-based ORS, zinc supplementation, and the use of amino acids and others are still under investigation it was proven effective for both corrections of dehydration and reduction in associated mortality (8)

Universal use of oral rehydration therapy (ORS) for diarrhea could prevent almost 1.5 million deaths per year, or 15% of all under-5 deaths. (4) But the use of ORT is still low only 44% of diarrhea patient receive ORT to say Mather or care giver who have KAP depends. 'knowing about definition, causes and associated dangers sign of diarrhea and dehydration, including prevention of dehydration during diarrheal episodes through the use of oral rehydration salts.(5) with full understanding of the producer and its benefit are expected from the care giver also must be encouraged to start ORT without waiting to visit the doctor such simple measure improve the practice of Mather and can reduce morbidity and mortality due to diarrhea also improving of hygienic and feeding practices at house hold level are crucial in general regardless of variant ORS, the prescribed dosage depend on degree of dehydration.(1) The e standard WHO-ORS (311 mosM / l) contains sodium (Na, 90 mmol / l), potassium (20 mmol / l), chloride (80 mmol / l), citrate (10 mmol / l), and glucose (111 mmol / l). The main goal of ORS is the replacement of electrolytes lost in stools of patients with diarrhea. (1)

1.2 statement of problem

Worldwide diarrhea one of the second leading causes of mortality in children aged less than five years. (1, 4) 1.7 billion case in every year it accounts for 8% of deaths in children under-five, killing 525,000 such children each year. (1) In developing world Diarrheal is one of the most common disease in children under five years old. (2) The under-five mortality rate in Pakistan is 75 per 1000 live births with death counts of 32000 while developed countries barely have 10 deaths each year. (7) In Pakistan there are about 24 million children under the age of 5 years and on average each child gets 3-4 episodes of diarrhea per year in children up to 4 years of age; to account for a total of approximately 120 million episodes per year.2 in Africa under five children experience five episode of diarrhea anomaly and 800,0000 children die in each year.(7) in Africa Ethiopia is one of the top 15 country nearly 73,700 children diarrhea death occurs according to Ethiopia demographic and health survey (EDHS) 2016 12% children had diarrhea these report showed that in SNNPE 13.9% children under five had diarrhea the occurrence of diarrheal diseases among under five children is in complex direction of socioeconomic, environmental, and behavioral variables. Socio-demographic characteristics like maternal and child age and availability sanitary facilities, hygienic practice, fly infestations, and regular consumption of street food are also some determinant factors for the occurrence of diarrheal diseases (3) South Asian and Sub-Saharan countries are at more risk for transmission of infections due to poor sanitation, inadequate access to clean water, and lack of awareness, campaigns in communities, resulting in improper treatment or delayed management of disease.(4) due to severe dehydration and malnutrition death cane happen more frequently than developed world including Ethiopia.(3)

Even if the total number of deaths globally from diarrheal diseases remains high, overall mortality rate has steadily declined over the last few decades. (9,12) This decline especially in developing countries is largely due to the use of early and appropriate use of oral rehydration therapy (ORT) with oral rehydration solution (ORS) The early use of ORT at home in children with diarrhea decreases the number of outpatient visits and hospitalizations and overall medical costs. (7) WHO encourage home based ORT to treat diarrhea and dehydration in addition to this give strong emphasis on preventive and therapeutic measure like save drinking water sanitation hygiene (WASH) breast feeding, drug, vaccine like Rota vaccine.(1) The use this all who strategy largely depends on the level of knowledge attitude and practice of Mather In developing

countries, only 39% of children under five with diarrhea receive the recommended treatment ORT with continued feeding to prevent dehydration and worsening nutritional status.(9) Africa has the lowest levels of treatment coverage (35%) followed by South Asia (37%) and the Middle East and North Africa (39%), East Asia and Pacific (excluding China) have the highest treatment coverage level at 55% (11)

Study done in different part of Ethiopia had shown that diarrhea is still common health problem According to (EDHS) 216 report in benishangul Gomez regional state despite the dramatic decrement of under-five mortality rate from 167 to 98 death per 1000 lives birth the prevalence of diarrhea was 22.1% in Amhara region the prevalence of (ORT) was 28%. (13) Another study in Arab Minch indicated that diarrhea is the second presentation in under five children next to pneumonia. (14)

also always we observe a lots of under five children come to WKUSTH after lot of complications was developed This is of great concern and it is important to study why prevalence and mortality rates are still high for a preventable and treatable diarrheal diseases so our study aim was assessed the knowledge attitude and practice of Mather or care give toward ORS for diarrheal disease among under five children in Gurage zone WKUSTH.

1.3 SIGNIFICANCE OF THE STUDY

There is research done by this topic in other places and mostly it is significantly associated with occupational status, educational status, place of resident and other maternal factors. But there was no research that was done in Gurage zone on assessment of KAP of child care givers (mothers) towards ORS for diarrhea treatment in under five children which is crucial for decreasing morbidity and mortality of children due to diarrhea and its complications.

So this study will suggest interventions and solutions to participate in implementation & is also relevant for the community bay crating awareness giving opportunity and administration management bodies, decision makers and other concerned bodies to utilize this information to fill the gap & design effective strategies for addressing the problems. In the long run, it was reduce the burden of dehydration & will help for further studies as background information.

The study was also provide information on determinants of ORS use aimed at guiding health providers & policy makers in improving childhood morbidities and mortalities due to diarrhea.

LITERATURE REVIEW

2. 1 – KNOWLEDGE OF MOTHERS ABOUT ORS UTILIZATIO

Despite the fact that the availability of ORS can sustainability reduce the mortality and morbidity resulting from diarrhea poor knowledge pertaining to diarrhea and its management has posed the third world country with diarrhea associated death and ill heath among child. (8) A cross sectional study was conducted in Pakistan from 100 mother they are selected through convenience sampling methods the highest attainable knowledge was 14 and the lowest attainable knowledge was 0 from this 0-5 were categorized as poor knowledge 5-10 were good knowledge and scoring above 11 were said to have excellent knowledge from this 76(81.7%) were knowledge about use of ORS while 17(18.3%) were to same extent, 70(75.3%) were consider it enough for treating dehydration 22(23.7%) were to some extent and 1(1.1%) were no, 5(5.4%) were know danger signs of 47(51.1%) were to some extent 40(43.5%) were no knowledge of danger signs 64(67.4%) have proper knowledge of administration 25(26.3%) were to some extent 6(6.3%) were not at all.(25) In congruent to this study in Ghana most of those who stated that diarrhea were a serious illness for children less than five years indicated the loss of fluids involved in the disease process leading to dehydration, malnutrition and eventual death. This suggests that mothers (care givers) had knowledge on diarrhea as a serious child hood illness (16) A cross sectional study was done in dire dawa from 295 participant (women having under five children) 65.2% was good knowledge to ward ORS.

2.2 ATITTUDE OF MATHER TOWARDS ORS

Many study conducted in developing country indicated that Misconceptions are prevalent that prevent the use of ORS during diarrhea many mothers believed that one needs a prescription from a doctor in order to buy ORS or ORS has a bad taste or no fluids to be given during diarrhea (9). ORS consists of a solution of salts and sugars which is taken by mouth. It is taken around the world but is most important in the developing world where it saves millions of children a year from death due to diarrhea (11).

Across sectional study conducted in Pakistan from 296 mother 257(86.8) were believe diarrhea can be managed at home 39(13.2%) were not, 229(77.4%) were believe diarrhea can be

controlled by ORT 67(22.65) were not, and 273(92.2%) were believe that hand washing, boiling water prevent diarrhea.(25)

Across sectional study was done in dire dawa from 295 participants 54.9% had negative attitude toward ORS.

2.3 – PRACTICE OF MATHER TOWARDS ORS

A cross sectional study was conducted in Pakistan from 100 mother 68(68%) were always use ORS 14(14%) were sometimes use ORS and 18(18%) were never use ORS. (25)

Study conducted in Kenya to assess household's perception and practice in management of diarrhea among under five reports some un acceptable practice by mother/care giver like decreasing fluid intake during diarrhea 89% of mother say hold Brest milk because enhance diarrhea (14)

Another similar study in Australia found out 71.48% representing about three fourth of the participants know the preparation of solution correctly, although 217 (55.6%) of the children reporting diarrhea within 2 weeks prior to the study actually used ORS solution (18).

Similar study was done in Nigeria, which showed the gap between knowledge and practice with being educated and none educated on ORS utilization could be linked to the fact that even though mothers (care givers) have knowledge on management of diarrhea by utilization of oral rehydration solution (ORS), they may not probably be putting the knowledge in to practice. Other factors such as the social class or family income might influence the mothers' knowledge more than just their own education (19).

Study, done on Gambia although 75% of the mothers were educated, only 156 knew the correct method of ORS preparation and its use; whereas out of the remaining mothers who knew about

ORS did not know the correct method of using ORS. However, literacy rate showed positive association with adequacy of ORS knowledge (20

Across sectional study was done in dire dawa from 295 participants among 295 women participant 58% were poor practice.

3 OBJECTIVE

3.1 GENERAL OBJECTIVE

- The aim of these study is To assess knowledge, attitude and practice of care givers (mothers) towards ORS for diarrhea treatment in under five children in WKUSTH, Gurage zone, south west Ethiopia, 2022.

3.2 SPACIFIC OBGECTIVE

- To determine knowledge of mothers (care givers) about ORS in treatment of diarrhea in under five children in WKUSTH, Gurage zone, south west Ethiopia, 2022
- To determine the attitude of mothers (care givers) towards ORS in treatment of diarrhea in under five children in WKUSTH, Gurage zone, south west Ethiopia, 2022.
- To determine the current practice of ORS by mothers (care givers) for treatment of diarrhea in under five children in WKUSTH Gurage zone, south west Ethiopia, 2022.

4 METDOLOGY

4.1 study design

An institutional based cross-sectional study design was used.

4.2 study period and Study Area

4.2.1 Study period

Study was conducted from May 10 June 5 2022 G.C

4.2.2 Study area

The study is conducted in Ethiopia, SNNP region Gurage zone, WKUSTH, and which is 170km southwest of the capital city, Addis Ababa, on the way to Jimma. WKUSTH was established on 2011 Ethiopian calendar and start to give service on 29/11/2011 E.C. At the begging of 214 total works and 91 workers on administrative staff the rest 123 was health worker and 112 beds inpatient ward (Emergency 19, Labor 14, and NICU 18). The hospital has 487 total workers, 284 are health worker and 203 are on administration office currently the hospital has 102 number of nurses, 86 physicians, 13 specialists 2 other special, 26 midwiferies, 17 laboratories, 1 biomedical, 20 pharmacies, 5 anesthesia, radiology, 2 environmental health, 7 health officer and other health related worker. Now total bed number 173(112 bed inpatient ward, 19emergency, 14 labors, 18 NICU and 10 ICU).

4.3 population

4.3.1 Source population

The source of population was Mather or care giver having under five children

4.3.2 Study population

All Mather coming to WKUSTH having under five children

4.3.3 Study unit

Care givers/mothers having under five children that was selected by systematic random sampling.

4.3.4 Sampling unit

Mother or care giver coming to WKUSTH which have under five children and that was selected by systematic random sampling

4.4 inclusion and exclusion criteria

4.4.1 Inclusion criteria

Mather or care giver in WKUSTH having under five children

4.4.2 Exclusion criteria

Mother or care givers who have seriously ill children and

Those who have mentally ill care giver or mother

4.5 sample size and sampling procedure

4.5.1 Sample size

The sample size was calculated by using single population proportion formula with the following assumption. Prevalence of mother knowledge about ORT/ORS 82%, based on the finding of a study conducted in Arbaminch town in 2014.

$n= z^2p (1-p)/d^{2,}$ Where n= sample size

P= 82%

d= marginal error (5%)

$n= z^2pq/d^2 = (1.96)^2 (0.82) (0.18)/ (0.05) = 227$

Due to the fact that there is non-response rate (with acceptable level of 10%) so, we was 10 %of the sample size to our sample size to minimize systematic error with no response

So our total sample size will be 227+22.7=250

First, total Mather in WKUSTH having under five children was numbered by group members then Each study unit was selected by systematic random sampling techniques K =N/n interval Each study unit was selected by systematic random sampling techniques

K =N/n when N=800 per moth

n=250

800/250=3 so with each interval.

4.5.2 Sampling procedure

First we was select pediatric unit from this unit there was pediatrics ward which include (medical, surgical and SAM) emergency and OPD then after this we was give numbers for all bed in pediatrics ward from bed number 1-34 except OPD for OPD from the first 3 women's randomly select the first one which was number 3 after that we was select every 3 individual when women's come to OPD and from bed number 1-3 we was randomly select the first one which was bed number 2 then every 3 bed number we was take sample from the study unit which was bed number 2, 5, 8…… till sample size was reached at the end Was gait total of 250 women or care giver 17 from OPD, 78 SAM , 56 from paid medical , 61 from surgical, 38 from emergency

4.6 Variable

4.6.1 Dependent variable

Knowledge of mothers (care givers) about ORS in treatment of diarrhea

Attitude of mothers (care givers) about ORS in treatment of diarrhea

Practice of mothers (care givers) about ORS in treatment of diarrhea

4.6.2 Independent variable

Age	ethnicity
Religion	income
Occupation	marital status
Educational status	

4.7 operational definition

According to the same research done in West Go jam zone, North West Ethiopia in 2014, our operational definition was described as follows.

Good knowledge- those mothers who answered above the mean of the knowledge related questions. (25, 26, 17)

Poor knowledge: - those mothers who answered below the mean of the knowledge related questions. (25, 26, 17)

Good Practice- those mothers who answered above the mean of the practice related questions. (25, 26, 17)

Poor Practice- those mothers who answered below the mean of the practice related questions. (25, 26, 17)

Positive attitude those mothers who answered above the mean of the attitude related questions ORS. (16, 17, 26)

Negative Attitude those mothers who answered below the mean of the attitude related questions. ORS (9)

4.8 data collection procedure and quality assurance

4.8.1 Data collection procedure

A structured interviewer administered questionnaire was used to collect data from mothers (Caregivers) of under-five children. It was constructed by adopting and modifying from previous researches done on related topics. An English version and local version questionnaire will be prepared.

The questionnaire was consisting of four parts. The first part will contain about socio-demographic characteristics of under-five children and mothers (caregivers). The second part will contain knowledge assessment of the mother (caregivers). The third one will practical assessment part and the last one was attitude assessment part.

4.8.1.1 Data collectors

Six students were assigned five of them as data collectors and one student was supervisor. The data collectors was responsible to interview the mothers (caregivers) of under five children, record the result in a consistent manner and finally submit the result the supervisor and later on the supervisor submit to the group as scheduled.

4.8.2 Data quality assurance

Pre-test was conducted one week before actual data collections by group members out of the study area on 5% of sample size & it was checked daily for completeness, accuracy & any ambiguity on inappropriate questions. After collecting the pre-test, the questionnaires was revised and amended.

4.10 Statistical analysis

After the data was collect, it was edited and cleaned. Then analysis was doing by using SPSS version 2022

4.11 Ethical consideration

A formal letter was writing by WKU, to be submitted to authorize body for their cooperation, permission was request from WKUSTH. Informed consent was secure from mothers (care givers) before starting data collection process & informed that information provided was keep confidential. Mothers (care givers) can withdraw at any time during data collection.

4.12 dissemination plane

Finally copy of the result was disseminated to relevant authorities and bodies that need the information as baseline for further study. The result was presented for nursing department at the end of the research, if possible to publish the result in local journals. We were also plan to place the finding in our library as a reference

5 RESULT

5.1. Socio demographic variables of children those are under five

A total of 250 participants (care giver) with response rate were 100% on the bases of age group, out of 250 73(29.2%) was between 12-23 months. Sex of children 138(55.2%) was female. Birth order of children 1st 108(43.2%) and number of under five children in house hold 1 was 205(82%).

Table 1 socio demographic variable of children

No.	Variable	Category	Frequency	Percentage
1	Age of children	<12 months	46	18.4
		12-23 months	73	29.2
		24-35 months	50	20
		36-47 months	46	18.4
		48-59 months	35	14
2	Sex of children	Male	112	44.8
		Female	138	55.2
3	Birth order of children	1st	108	43.2
		2nd	71	28.4
		3rd	42	16.8
		4th	25	10
		>4	4	1.6
4	Number of under five children in the household	1	205	82
		2	42	16.8
		3	3	1.2

5.2 Socio demographic and socio economic variables of mother or caregivers of having under five children

A total of 250 participants (care giver) with response rate were 100% among those age of care giver 164(65.6%) was between 25-35 154(61.65%0 were Muslim and 237 was Gurage. 71(28.4%) level of education of care giver was Illiterate.140 (56%) occupation of care giver was housewife. 227(90.8%0 Relation of care giver to children was mother and 201(80.4%) martial status was married and from those monthly income was >300 were 99(39.1%) and 222(88.8%) were family size of <5

Table 2 socio demographic variable and socio economic characteristics of mother or care giver

1	Age of care giver	15-24	48	19.2
		25-35	164	65.6
		>35	38	15.2
2	Religion	Muslim	154	61.6
		Orthodox	82	32.8
		Protestant	14	5.6
3	Ethnicity	Gurage	237	94.8
		Oromo	5	2
		Amhara	8	3.2
4	Level of education of caregiver	Illiterate	71	28.4
		Elementary school	70	28
		Secondary school	61	24.4
		College	37	14.8
		University	11	4.4
5	Occupation of caregiver	Gov't employee	38	15.2
		Private employee	13	5.2
		Housewife	140	56
		Merchant	41	16.4
		Other	18	7.2

6	Relation of caregiver to client	Mother	227	90.8
		Father	6	2.4
		Grandmother	14	5.6
		Other	3	1.2
7	Marital status	Married	201	80.4
		Divorced	29	11.6
		Widowed	18	7.2
		Others	2	0.8
8	If married, job of husband/ wife	Gov't employee	59	29.4
		Private employee	28	13.9
		Housewife	5	2.5
		Merchant	57	28.4
		Other	52	25.8
9	Level of education of husband/ wife	Illiterate	47	18.8
		Elementary school	70	28
		Secondary school	32	12.8
		College	62	24.8
		University	39	15.6
10	Monthly income	<500	10	4
		500-1000	50	20
		1001-3000	91	36.4
		>3000	99	39.6
11	Family size	Less than or equal to five	222	88.8
		Greater than five	28	11.2

5.3 Knowledge of Mothers (care givers) about acute diarrhea and its management

A total of 250 participants (care giver) with response rate were 100 % for these there was twenty three knowledge related question. From the total 250 care givers 158(63.25) of them has good knowledge about acute watery diarrheal disease case management on ORS utilization. With confidence interval was (58.1-68.6)

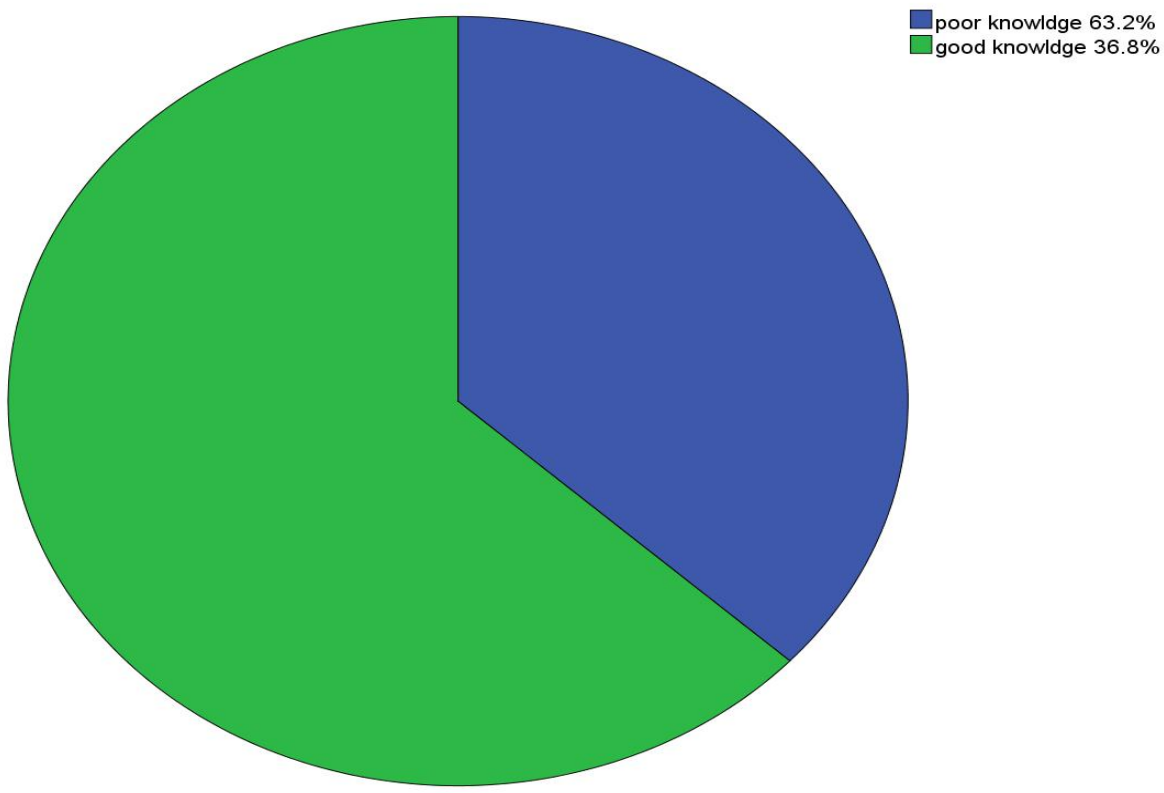

Fig.1.knowledge of mothers (care givers) on utilization of oral rehydration therapy for acute diarrheal disease case management for under- five children at WKUSTH Gurage zone, south west, Ethiopia, 2022

5.4. Attitude of mothers towards ORS

A total of 250 participants (care giver) with response rate were 100% there were four attitude related quotations from those 250 women 160(64%) was positive attitude towards ORT with confidence interval of 58.1-70

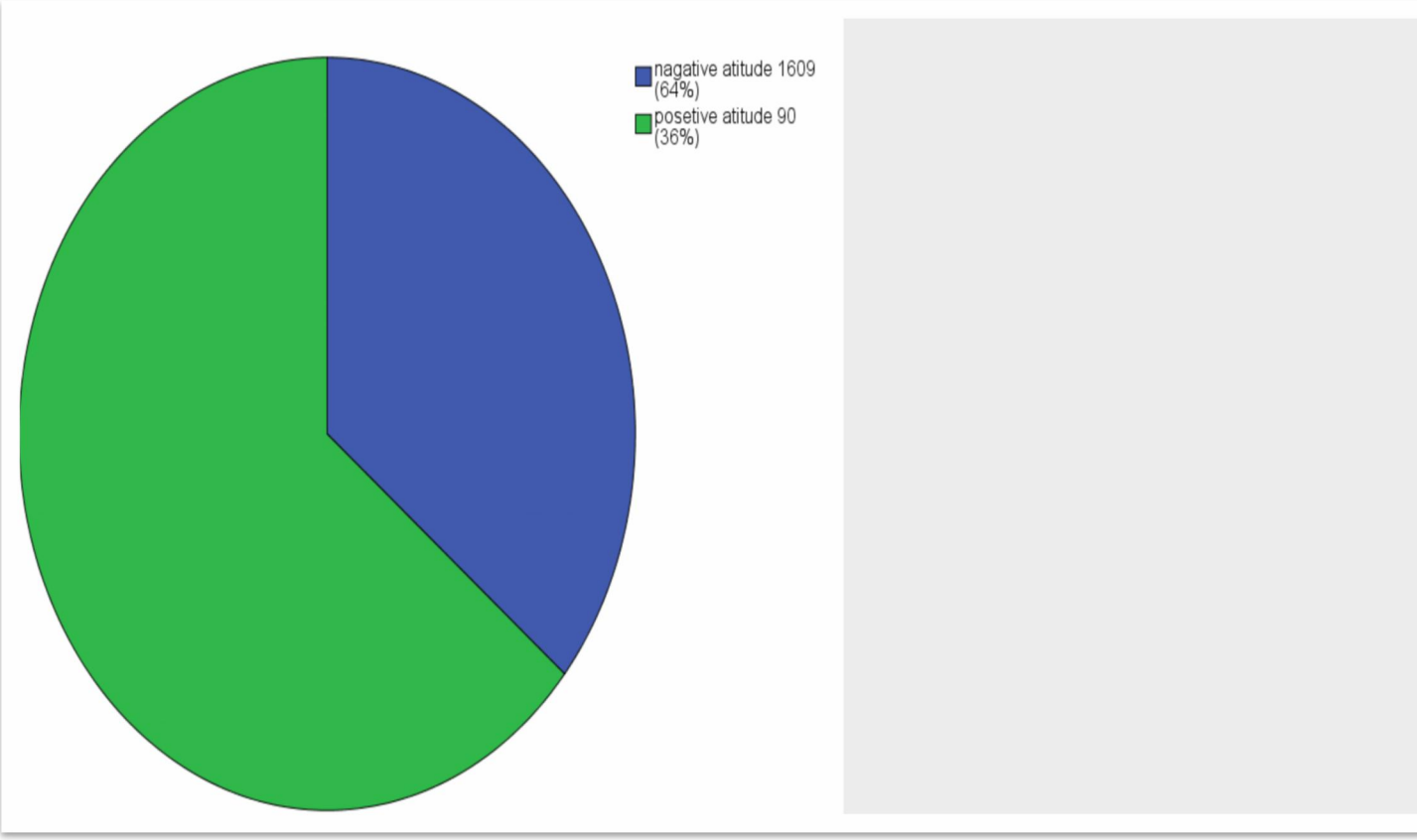

Fig.2 attitude of mothers (care givers) on feeling of oral rehydration therapy for acute diarrheal disease case management for under- five children at WKUSTH Gurage zone, south west, Ethiopia, 2022

5.5. The Practice of mothers on diarrhea management/ORS use

Among A total of 250 participants (care giver) with response rate were 100% Out 28 of practice related question asked to caregivers of under-five children about ORS utilization for Out the management of acute watery diarrhea from the total 250 care givers 138(55.2%) of them has

good practice about acute watery diarrheal disease case management on ORS utilization with confidence interval of 47.6-61.5

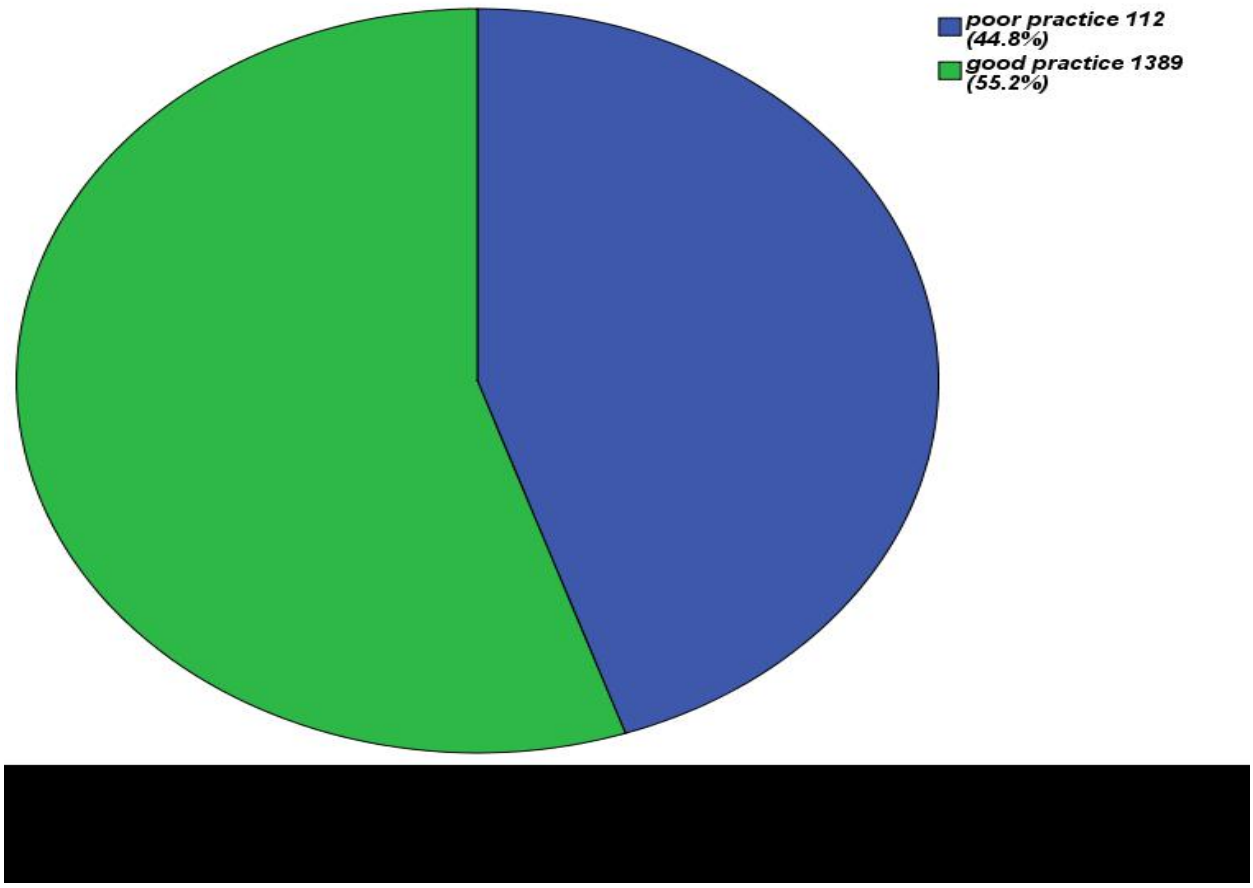

Fig.3.practice of mothers (care givers) on utilization of oral rehydration therapy for acute diarrheal disease case management for under- five children at WKUSTH Gurage zone, sout

6. DISCUSSION

6.1 knowledge of mother

Knowledge about diarrhea and its managements is important because it leads to early referral of sick children but failure to refer such results in major complication and eventually death children From This study it was found that 158(63.2%) of care givers has good knowledge about ORS utilization by mothers for treating diarrhea when compare to study done in Nigeria, Pakistan and Ghana it was low about 82%, 81.7%, 73.3% respectively of them had good knowledge about ORS utilization for treatment of diarrhea those research recommended that Provision of adequate health services and prompt treatment of infections as ways to prevent diarrheal in children. Improved hygiene standards and hand washing practices are feasible strategies in preventing childhood diarrhea thereby ameliorating childhood morbidity and mortality from infectious diseases. Hence, educational programs on hand washing and personal hygiene practices should be prioritized in all ANC and postnatal care outlet and fare when compares to study done in dire dawa and Indonesia 65.41% and 65.4% respectively

6.2 attitude of mother

From these study we was found that 160(64%) was positive attitude towards ORT with ORS utilization by mothers for treating diarrhea but it was low feeling on ORS toward ORT when compare to research was done in Pakistan, Kenya and Nepal 86%.85%, 89%, 71.1% of them was positive attitude towards ORS respectively but it our study was good when compares to research done in dire dawa attitude of mother towards ORS to use ORT was 54.9% of them had negative attitude

6.3 practice of mother

From our research we found that 138(55.2%) of them has good practice about acute watery diarrheal disease case management on ORS utilization it was low when compares to research done in Pakistan 68% of them had good practice and it was faire when compares to research done in Indonesia 53.8% of them had good practice but our research result was satisfactory when compares to research done in Nigeria and Gahanna 75.55% and 60% of them had poor practice respectively

6.4 Strength of the and study Limitation of the study

Strength of the study

- 100% response rate of Our study participant with full commitments
-

Limitation of the study

- It is possible that some caregivers could not remember (recall bias) the details. This may affect the reliability and validity of the data collected.
- Another limitation of this study is that practice of mothers was assessed alone by asking practice question rather than observing while mothers were demonstrating.
- Presence of another research group that makes those mother feels bury during data collection

7. CONCLUSION

According to WHOM definition criteria the present study revealed majority of mothers (caregivers) had poor knowledge on ORS for diarrheal management. In the other hand mothers (care givers) having fewer than five children had poor attitude. The interesting finding on this study was mother or care giver having fewer than five children was good practice

7.1 RECOMMENDATION

Since most of the diarrheal cases were treated at home, mothers (care givers) need to have a basic knowledge about the management and practice of ORS preparation for under –five diarrhea control, to shorten its duration, severity and prevalence of this life– treating under– five disease so, based on the finding from the study the following recommendation was made

- **At health extension level**

- Health extension workers should improve on Home based management of oral rehydration solution in case of acute diarrhea should clearly be percolated in the community through home visits and demonstration, not only the visit to the health facility to enhance the reduction in morbidity and mortality of under-fives
- Community-based awareness campaigns on home management of childhood diarrhea with ORS should be addressed in rural areas especially areas where access to pediatric care are not prevalent

- Hand washing practices before and after meal or after changing a child's soiled diaper should be encouraged through the use of effective visual aids to demonstrate the transmission of endemic pathogen into the mouth through contaminated hands.

- **At public health and government level**

- There is a need for public health educational interventions by women 'abut KAP and Health Promotion efforts should target these areas to further improves the Management of under- five diarrheal diseases to minimize mortality and Morbidity cases.
- The government at all levels in conjunction with relevant pharmaceutical agencies should ensure regular provision and prompt availability of ORS sachets in all health care settings. This would promote easy access and optimal use of ORS among nursing mothers.
- The media and hospital posters can be used to effectively increase awareness on the management of childhood diarrhea with ORS among nursing mothers.

- **At health providers level (specially nurse)**

- The health care workers should therefore spend more time to emphasize on the need of ORS for the prevention of dehydration due to diarrhea and awareness creation should be done for correct preparation of ORS solution.
- Health care provider's activity should also focus as to why and when it is to be used and how correctly it can be used. These activities need to be regular and continuous so that morbidity and mortality due to Diarrheal disease are effectively prevented.
- Health care providers on pediatric care should to be trained on the management of diarrhea in children. This approach would guarantee effective dissemination of correct information to nursing mothers during post natal visits concerning diarrheal disease as well as the benefits of using ORS to manage childhood diarrhea

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9. Annex

Verbal consent form before conducting interview

Hello, how are you we are working in the research team of Wolkite University. I would like to interview you a few questions on your knowledge, attitude and practice of mother those are having under five children to wards ORS for diarrheal treatment . The objective of this study is to Assess Knowledge, attitude and practice of mothers (care givers) towards oral rehydration solution for diarrhea treatment among under five children at WKUSTH Gurage zone, south west, Ethiopia, 2022

Your cooperation and willingness for the interview is helpful in identifying problems related to the subject matter. Your name will not be written in this form. All information that you give will be kept strictly confidential. Your participation is voluntary and you are not obliged to answer any question you do not wish to answer. If you are not still discomfort with the interview, please feel free to drop it any time you want. Do I have your permission to continue?

If yes, continue to the next page

If no, ask the reason and skip to the next respondents

Date of interview	Time started	Time finished	Supervisors name	signature
.....	.....	.....	.....	.....

SOCIO-DEMOGRAPHIC CHARACTERISTICS 0F CHILDREN WKUSTH WELKITA SOUTH WEST ETHIOPIA

No.	Variable		Yes	No
1	Age of client	<12 months		
		12-23 months		
		24-35 months		
		36-47 months		
		48-59 months		
2	Sex of client	Male		
		Female		
3	Birth order of client	1st		
		2nd		
		3rd		
		4th		
		>4		
4	Number of under five children in the household	1		
		2		
		3		

SOCIO-DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS 0F PARTICIPANT IN WKUSTH WELKITA SOUTH WEST ETHIOPIA

5	Age of caregiver	15-24		
		25-35		
		>35		
6	Religion	Orthodox		
		Muslim		
		Protestant		

7	Ethnicity	Amhara		
		Oromo		
		Tigre		
8	Level of education of caregiver	Illiterate		
		Elementary school		
		Secondary school		
		College		
		University		
9	Occupation of caregiver	Gov't employee		
		Private employee		
		Housewife		
		Merchant		
		Other		
10	Relation of caregiver to client	Mother		
		Father		
		Grandmother		
		Other		
11	Marital status	Married		
		Divorced		
		Widowed		
		Others		
12	If married, job of husband/ wife	Gov't employee		
		Private employee		
		Housewife		
		Merchant		
		Other		
13	Level of education of husband/ wife	Illiterate		
		Elementary school		
		Secondary school		
		College		

		University		
14	Monthly income	<500		
		500-1000		
		1001-3000		
		>3000		
15	Family size	Less than or equal to five		
		Greater than five		

Knowledge of mothers about diarrhea and its management of participant in WKUSTH Wolkite south west Ethiopia

No	Variable	Yes	No
1	Frequent passage of watery stool		
2	Frequent passage of non-watery stool		
3	Blood in stools		
4	No idea		
5	Perception of diarrhoea as a serious childhood illness		
6	Poor hygiene		
7	Food contamination		
8	Water contamination		
9	Teething		
10	Intestinal parasite		
11	Flies		

	No idea		
13	Understanding of danger signs of diarrhoea		
14	Becoming weak or lethargic		
15	Repeated vomiting		
16	Fever and blood in stool		
17	Marked thirst of water		
18	Poor feeding		
`19	Knowing of ORS		
20	Purposes of ORS To stop diarrhoea		
21	To replace fluid lost by diarrhoea		
22	To stop vomiting & fever		
23	I don't know		

Attitude of mothers (care givers) towards oral rehydration therapy for acute diarrheal disease case management for under- five children in WKUSTH Wolkite south west Ethiopia

No	Variable	yes	No
1	ORS can be used in treatment of diarrhoea		
2	Other homemade fluids can be used in treatment of diarrhoea		
3	Not feeding a child with diarrhoea will worsen the disease		
4	Diarrhoea can be treated at home with salt and sugar solutions		

Practice of mothers (care givers) on utilization of oral rehydration therapy for acute diarrheal disease case management for under- five children in WKUSTH Wolkite south west Ethiopia

No	Variable	Yes	No
1	Breast milk only		
2	Breast milk + infant formula		
3	Complementary feeding only		
4	Complementary feeding plus breast milk		
5	Normal family diet		

6	Caregivers who have under five children attacked by diarrhoea			
3	Homemade fluid given			
4		Sugar and salt solution		
5		Salt with water		
6		Rice water		
7		Soup		
8		Juice		
9	Use of ORS to treat a child attacked by diarrhoea			
10		Mixed with 0.5 L water		
11		Mixed with 1 L water		
12		Mixed with 2 L water		
13				
14		Friend/ neighbor/ relative		
15		Health provider		
16		Radio		
17		Reading instruction		
18		Once a day		-
19		2-3 times a day		
20		4-5 times a day		
21		>5 times a day		
22		After passing every loose stool		
23	24 hours			

24	48 hours		
25	Previously boiled and cooled water		
26	Drinking water		
27	Any available water		

ቃለመጠይቅከማድረግዎበፊትየቃልስምምነትቅጽ

ሰላምእንዴትነህ/ነሽበወልቂጤዩኒቨርሲቲየምርምርቡድንውስጥእየሰራንነው።ከአምስትአመትበታችየሆኑልጆችላይእናቶችንወይ ምአሳዳጊወችንስለተቅማጥህክምናእናስለአአርኤስጥቅምናአጠቃቀምስለእርስዎእውቀት፣አመለካከትእናተግባርጥቂትጥያቄዎችን ልጠይቅዎትእፈልጋለን።የዚህጥናትአላማእናቶች (ተንከባካቢዎች)
ከአምስትአመትበታችለሆኑህጻናትኦአርኤስመፍትሄንበተመለከተበ WKUSTH ጉራጌዞንደቡብምዕራብኢትዮጵያ 2022 ያላቸውንእውቀት፣አመለካከትእናተግባርመገምገምነው።

የእርስዎትብብርእናለቃለመጠይቁፈቃደኛነትከርዕሰ-ጉዳዩጋርየተያያዙችግሮችንለመለየትይረዳል.
ስምህ/ስምሽበዚህቅጽአይጻፍም።ሁሉምየሚሰጡትመረጃበጥብቅበሚስጥርይጠበቃል።የእርስዎተሳትፎበፈቃደኝነትነውእናእር ስዎለመመለስየማይፈልጉትንማንኛውንምጥያቄለመመለስአይገደዱም.
በቃለመጠይቁአሁንምካልተመቸዎት፣እባክዎንበፈለጉትጊዜለመልቀቅነፃነትይሰማዎ።ለመቀጠልፍቃድህአለኝ?

አዎከሆነ፣ወደሚቀጥለውገጽይቀጥሉ

አይደለምከሆነምክንያቱንይጠይቁእናወደሚቀጥለውምላሽሰጪይዝለሉ።

የቃለመጠይቁቀንየጀመረበትጊዜየተጠናቀቀውየተቆጣጣሪዎችስምፊርማ

....

SOCIO-DEMOGRAPHIC CHARACTERISTICS 0F PARTICIPANT IN WKUSTH WELKITA SOUTH WEST ETHIOPIA

No.	Variable	አዎ	አይደለም

1	የታማሚዉእድሜ	<12 ወር		
		12-23 ወር		
		24-35 ወር		
		36-47 ወር		
		48-59 ወር		
2	የታማሚውፆታ	ወድ		
		ሴት		
3		1		
		2		
		3		
		4		
		>4		
4	ከቤትዉስጥእድሜያቸዉከአምሰስትበታችየሆኑልጆችብዛት	1		
		2		
		3		
5	የአሳዳጊ/ የእናቱእድሜ	15-24		
		25-35		
		>35		
6	ሀይማኖት	ኦርቶዶክስ		

		ሙስሊም		
		ፕቴ		
7	ብሄር	አማራ		
		ኦሮሞ		
		ትግሬ		
8	የአሳዳጊ/ የእናቱየትምህርትደረጃ	ያልተማረ		
		1-8l		
		9-12		
		College		
		University		
9	የአሳዳጊ/ የእናቱየስራሁኔታ	የመንግስትሰራተኛ		
		የግልሰራ		
		የቤትእመቤት		
		ነጋዴ		
		ሌላ		
10	የታማሚዉናየአስታማሚውቁርኝት	እናት		
		አባት		
		አያት		
		ሌላ		
11	የትዳርሁኔታ	ያገባ		

		የፈታ/ች		
		የሞተበት/ባት		
		ሌላ		

knowledge of mothers about diarrhoea and its management ofparticipant in WKUSTH Welkita south west Ethiopia

ቁ			እስማማለሁ	አልስማማም
1	Dየተቅማጥፍቺ	ተከታታይዉሀማየሆነሰገራ		
		ተከታታይዉሀማያልሆነሰገራ l		
		ደምየቀላቀለሰገራ		
		አረንጓዴሰገራ		
		ለሀጭ /ንፍጥየቀላቀለሰገራ		
		ሀሳብየለኝም		
2	ተቅማጥከባድየሆነየህፃናትበሽታነዉለህታምናለህ	አዉ		
		አይ		
3	የተቅማጥመንስኤ	የንፅህናጉድለት		
		የምግብክለት		
		የውሃክለት		
		Teething		
		የሆድትላትል		
		በረሮዎች		

		ሀሳብየለኝም		
4	ከባድ/አደገኛየተቅማጥምልክቶችንተረድተሀል/ሻል	አዉ		
		አይ		
5	ከባድ/አደገኛየተቅማጥምልክቶችንመዘርዘርትችላለህ/ትችያለሽ	በጣምመድከምናልፍስፍስማለት		
		ተደጋጋሚየሆነማስመለስ		
		ትኩሳትናደምየቀላቀለሰገራ		
		በጣምበዉሀመጠማት		
		መጥፎሰሜት		
6	ORS ታውቃለህ/ታውቂለሽ	አዉ		
		አይ		
7	የ ORS ጠቀሜታ	ተቅማጥንለማቆም		
		በተቅማጥየወጣዉንምግብለመተካት		
		ትኩሳትንናማስመለስንለማቆም		
		አላቅም		

Attitude of mothers (care givers) towards oral rehydration therapy for acute diarrheal disease case management for under- five children in WKUSTH Wolkite south west Ethiopia

No	Variable	እስማማለሁ	አልስማማም	ገለልተኛ
1	ORS ለተቅማጥህክምናይሆናል			

2	ሌላከቤትየሚሰሩምግቦችለተቅማጥህክምናይረዳሉ			
3	ህፃናትበሚያስቀምጣቸውሰአትአለመመገብበሽታውንያባብሰዋል			
4	ተቅማጥንበቤትዉስጥበጨዉናበሌሊምነገርይታከማል			

Practice of mothers (care givers) on utilization of oral rehydration therapy for acute diarrheal disease case management for under- five children in WKUSTH Wolkite south west Ethiopia

No	Variable		yes	No
1	የአመጋገብልማድ	የጡትወተትብቻ		
		የጡትወተትናየፋብሪካወተት		
		አጋሽምግብብቻ		
		አጋሽምግብናየጡትወተትብቻ		
		የተገኘዉንየቤትምግብ		
		አጠቃላይ		
2	ከአምስትአመትበታችበተቅማጥየተጠቃልጅአሎት	አዉ		

		አይ		
3	ከቤትየተሰራምግብ/ፈሳሽነገርትሰጣለችሁ	አዉ		
		አይ		
		አጠቃላይ		
4	ለሚያስቀምጠዉሀየንከቤትተሰርቶየሚሰጠዉምግብ/ፈሳሽነገር	Sugar and salt solution		
		ጨዉበወሀ		
		የሩዝዉሀ		
		ሾርባ		
		ጁስ		
5	ORS ተቅማጥለያዘዉሀየንህክምናይጠቅማል	አዉ		
		አይ		
		አጠቃላይ		
6	ORS አዘገጃጀት	0.5 ሊዉሀበመደባለቅ		
		1ሊዉሀበመደባለቅ		
		2 ሊዉሀበመደባለቅ		
		አጠቃላይ		
7	ORS ለማዘጋጀትዋነያውየመረጃምንጭ	ጓደኛ/ጎረቤት/		
		የጤናሰራተኛ		
		ራድዮ		
		መፃፎችንበማምበብ		

8	ምንያህልጊዜ ORS እንሰጣለን	በቀንአንዴ		-
		2-3 ጊዜበቀን		
		4-5 ጊዜበቀን		
		>5 ጊዜበቀን		
		ሁልጊዜካስቀመጠዉበኋላ		
9	Duration of ORS before discredited	24 ሰአት		
		48 ሰአት		
		72 ሰአት		
10	ORS ንለመበጥበጥየምንጠቀመውዉሀ	ቀድሞየፈላናየሞቀዉሀ		