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Factors Contributing Gestational Diabetic Among Pregnant Mothers Attending Benadir Hospital Mogadishu-Somalia

Samira Isack Aden **Maryan Omar Ali** **Fardowsa Hassan Ahmed**

Jamhuriya University of Sciences and Technology (JUST)

Department of Medicine and Health Sceience

Abstract

Background: The Median GDM figures vary from 6 and 13 %. Recent estimates in the United States show that GDM complicates up to 9 % of all deliveries. The latest overall prevalence of GDM is measured at 11 % in Central and South America.

Objectives: The main objectives were to examine the factors contributing gestational diabetic mellitus among pregnant mothers in Benadir Hospital.

Methodology: The Research design was descriptive cross-sectional study to identify factors contributing gestational diabetic among pregnant mothers attending Benadir hospital. Data collection tools of this study was quantitative (questionnaires) and analyzing by using SPSS version (20.0) and present in frequency tables & figures.

Result: The results we found based on the respondents by the overweight mother as indicated that the 34% of the participants they told overweight mother was a contributing factor gestational diabetic among pregnant mothers. while the strongly agree 20 % of the participants while natural agree, 20% participant while disagree 22% participant. While strongly disagree 4% participant, this means the majority of the respondents were emphasis overweight mother can increase the factors contributing gestational diabetic among pregnant mothers.

Conclusion: Overweight and obesity were common problems with an increasing worldwide incidence.

Key words: gestational diabetic, antenatal care, human placental lactogen, body mass index.

Background

The Median GDM figures vary from 6 and 13 %. Recent estimates in the United States show that GDM complicates up to 9 % of all deliveries. The latest overall prevalence of GDM is measured at 11 % in Central and South America.

Objectives: The main objectives were to examine the factors contributing gestational diabetic mellitus among pregnant mothers in Benadir Hospital.

Research methodology

Research design

A quantitative approach was used in order to find numerical based data about the factors contributing gestational diabetic among pregnant mothers in Benadir hospital. A cross sectional design was used in this study for the suitability of the study design, the reason we chose this method is because this approach is cheap.

Study area

The study area of this study was Benadir hospital in wadajir district that one of biggest maternal and child hospital in Mogadishu Somalia. Benadir hospital is admitting many mother and child who suffer different disease.

Target population

The study population was involved 50 participants of mother who have gestational diabetic and admitted Benadir hospital during our data collection. During the period of study from 14 may to 5 June by collecting data from women who were risk group of gestational diabetics in Benadir hospital.

Sample size through our presence in the hospital, there were pregnant women gestational diabetic and Women who exposed complication of gestational diabetic. Our sample size consists of 50 participants.

Sample procedure

The study was used non-probability sampling method.

Date collection tool

Data collection tools of this study; questionnaire was used as date collection method in order to collect data from target population or respondents of this investigation.

Data analysis

The researcher was employed Descriptive statistics and the data was analyzed by using statistical package for social science (SPSS) version (20.0).

Ethical considerations

The researcher received permission latter from Jamhuriya University of science and technology as well as Benadir hospital to be allowed to carry out their research and respondents of study show respect full and respect when ask questions.

Results

4.1 RESPONDENT BY FREQUENCY OF MATERNAL VISIT TO ANC

Frequency visit for ANC	Frequency	Percent%
Yes	42	84%
No	8	16%
Total	**50**	**100%**

Table 4.1 Respondent by frequency to maternal visit to ANC

4.2 RESPONDENT BYHAVE OVERWEIGHT MOTHER

Have overweight mother	Frequency	Percent%
Agree	17	34%
Strongly Agree	10	20%
Natural Agee	10	20%
Disagree	11	22%
Strongly Disagree	2	4%
Total	**50**	**100%**

Table 4.2 Have overweight mother by respondent

4.3 RESPONDENT BY HAVE PREVIOUS GESTATIONAL DIABETIC

Previous GD	Frequency	Percent%
Agree	10	20%
Strongly Agree	32	64%
Disagree	7	14%
Strongly Disagree	1	2%
Total	**50**	**100%**

4.4 RESPONDENT BY HAVE FAMILY HISTORY OF GESTATIONAL DIABETIC

Family history	Frequency	Percent%
Agree	26	52%
Strongly Agree	5	10%
Natural Agee	4	8%
Disagree	11	22%
Strongly Disagree	4	8%
Total	**50**	**100%**

Table 4.4 Respondent by Have family history of gestational diabetic

4.5 RESPONDENT BY HAVE THE MOTHER OVER AGE (ADVANCED AGE).

Advanced age	Frequency	Percent%
Agree	25	50%
Strongly Agree	8	16%
Natural Agee	2	4%
Disagree	10	20%
Strongly Disagree	5	10%
Total	**50**	**100%**

Table 4.5 Respondent by Have mother over age (advanced age)

4.6 RESPONDEBT BY IF THE MOTHER HAS SUFFICIENT KNOWLEDGE

If have sufficient knowledge	Frequency	Percent
Agree	14	28%
Strongly Agree	5	10%
Natural Agee	13	26%
Disagree	10	20%

Strongly Disagree	8	16%
Total	**50**	**100%**

4.7 RESPONDENT BY HAVE PREVIOUSLY HAD A BABY WHICH WEIGHT MORE THAN 4KG

Previous baby<4Kg	Frequency	Percent%
Agree	10	20%
Strongly Agree	22	44%
Natural Agee	3	6%
Disagree	11	22%
Strongly Disagree	4	8%
Total	**50**	**100%**

Table 4.7 Respondent by Have previously had a baby which weight more than 4kg

4.8 RESPONDENT BY HAVE SUFFERED FROM TOO AMNIOTIC FLUID IN PREVIOUS PREGNANCY

Have suffered from too	Frequency	Percent%
Agree	13	26%
Strongly Agree	10	20%
Natural Agee	18	36%
Disagree	6	12%
Strongly Disagree	3	6%
Total	**50**	**100%**

Table 4.8 Respondent by have suffered from too amniotic fluid in previous pregnancy

4.9 RESPONDENT BY BIG BABY

Big baby	Frequency	Percent%
Agree	18	36%
Strongly Agree	16	32%
Natural Agee	5	10%
Disagree	8	16%
Strongly Disagree	3	6%
Total	**50**	**100%**

Table 4.9 Respondent by Big baby

4.10 PRETERM BIRTH BY RESPONDENT

Preterm birth	Frequency	Percent%
Agree	22	44%
Strongly Agree	4	8%
Natural Agee	6	12%
Disagree	10	20%
Strongly Disagree	8	16%
Total	**50**	**100%**

4.11 RESPONDENT BY MACROSOMIA

Macrosomia	Frequency	Percent%
Agree	15	30%
Strongly Agree	18	36%
Natural Agee	5	10%
Disagree	10	20%
Strongly Disagree	2	4%
Total	50	100%

Table 4.11 Respondent by macrosomia

4.12 RESPONDENT BY STILL BIRTH

Still birth	Frequency	Percent%
Agree	8	16%
Strongly Agree	21	42%
Natural Agee	2	4%
Disagree	11	22%
Strongly Disagree	8	16%
Total	**50**	**100%**

Table 4.12 Respondent by still birth

4.13 RESPONDENT BY CAESAREAN SECTION

Caesarean section	Frequency	Percent%
Agree	21	42%
Strongly Agree	9	18%
Disagree	10	20%
Strongly Disagree	10	20%
Total	**50**	**100%**

Table 4.13 Respondent by Caesarean section

4.14 OBESITY AND TYPE 2

Obesity and type2	Frequency	Percent%
Agree	19	38%
Strongly Agree	6	12%
Natural Agee	3	6%
Disagree	13	26%

Strongly Disagree	9	18%
Total	**50**	**100%**

Conclusion

The results we found based on the respondents by the overweight mother as indicated that the 34% of the participants they told overweight mother is a contributing factor gestational diabetic among pregnant mothers. while the strongly agree 20 % of the participants while natural agree, 20% participant while disagree 22% participant. While strongly disagree 4% participant, this means the majority of the respondents were emphasis overweight mother can increase thefactors contributing gestational diabetic among pregnant mothers.

The results we found based on the respondents by Big baby indicated that the agree 36% of the participants they told Big baby may increase the factors contributing gestational diabetic among pregnant mothers. while strongly agree 32% of the participants while Natural agree 10% of the participant while strongly disagree 6% of the participant. while disagree 16% of the participant. this means the majority of the respondents were emphasis Big baby may the factors contributing gestational diabetic among pregnant mothers.

RECOMMENDATION

1. Raise awareness of the mothers to visit antenatal care to during pregnancies to detect early their problem.
2. The study recommends health canters should recruit well trained health care providers in clinical and maternities to in decrease factors contributing gestational diabetic

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Factor Associated With Abortion Among In Reproductive Age women At Sos Hospital Mogdisho-Somalia Hospital Based Study

Sagal Abdihamid * Naima Abdullahi * Hafsa Abdi *
Amina Mohamed Osman* Yahye Sheikh Abdulle Hassan
Jamhuriya University of Science and Technology (JUST)
Faculty of Medicine and Health Science
Department of Nursing

Abstract

Globally a large number of women die due to birth and pregnancy-related complications and of the total, nearly 99.0% of maternal death occurs in low- and middle-income countries.

This study aim to determine factors association with abortion in women reproductive age among attending in SOS hospital Mogadishu-Somalia,

Study design was descriptive cross-sectional study design, study area was SOS hospital, Target population of the study was women reproductive age (15-45) attending in SOS hospital, Data were collected using a structured Questionnaire and contains questions with a simple language that was easily to be understood by the respondents for starting the easier questions, data was analyzed by SPSS version 20.

The majority respondent 37% of respondent were between the age of 21-30 years ,followed by 27%were aged between 30-35 years and 25% were aged between 15-20 years and rest 9% were aged above 40years.As the study founded the majority 20(27%) illiterate matheres ,and 19(26%) there mather we visity MCH two time during pregnant.18(25%) there mather we visity MCH one time during pregnant,9(12%) there visity MCH three time during pregnant and the rest

The study was conclude the majority respondent 27(37.5%) of respondent were between the age of 21-30 years.most of responden 31(43%) were illiterate .

Background

Abortion is one of the leading causes of maternal death. A recent study based on 115 countries in the period of 2003 to 2009 reported 7.9% of maternal deaths due to abortion. The number of deaths due to abortion may be even higher, but there is a chance of under-reporting. Among many factors, one of the most important contributing factor to maternal mortality in low- and middle-income countries is unsafe abortion. Globally a large number of women die due to birth and pregnancy-related complications and of the total, nearly 99.0% of maternal death occurs in low- and middle-income countries.(Yogi et al., 2018). The World Health Organization (WHO) estimates that worldwide 210 million women become pregnant each year and that about two-thirds of them, or approximately 130 million, deliver live infants. Abortion rates in four of Asia's five sub-regions (Eastern, Southern, Southeastern and Western) are close to the overall regional rate; the rate in Central Asia is higher (42 per 1,000 women). The proportion of all pregnancies in Asia ending in abortion each year, estimated at 27% in 2010–2014, has remained roughly the same since 1990–1994; by sub-region, the proportion ranges from 22% in Western Asia to 33% in Eastern Asia. Abortion is an important cause of morbidity and mortality among mothers in reproductive age, especially in developing countries.

Objectives

To determine factors association with abortion in women reproductive age among attending in SOS hospital Mogadishu-Somalia

Methodology

Research design and area

Study design was deceptive cross-sectional study designing to identify factor association with abortion in women reproductive age attending in SOS hospital.

Study area and population

This study was conducted at SOS hospital and

Target population of the study

Target population of the study was women reproductive age (15-45) attending in SOS hospital

Sample size

The sample size was calculated based on the following formula (Slovene's formula)

Slovene's Formula:

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

Where: n is sample size

N= total number population

E is a margin of error which is 5%

$$n = \frac{88}{1 + 88(0.05)2}$$

Sample size (n) is **72**

Sample procedure

The study was used purposive non probability sampling method to collect data from participants

Data collection methods and tools

Data were collected using a structured Questionnaire and contains questions with a simple language that was easily to be understood by the respondents for starting the easier questions. **Data analysis**

Statically analysis was carried out by using statistical package for the social science (SPSS) version 20 program

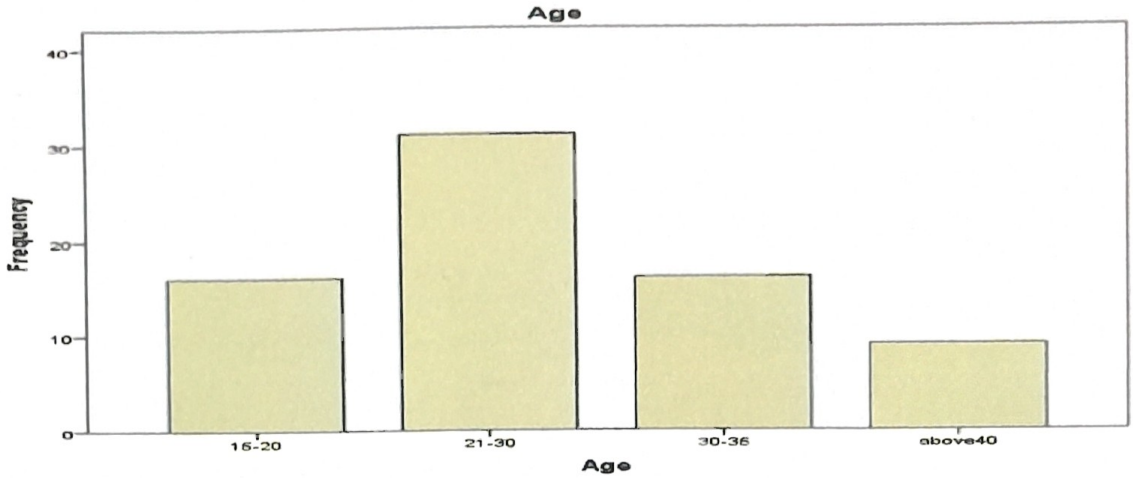
Ethical consideration

During the study period:

- The researcher explained the objective of the study to the participants and informed them to the study as voluntary, so this study has been carried on under the acceptance of the participants through confidentiality with of the names of the participants not to mark on the questionnaire.
- Good explanation of the questioner was given to the respondents before requesting to fill questioner

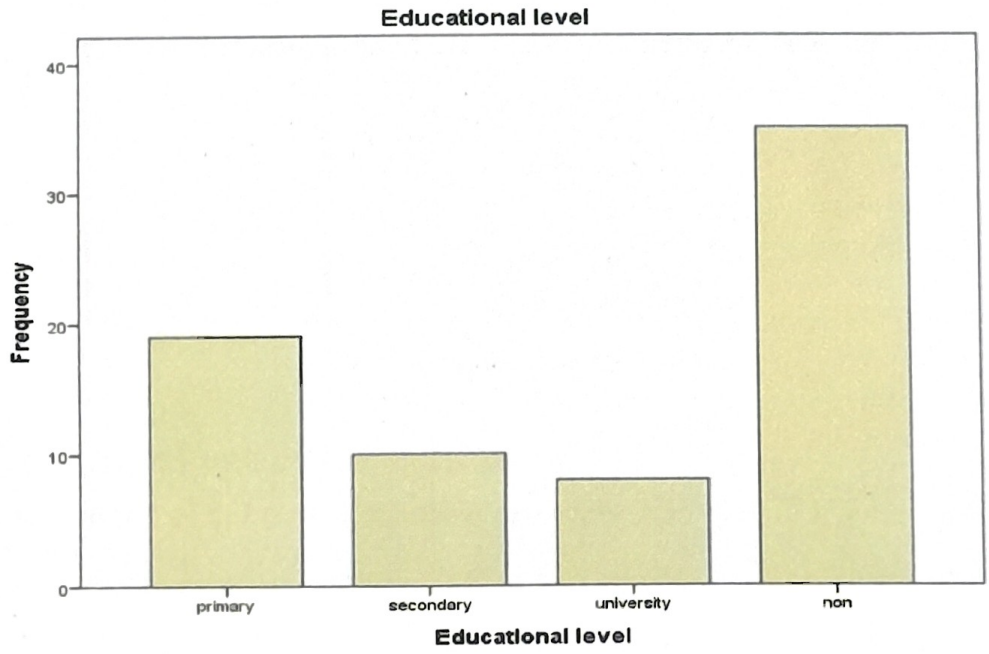
Results

Respondents by age



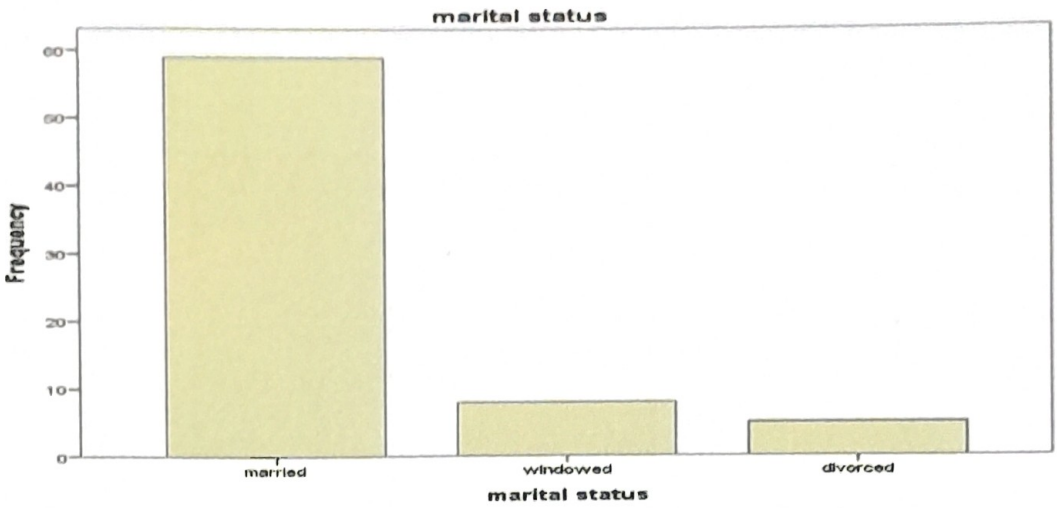
Education level of the respondent

Most of respondent of this study 31(43%) were illiterate and 18(25%) are primary level of education 12(16.7%) were secondary level and 11(15.3%) were university level of education.



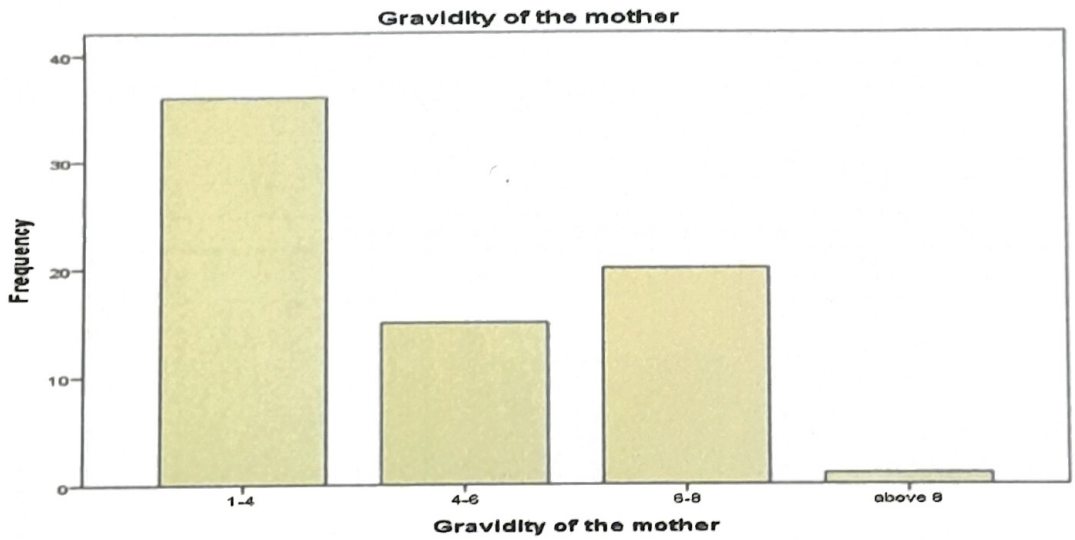
Marital status of the respondent

Most of the respondents of this study 56(77.8%) were married 10(13.9%) were windowed and rest 6(8.3%) are divorced.



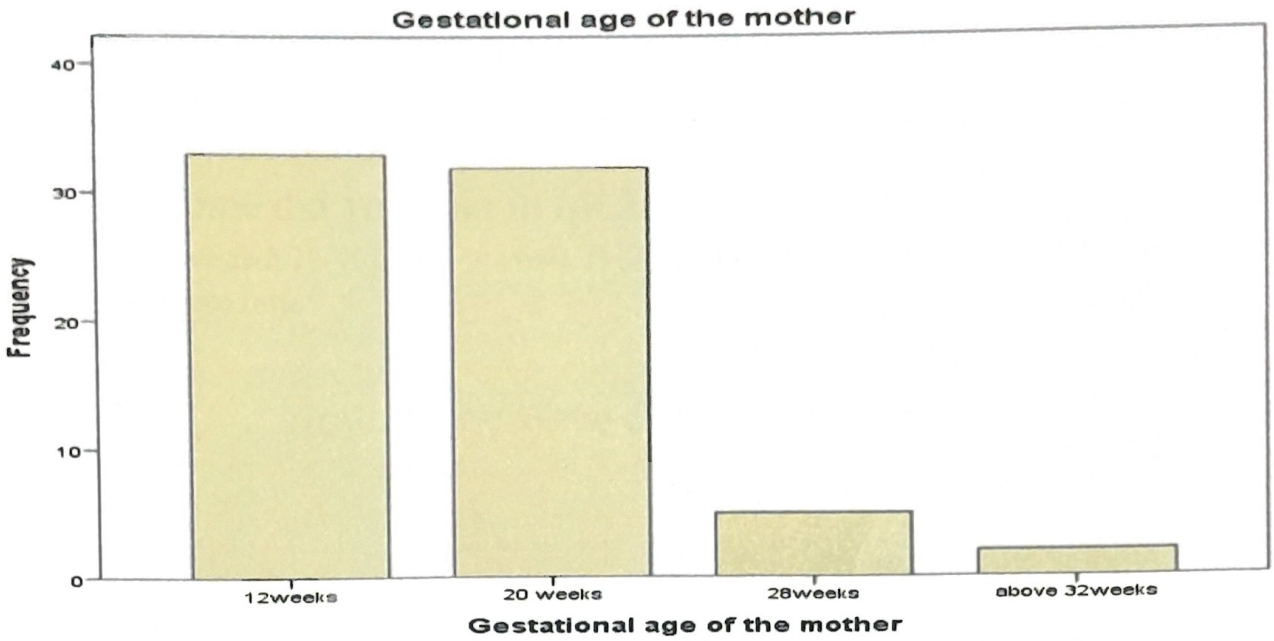
Gravidity of the mother

The majority of this study 35(48.6%) were 19 (26.4%) were 17(23.6%) and rest above 8 (1.4%)

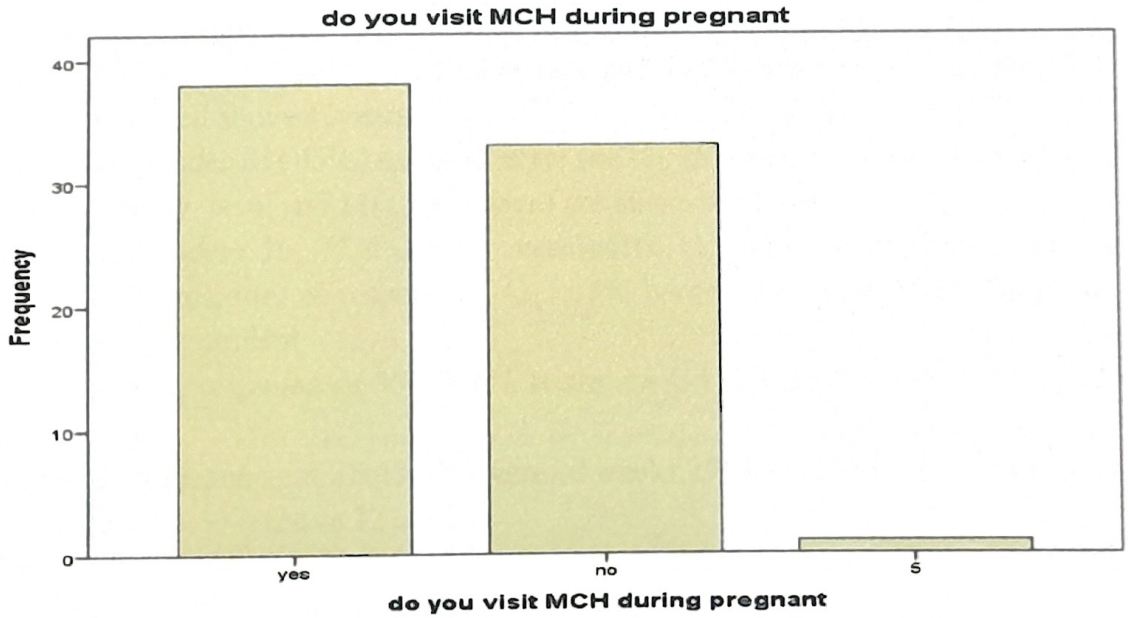


Gestational age of the mother

The majority of this respondent study are 35(48.7%) were 29 (40.3%) and 4 (5.5%) and the rest 4 (5.5%)



Do you visit MCH during pregnant



How many time did you visit in MCH

Majority of respondent 18(40) were one time 11(24.4%) were more three time 9(20%) were three time 7(15.6%) were two time

Discussion

The majority respondent 27(37.5%) of respondent were between the age of 21-30 years ,followed by20(27.8%)were aged between 30-35 years and18(25%) were aged between 15-20 years and rest7(9.7%) were aged above 40years

most of responden 31(43%) were illiterate and18(25%) were primary level of education 12(16.7%) were secondary level and 11(15.3%)were are university level

most of respondent 56(77.8%) were married10(13.9%) were windowed and rest 6(8.3%) were divorced the majority of respondent 42(58.3%)were house wife 21(29.2%)were business wife 9(12.5%)other or student

the mojority of responedent 35(48.6%)were are 1-4 ,19(26.4%) 6-8 ,and17(23.6%) 4-6, and the rest1(1.4%)

The mojority respondents 35(48.7%) were 20 weeks,29(40.3%)were 12 weeks, and 4(5.5%)28 weeks and the rest 4(5.5%) above 32 weeks

The mojority of study 45(62.5%) were visit MCH during pregnant and the rest of the study 27(37.5%) were not visit MCH during pregnant

Conclusion

The majority respondent 27(37.5%) of respondent were between the age of 21-30 years.

most of responden 31(43%) were illiterate .The mojority respondents 35(48.3%) were 20 weeks.

The mojority of study 45(62.5%) were visit MCH during pregnant.The majority of study 68(94.4%)were feeling a painfull.The respondent of the s The most respondent of study 39(54.%)

were accepting in legal.The majority of respondent 65(90.3%) the mather believe can couse severe bleeding .The majority of respondent 63(87.5%) the mather accepting taken heavy objective can couse abortion.

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Factors Associated With Postpartum Hemorrhage Among Pregnant Women Banadir Hosbital

Raasiya abdullahi mahamed[1], nasteexo ahmed mahamud[2], Mariam mahamed nor[3]

[1, 2, 3] Department of nursing, Faculty of medicine and health science

Jamhuriya University of Science & Technology, Mogadishu, Somalia

Abstract

PPH is generally defined as blood loss greater than or equal to 500 ml within 24 hours after birth. It may result from failure of the uterus to contract adequately (atony), genital tract trauma (i.e. vaginal or cervical lacerations), uterine rupture, retained placental tissue, or maternal bleeding disorders. Uterine atony is the most common cause and consequently the leading cause of maternal mortality worldwide

The aim of this study where to investigate factors associated with postpartum hemorrhage among pregnant women in Banadir hospital Mogadishu Somalia the specific objectives of this study were. To determine factors associated with uterine atony, to identify main causes of retained placenta of postpartum hemorrhage, to assess traumatic effects during pregnant Banadir hospital Hodan district.

Methodology used a descriptive cross-sectional design and the study area is Banadir hospital Mogadishu Somalia a total 80 respondents was purposively selected from 80 respondents the data were collected using structured questionnaire, the data was compiled and analyzed by using SPSS version 20.

The result we found based on the respondents by the factors associated uterine atony as indicate that the (27.5%) of the respondents were said yes, while the relationship between retained placenta and postpartum hemorrhage of the respondents where (43.8%).

Keywords –*postpartum hemorrhage maternal mortality treatment medical and surgical.*

Background of study

PPH is generally defined as blood loss extra than or equal to 500 ml within 24 hours after birth, while severe state is blood loss more than or equal to 1000 ml within 24 hours. Most cases of injury and death due to PPH occur in the first 24 hours following delivery and these are regarded as primary whereas any irregular or extreme hemorrhage from the birth canal happening between 24 hours and 12 weeks postnatal is regarded as secondary PPH. It may result from failure of the uterus to contract adequately (atony), genital tract trauma (i.e. vaginal or cervical tears), uterine rupture, retained placental tissue, or motherly hemorrhage disorders. Uterine atony is the most common cause and consequently the leading cause of maternal death worldwide [1]

The leading cause of PPH is thought to be uterine atony - the failure of the uterus to contraction completely after delivery of the placenta. PPH resulting from uterine atony is a major preventable cause of maternal morbidity and mortality, especially in developing countries (B-Lynch et al., 2006). Injury and death due to PPH are mainly avoidable through trained care during childbirth. However, delays in classifying hemorrhage, delays in transferring the woman to the suitable point of care, and delays in getting the recommended treatment all contribute to high rates of maternal death and morbidity due to PPH. In several poor countries, women may give birth without any help. Alternatively, a relative, a member of the public, or a traditional birth attendant (TBA), often without

formal health training, may attend births occurring in the community. These females may not have access to interventions to either prevent or treat PPH [2]

Methodology

Research design:

This study was adopted cross sectional design study

Study area:

This study was conducted at Banadir hospital

Target population

The study was comprised patient with postpartum hemorrhage groups who sought care seeking from Banadir hospital and their residence in Mogadishu district

Sample size

The sample size using the solver n's formula.

$$n = \frac{N}{1 + n(e2)}$$

$$n = 100$$

$$n = ?$$

$$e = 0.05$$

$$n = \frac{100}{1 + 100(0.05)2}$$

$$n = \frac{100}{1 + 100(0.0025)}$$

$$n = \frac{100}{0.25}$$

$$n = \frac{100}{1.25}$$

$$n = 80$$

Sample procedure

The study was used purposive non probability sampling method was used.

Data collection & tools

Survey Questionnaires was used by collecting the data

Data analysis and interpretation

The researcher was employee descriptive statistics and frequencies table graph and mean rang analysis and the data was analyzed by using SPPS (20

Ethical considerations

The study concerns survival and development of the patients, the researcher were receive authorization letter from Jamahiriya university for science and technology and as well as Banadir hospital for them to be allowed that they can carry out the research

Limitations of the study

The limitation of this study includes poor resources for literature review and luck of internet access, delay of covid 19

Results

Table 4.6: Do you know risk factors of uterine atony?

DO you know risk factors of uterine atony?	Frequency	Percentage %
Yes	22	27.5%
NO	58	72.5%
Total	80	100.0

Respondent were asked DO you know risk factors of uterine Atony. And Replayed as follows 22(27.5%) were yes, and other rest follows as 58 (72.5) were no.

The figure below shows the above information graphically.

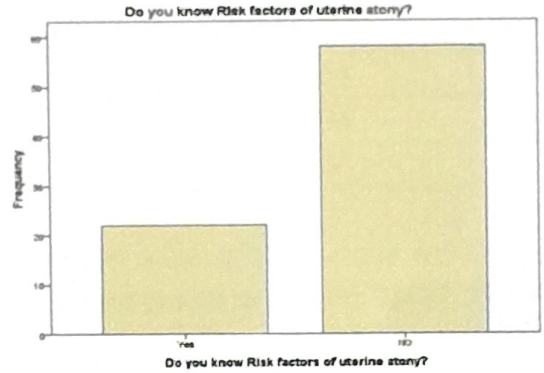

Figure 4.6: Do you know risk factors of uterine atony?

Table 4.8: Do you think that uterine atony can cause postpartum hemorrhage?

Do you think that uterine atony can cause postpartum hemorrhage?	**Frequency**	**Percent%**
Yes	33	41.3%
NO	47	58.8%
Total	80	100.0

The Respondent asked do you think that uterine atony can cause postpartum hemorrhage. And replayed as fallows 33(41.3%) were said yes and other follows 47(58.8%) were said no.

The figure below shows the above information graphically.

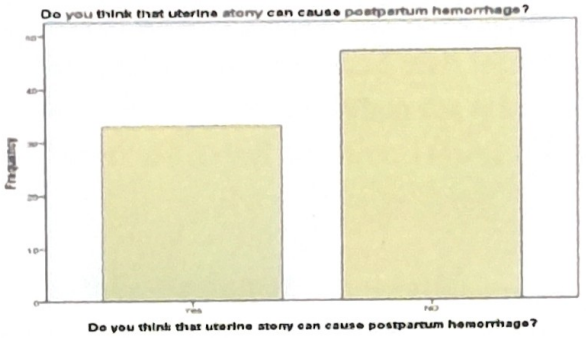

Figure 4.8: Do you think that uterine a tony can cause postpartum hemorrhage?

Table 4.10: Do you known status level of postpartum hemorrhage in Somali?

Do you know status level of postpartum hemorrhage in Somali?	Frequency	Percent%
Yes	54	67.5%
NO	26	32.5%
Total	80	100.0

Respondent asked do you know status level of postpartum hemorrhage in Somali were replied as follows 54(67.0%) were said yes and other rest as follows 26(32.5%) Were said no.

The figure below shows the above information graphically.

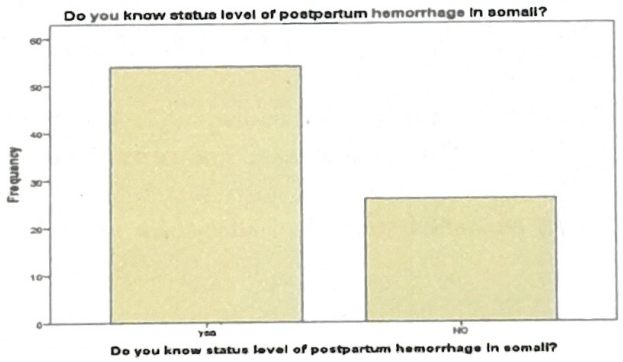

Figure4.10: Do you known status level of postpartum hemorrhage in Somali?

Conclusion

The result we found based on the respondents by the factors associated uterine atony as indicate that the (27.5%) of the respondents were yes, when the asked the question saying Do you thing that uterine atony can prevent (73.8%) of the respondents were yes, when asked the question saying(52.5%) of the respondents were medical and follows as (47.5%) of the respondents were surgical.

The result we found on Respondent asked IS the relationship between retained placenta and postpartum hemorrhage (43.8%) of the respondents were yes. When asked the question saying DO you think postpartum hemorrhage is serious disease (81.3%) of the respondents were yes.

The result we found based Respondent when asked the question saying genital tract trauma and other then episiotomy (15.0%) of the respondents were vaginal wall laceration. When the asked question saying (13.8%) of the respondents were cervical tear. When the asked question saying (16.3%) of the respondents were prenatal tear. When the asked question saying (55.0%) of the respondents were absent.

Recommendation

Based on feedings of this study the following are recommended.

- ✓ Postpartum family planning as essential component of both antenatal and postnatal care
- ✓ the use of uterotonics for the prevention of PPH during the third stage of labor.
- ✓ The use of bimanual uterine compression as temporizing for the treatment of PPH due to uterine atony.

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Prevalence of giardia lamblia among children attended at SOS hospital MOGADISHU-SOMALIA

Abdiqani Mohamed Ali, Ahmed Osman Ga'al, Amal Mohamoud Mohamed, Maryan Abdulkadir Said, Ifrah Yusuf Elmi

FACULTY OF MEDICINE & HEALTH SCIENCES
Jamhuriya University of Science & Technology, Mogadishu- Somalia
Emails: Cabdiqanivow@gmail.com, ahmedbinuosman@gmail.com, amaleeycawad@gmail.com, cadeymaryam8@gmail.com,ifrahyusuf215@gmail.com

ABSTRACT

Background: *Giardia lamblia is considered to be one of the leading causative agents of diarrhea, especially in children. Epidemiological surveys have shown that parasitic diarrhea in children is primarily due to G. lamblia infection Giardia lamblia can result in reduced physical fitness, delayed growth and gastrointestinal problems, such as abdominal pain, vitaminB12 deficiency and malabsorption about 200 million people have symptomatic giardiasis. In areas where sanitation and hygiene are poor the disease is most severe*

Objective: *To identify prevalence of giardia lamblia among children attended at SOS hospital in Mogadishu Somalia.*

Methods and Materials: *study was descriptive cross-sectional study conducted in SOS hospital, Mogadishu-Somalia during May 2020 to june2020; 50 stool samples were collected from the patients attending at SOS hospital. The Stool was to identify under microscope Examination used for wet preparation method. The study used SPSS (version 20.0) for analysis, and results were presented in frequencies, percentage, and bar charts.*

Results: *50 sample stools were collected from patient with suspected parasitic infection SOS hospital different age groups and both sexes were covered. When we made diagnosis test of stool in 8(16%) were giardia lamblia cyst seen also when we made diagnosis test in 2(4%) were giardia lamblia trophozoite, during diagnosing I have seen other parasites, 9(18%) were Ascaris lubricoides ova seen, 7(14%) were T.T ova seen, 5(10%) were H.nan egg seen, 4(8%) were E.histolytic, when we made diagnose test of giardia lamblia in 15(30%) were negative.*

Conclusion: *the results from the study showed high rate of giardia lamblia infection and also another parasite. We have identified domestic factors like mother education, no. of under-five children in the family, low SES and peri-domestic factors like lack of solid waste collection and visible sewage near the house. We emphasize the pro-vision of health care services, personal education and environmental hygiene by both governmental and non-governmental organization to reduce this high prevalence. Regular diagnosis should be available and treatment should be provided for infected and vulnerable communities.*

Keywords: *Giardia duodenalis, Giardi lambila Giardiasis, Cyst, Trophocyte*

1.0 BACKGROUND OF THE STUDY

Giardia intestinalis is a large-scale intestinal protozoan parasite in children under 5 years of age, but the long-term health effects of giardiasis in children have not been fully understood. In babies, giardiasis has been associated with lower serum zinc, iron, and vitamin A despite similar anthropometric indicators among infected and non-infected people. By identifying cysts, trophozoites and Giardia-specific antigens in fecal samples, giardiasis can be diagnosed. There are various faece tests available. (Duffy et al., 2013).

Giardia lamblia (Also known as Giardia intestinalis, Giardia duodenalis) has recently emerged as a significant cause of human and animal diarrhea. It is distributed throughout the world and has high levels of genetic diversity. In developing countries, with some 500,000 new cases reported each year (WHO, 1996), about 200 million people have symptomatic giardiasis. In areas where sanitation and hygiene are poor the disease is most severe (Nygard et al., 2006).

Increased prevalence in both humans and in some of the surrounding animals offers a growing concern about the role some animals play in human giardiasis (Olson, 2004). Every single person eliminates up to 900 million cysts a day. (Suman et al., 2013). the mode of transmission Person gets infection by cyst ingestion in Contaminated food, and water. Direct Individual. Conveyance can also be Are found in children, homosexual males and mentally Men. It associates increased vulnerability to giardiasis Cannabis use, with blood group A, achlorhydria, Chronic Pancreatitis, Immune and Malnutrition Defaults such as hypogammaglobulinemia and 19A deficiency. Also Flies, Faeco-oral route and contamination food and water. They are mostly asymptomatic, but in some cases, Giardia may cause diarrhea of the mucus, fat malabsorption (Shiff et al., 1982).

Multiple specimens are often needed for examination and Techniques for concentration, like structured ether or zinc Acetate are used. In asymptomatising.as well as ELISA, DNA probe and PCR. Treatment of giardia lamblia is Metronidazole (250 mg, 5–7 day thrice daily) and the drugs of choice are tinidazole (2 g single dose). Metronidazole cure levels surpass 90 per cent. Tinidazole has greater effectiveness than metronidazole. prevention of giardia lamblia is the following interventions will help to avoid giardiasis (Shiff et al., 1982).

Globally, Giardia is a common and widespread intestinal protozoan parasite which occurs in of both humans and animals. The purpose of this study is determining the prevalence rate of Giardiasis in children, Kermanshah childcare centers in Iran. .(Faraji et al., 2015).

Giardia lamblia which is also known as G. Duodenalis & G. Intestinalis is the most common human intestine protozoan parasite in the world, with detection rates ranging from 2-5% in developed nations to 20-30% in developing nations. Giardiasis is associated with poor sanitary conditions, inadequate water treatment, day-care centers and institutional facilities including nursing homes. Infection occurs when G-cysts become infected. Lamblia is consumed by a susceptible host via contaminated water, food, direct transmission from person to person, or animal to person. The WHO reported that 200 million people in Asia, Africa and Latin America have giardiasis symptoms, with some 500,000 new cases a year, particularly among children. The infection can cause severe acute diarrhea with chronic

infections in children under the age of five, resulting in weight loss and growth retardation. The reported prevalence of giardiasis in Brazilian children ranges from up to 14.6% in cases of diarrhea within a specific population to 78.3% in daycare and school settings. (Pereira et al., 2007).

Giardia is the world's most used pathogenic intestinal flagellate protozoan. Giardia lamblia (syn. Giardia intestinalis, Giardia duodenalis) is the most studied species that infect mammals, including humans. The scientific literature is very sparse about the other seven species and little is known about their characteristics and epidemiological importance. The exception is the species Giardia muris, which is often used in experimental infection to try to understand the relationship between parasite and host in G. Infection with lamblia. G Classification. Lamblia was made on the basis of the molecular characteristics of the host of origin and morph. The first division in G. *lamblia* assemblages was produced according to the specificity of the host from which the isolate originated. (Fantinatti, 2019).

Giardiasis is an infectious disease that can have both immediate and long-term effects including chronic diarrhea with or without dehydration and intestinal malabsorption, recurrent abdominal pain and weight loss. It has also been linked with chronic fatigue after contagious irritable intestine syndrome and, in particular, impaired cognitive function and failure to thrive in early childhood, all of which have drawn growing attention in recent years to this protozoan infection. Although it's distributed worldwide, Giardia's prevalence is more common in developing countries ranges from 20% to 30% compared to 2% to 5% in developed countries. (Anuradha et al., 2015).
Giardiasis is one of the intestinal protozoa causing problems of public health in most developing countries, as well as in some developed countries. Giardia lamblia is considered a leading cause of diarrhea in both children and adults. Many infected people can be asymptomatic due to the number of potential carriers such as adult males (5.3 percent), school children (39.2 percent) and food vendors (2.0 percent). In asymptomatic children (9.7%) Giardia lamblia was observed almost three times more than in symptomatic children (3.7%). Epidemiological studies have shown that parasite diarrhea in children is mainly caused by infection with Giardia lamblia, especially in areas where fresh vegetables and drinking water sources are contaminated with wastewater and food can be bought from street vendors. It is estimated that around 200 million people in Africa, Asia and Latin America are infected each year. (Nkrumah & Nguah, 2011).

Giardia lamblia has been identified as the most dangerous intestinal pathogen, with an estimated 2.8x10 annual human infection. The prevalence rates in some developing countries can exceed 20 to 60 per cent. Usually, this parasite is identified as one of the causes of childhood diarrhea, which also causes retarded growth and development of children. In Libya, a number of limited studies were conducted and most of the results of these studies were hospital-based data, showing prevalence of 1.2 to 11.4 per cent. Epidemiological data about this parasite from the Wadi Al-Shati region in Libya are not available. Studies are required against this background to determine the prevalence, and potential risk factors could contribute to G. Transmission to lamblia. The objective of this cross-sectional study was to survey the prevalence of Giardia lamblia and also to investigate possible risk factors for giardiasis among children in some areas of the province of Wadi Al-Shati, Libya.(Al-mubrook et al., 2010).

Specific objective

1. To determine the prevalence of giardia lamblia among children attended at SOS hospital.
2. To identify socio-demographic factors of giardia lamblia among children attended at SOS hospital.
3. To identify preventive practice towards of giardia lamblia among children attended at SOS hospital.

2.0 RESEARCH METHODOLOGY

2.1 RESEARCH DESIGN

The researcher uses descriptive quantitative design in cross sectional.

2.2 STUDY AREA

This study was conducted in SOS hospital because SOS is one of the largest hospitals in children at Banadir region and located about HILIWAA district from Mogadishu.

2.3 SAMPLE SIZE

A total 50 samples were collected from SOS hospital HILIWAA district.

2.4 DATA COLLECTION

Data on the occurrence of giardia lamblia infections among populations was obtained by laboratory investigations of the collect stool specimen. By an interviewing questionnaire, then we analyzed statistical tool (SPSS).

2,5 DATAANALYSII

NTERPRETATIONS

Scientific Program for Social Sciences (SPSS, Version 20) software and Microsoft Excel were used to analyze the responses from the completed questionnaires.

2.6 ETHICAL CONSIDRETION

First in considering the research ethics the researcher was received permission letter from Jamahiriya University for science and technology as well as same selected Mogadishu hospitals for them to be allowed that they can carry out their research wisely.

3.0 RESULTS

3.0 What is your gender?

The table below shows that half of the respondents 25(50%) were male while 25(50%) were female.

Table 3.0 what is your gender?

What is your gender?	Frequency	Percent%
Male	25	50%
Female	25	50%

Total	**50**	**100%**

3.1 What is your age?

The table below shows that the majority of the respondents 27(54%) were aged between 0-5 in year, 14 (28%) were aged between 6-10 in years, 9 (18%) were aged between 11-15 in years.

Table 3.1 what is your age?

What is your age?	Frequency	Percent%
0-5year	27	54%
6-10year	14	28%
11-15year	9	18%
Total	**50**	**100%**

3.2 place of residence

The table below shows the majority of the respondents 19 (38%) were from Hurwa district, 12 (24%) were from Yaqshid district, 12 (24%) were from Karan district, while only 7 (14%) were from other districts.

Table 3.2 place of residence

place of residence	Frequency	Percent%
Hurwaa	19	38%
Yaqshid	12	24%
Karan	12	24%
Other	7	14%
Total	**50**	**100%**

3.3 Place of hygiene

The table below shows the majority of the respondents the hygiene 30(60%) were poor, the hygiene of 20 (40%) were good.

Table 3.3 Place of hygiene

Place of hygiene	Frequency	Percent%
Good	20	40%
Poor	30	60%
Total	**50**	**100%**

3.4 Mother's educational status

The table below shows that the majority of the respondents 21(42%) was none (illiterate) 15(30%) were primary level, 11(22%) were secondary level, while only 3(6%) were in university

Table 3.4 Mother's educational status

Mother's educational status	Frequency	Percent%
None	21	42%
primary education level	15	30%
secondary education level	11	22%
universal level	3	6%
Total	**50**	**100%**

3.5 Do you wash your hands after toilet before touching your child?

The table below shows that the majority of respondents 25(50%) were sometimes, 22(44%) were Always, while only 3 (6%) were never.

Table 3.5 Do you wash your hands after toilet before touching your child?

Do you wash your hands after toilet before touching your child?	Frequency	Percent
Always	22	44%
Sometimes	25	50%
Never	3	6%
Total	**50**	**100%**

3.6 Your child playing ground

The below shows that the majority of respondents 35(70%) reported that the not clean, 15 (30%) reported that others clean.

Table 3.6 your child playing ground

your child playing ground	Frequency	Percent%
Not clean	35	70%
Clean	15	30%
Total	50	100%

3.7 What is your source of drinking water?

The table below shows that the majority of respondents 38(76%) were drinking tap water, while only 12(24%) were drinking stream water.

Table 3.7 what is your source of drinking water?

What is your source of drinking water?	Frequency	Percent%
Tap water	38	76%
stream water	12	24%
Total	**50**	**100%**

3.8 Type of your toilet

The table below shows that the majority of respondents 26(52%) were private, 14(28%) were open defection, while only 10(20%) were public.

Table 3.8 Type of your toilet

Type of your toilet	Frequency	Percent%
open defection	14	28%
Public	10	20%
Private	26	52%
Total	**50**	**100%**

3.9 Do you trim your child's nails when grown?

The table below shows that the majority of respondents 29(58%) were sometimes, while only 21(42%) were Always.

3.9 Do you trim your child's nails when grown?

Do you trim your child's nails when grown?	Frequency	Percent%
Always	21	42%
Sometimes	29	58%
Total	**50**	**100%**

3.10 Lab diagnosis

The table below shows when we made diagnose test of giardia lamblia in 15(30%) were negative, 9(18%) were Ascaris lubricoides ova seen, 10(20%) were G.lamblia seen, 7(14%) were Trichuris trichuira ova seen, 5(10%) were H.nan egg seen, while only 4(8%) were E.histolytic.

Table 3.10 Lab diagnosis

Lab diagnosis	Frequency	Percent%
G.lamblia	10	20%
Ascaris lubricoides	9	18%
Trichuris trichiura	7	14%
H.nana	5	10%
E.histolytica	4	8%
Negative	15	30%
Total	**50**	**100%**

4.0 DISCUSSION

When we made diagnose test of Giardia lamblia in 15(30%) is not seen , 9(18%) were Ascaris lubricoides ova seen, 10(20%) were G.lamblia seen, 7(14%) were Trichuri Trichiura ova seen, 5(10%) were H.nan egg seen, 4(8%) were E.histolytic, while only 2(4%) were G.lamblia trophozoite. compared with another study from Maharashtra,india The highest frequency of 32.41% was noted for Giardia lamblia. Relatively high frequency of 21.37% was also seen for Entamoeba histolytica. Other parasites found were Hymenolepis nana (17.24%), Ascaris lumbricoides (11.72%).(Mane et al., 2014). The majority of the respondents 21(42%) was none (illiterate) 15(30%) were primary level, 11(22%) were secondary level, while only 3(6%) were in university in this study, half of the patients 25(50%) were male. It could be said that, may be boys have more relation to sources of parasites in social and environment. In this study the highest rate of infection was seen at 4-6 year-old age groups (14.24%), and the lowest rate was observed at 0-2 year-old age-groups (1.74%). Also in another study that carried out by Machado children whose parents had low level of education have the most common infections.33 It could be said that parents of children at high level of education provide better control on personal hygiene their children.1 In this study the prevalence rate ranged in rural residents (15.67%) was more than urban residents (11.07%).(Faraji et al., 2015) On the basis of their age children were divided into three groups. Group 1 included the children between 5-8 years of age; group 2 and group 3 included the children between 9 to 12 and 13 to 15 years of age respectively. The infection rate was highest in case of group 1 (13.7%), then showed a decline with increase in age and was least in case of group 3 (3.88%). This difference was significant when compared statistically ($p = 0.01$). The reason for decline of infection with increase in age may be possibly due to strengthening of the immune system and children becoming more conscious of hygienic habits. Our findings are in close association with those of Mbuh et al. who reported highest protozoan infection rate in age group of 6-13 years which then declined in higher age groups. Chaudhary, et al. , (from his study in Barabanki, Uttar Pradesh) also reported the peak prevalence of Giardia lamblia in the age group of 1- 10 years (35.84%), which then declined gradually with successive increase in age reaching a least infectivity rate in the age group of 51-60 years (3.77%).(Abdullah, 2016)

The majority of respondents 38(76%) were drinking tap water, while only 12(24%) were drinking stream water. this agrees with the study from Mexico which reported most households got drinking water from taps (87.9%)(Cifuentes et al., 2000) Also another study from Yemen which showed They also suffer from severe water shortages and people tend to collect drinking water from unclean water sources such as streams, wells, tanks, rains, and and other natural or artificial sources.(Alshahethi et al., 2020).

The majority of respondents 29(58%) were sometimes untrimmed nails, while only 21(42%) were Always. this indicates the majority respondents were untrimmed their nails. this agrees with study from India which showed Children who used to wash hands with plain water and maintained untrimmed nails were more prone to infection than those who used soaps for hand washing after defecation and maintained clean trimmed nails.(Abdullah, 2016)

5.0 CONCLUSION

Giardia intestinal is a large-scale intestinal protozoan parasite in children under 5 years of age, but the long-term health effects of giardiasis in children have not been fully understood. In babies, giardiasis has been associated with lower serum zinc, iron, and vitamin A despite similar anthropometric indicators among infected and non-infected people.

The study was descriptive and cross sectional in design. A total of 50 patients were selected during data collection as a sample size. Questionnaire was used as a data collection tool in order to collect data from the study population. SPSS was used to analyze research data and then frequency tables and charts were used in order to present study results.

Based on study results, half of the respondents 25(50%) were male while 25(50%) were female. the majority of the respondents 27(54%) were aged between 0-5 in year, 14 (28%) were aged between 6-10 in years, 9 (18%) were aged between 11-15 in years. the majority of the respondents 19 (38%) were from Hurwa district, 12 (24%) were from Yaqshid district, 12 (24%) were from Karan district, while only 7 (14%) were from other districts. the majority of the respondents the hygiene 20(40%) was good, the hygiene of 30 (60%) was poor, the majority of the respondents 21(42%) was none (illiterate) 15(30%) were primary level, 11(22%) were secondary level, while only 3(6%) were in university

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STUDY OF MICROALBUMINURIA AMONG TYPE 2 DIABETIC PATIENTS MOGADISHU-SOMALIA

Mubarak Hassan Mohamud, Khadija Abukar Abdulkadir, Shukri Mohamed Ahmed, Muna Mohamud Abdullahi.

FACULTY OF MEDICINE & HEALTH SCIENCES

Jamhuriya University of Science & Technology, Mogadishu- Somalia

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Mubarak Hassan Mohamud, Khadija Abukar Abdulkadir, Shukri Mohamed Ahmed, Muna Mohamud Abdullahi.

FACULTY OF MEDICINE & HEALTH SCIENCES

Jamhuriya University of Science & Technology, Mogadishu- Somalia

Emails:mubarakxm2@gmail.com,Khadiijoabukar67@gmail.com,shukrimoha12@gmail.com, Munamohamud57@gmail.com

ABSTRACT

Background: *Diabetes mellitus is a group of metabolic diseases characterized by hyperglycemia caused by insulin secretion defects. Both type 1 and type 2 DM can cause chronic diabetic nephropathy complication. The early stage of nephropathy is detected by MAU test, when urinary albumin excretion (UAE) is 30–300mg/24h, or 20–200mg / min.*

Objective: *This study aims to assess the prevalence of microalbuminuria among type 2 diabetic patients.*

Methods: *Cross-sectional study was conducted at Ummah hospital, Mogadishu, Somalia during September 2019 to August 2020. A total of 50 clean random urine samples were collected from diabetic patients and then tested through urine analysis investigation following the standard procedure. Albumin and creatinine tests were performed for albumin creatinine radio (ACR) method. The study used SPSS (version 20.0) for analysis, and results were presented in frequencies, percentage, and bar charts.*

Results: *31 (62%) were normoalbuminuric while 19(38%) were microalbuminuria out of the total 50 samples collected, 31were normal with 28 control and 3 uncontrol while 19 were abnormal with 4 control and 15 uncontrol, 31were normal with duration <5 (13), 5-10 (15) and >10 (3) while 19 were abnormal with duration <5 (4), 5-10 (2) and >10 (13).*

Conclusion: *The results from the study showed high the prevalence of microalbuminuria 38%, Microalbuminuria exhibits a direct relationship with increased duration of mellitus diabetes, Uncontrol of diabetic increase level of microalbuminuria, recommend annual microalbuminuria screening from the early diagnosis of type 2 diabetes and early treatment where microalbuminuria is found,*

Keywords: *Albumin, Diabetes mellitus, Microalbuminuria*

1.0 BACKGROUND OF THE STUDY

Diabetes mellitus is a group of metabolic diseases characterized by hyperglycemia caused by insulin secretion defects, insulin action, or both usually break down the sugars and carbohydrates we intake into a specific sugar called glucose. Glucose powers our body's cells. Diabetes mellitus (DM) continues to be an international public health concern as its complications have been a major cause of morbidity and mortality. It is the most serious metabolic syndrome disorder with chronic hyperglycemia and carbohydrate, fat, and protein metabolism abnormalities.(Ufuoma et al., 2016)

Both type 1 and type 2 DM can cause chronic diabetic nephropathy complication.(Karar et al., 2015). Microalbuminuria, an early diabetic nephropathy marker and may advance to macroalbuminuria and ESRD.(Efundem et al., 2017). Globally the prevalence of diabetes (DM) is rising at an alarming rate

throughout the world. An estimated 415 million people worldwide suffered from this disease, according to the International Diabetes Federation in 2015. DM complications represent increased morbidity, disability, and mortality and pose a threat to all countries ' economies, especially developed ones.(Papatheodorou et al., 2016)

Type 2 diabetes accounts for about 90% of diabetes cases, with the remaining 10% mainly due to type 1 diabetes mellitus and gestational diabetes.(Jangid et al., 2017)

Diabetes affects 246 million people around the world and it is estimated that around 380 million people will be diabetic by 2025, and that its prevalence will be in developed countries. The global estimate of the number of diabetics in Africa in 2010 was approximately 12 million people (age group adults 20-79 years old) and it is estimated that around 23 million Africans will be diabetes by 2030.(C et al., 2017)

Diabetes and its complications have become a major public health concern. If blood sugars are not controlled, the effects of diabetes can be devastating. In sub-Saharan Africa, at some stage of their lives, 10.0-15.0 percent of diabetic patients develop foot ulcers, and approximately 50.00 percent of all diabetes-related admissions are due to diabetic foot problems. The prevalence of diabetic foot ulcer ranged from 1.0% to 4.10% in the U.S., 20.40% in the Netherlands and 20.00% in Iran among diabetics. The prevalence of diabetics in Kenya was also about 4.60%. Hospital studies have shown that the prevalence of limb ulceration in Nigeria ranged from 11.70% to 19.10% among people with diabetes. Hospital studies have shown that the prevalence of limb ulceration in Nigeria ranged from 11.70% to 19.10% among people with diabetes. Diabetic patients with high levels of glycosylated hemoglobin in Ghana are susceptible to micro-vascular complications such as nephropathy and retinopathy, and patients with impaired glycemic control are typically the patients with these complications.(C et al., 2017)

The International Diabetes Federation (IDF) reports that 19.8 million people in Africa have diabetes where about 75% are still undiagnosed. Type 2 diabetes (T2D) is responsible for up to 90 per cent of all diabetes cases. The rise in the prevalence of diabetes in sub-Saharan Africa (SSA) has increased in tandem with the increase in obesity and other risk factors for the cardiovascular. Countries with the highest reported diabetes population are Nigeria (3.9 million), South Africa (2.6 million), Ethiopia (1.9 million) and Tanzania (1.7 million). Diabetes possesses an enormous burden on society by increasing quality of life and life expectancy. As well as causing the individuals and nations economic loss.(Chiwanga et al., 2016)

Today, diabetes burden continues to remain one of Africa's major health problems that have resulted in high mortality and morbidity. Diabetes is a widespread chronic medical condition in countries of sub-Saharan Africa including the Ethiopian population. However, due to very limited country studies the overall incidence and prevalence of diabetes in Ethiopia are unknown.(Teshome et al., 2018)

Locally Diabetes is a medical problem in Somalia, although in the 20-79 age bracket, the incidence among adults is lower than in many other countries This is not necessarily because of a lack of insulin exposure. However, because they fail to follow medical advice or treatment plans, many Somali

diabetics develop serious or even fatal complications. Because many patients with type 1 diabetes died from complications, help workers found that most patients with diabetes seeking hospital treatment had type 2 diabetes. Diabetic patients can be treated in hospitals without complications, whereas in any of the country's hospitals complex cases with complications cannot be managed. Therefore, those who can afford to seek treatment outside the country Proper education and guidance on how to handle diabetes is helpful in their daily lives for diabetics. Nonetheless, even highly educated people with good knowledge of their own condition would face the same challenges as other Somali diabetics.(*3510_1.Pdf*, n.d.)

1.1 Specific objectives

to assessment of microalbuminuria levels among type 2 diabetic patients.

to study of relationship between microalbuminuria levels and duration of diabetic.

to compare microalbuminuria between controlled diabetic patients and uncontrolled diabetic patients.

2.0 METHODOLOGY

2.1 Research design

The research design was descriptive quantitive, cross-sectional research design.

2.2 Study area

The study was conduct at Ummah hospital because Ummah is one of the largest hospitals in diabetic patients at Banadir region and located about ABDIAZIZ district from Mogadishu, Somalia.

2.3 Sample size

The sample size was consisting of 50 respondents out of respondents attending Ummah hospital in Mogadishu-Somalia.

2.4 Data collection

Data on the occurrence of type 2 diabetic patients among populations was obtained by laboratory investigations of the collect urine specimen. By an interviewing questionnaire, then we analyzed statistical tool (SPSS).

2.5 Data analysis interpretations

Scientific Program for Social Sciences (SPSS, Version 20) software and Microsoft Excel will use to analyze the responses from the completed questionnaires.

2.6 Ethical consideration

First in considering the research ethics the researcher will receive permission letter from Jamahiriya University for science and technology as well as same selected Mogadishu hospitals for them to be allow that they can carry out their research wisely.

3.0 RESULT

3.0 Distribution of the study sample according to their gender

the table below shows that the majority of respondents 28(56%) were female, 22(44%) were male.

Table 3.0 Gender distribution

Gender distribution	Frequency	Percent%
Male	22	44%
Female	28	56%
Total	**50**	**100%**

3.1 Distribution of the study sample according to their age

The majority of the respondents of this study 24(48%) were aged between 31—50 years, followed by those 14(28%) who aged between 15--30 years, and the rest 12(24%) were aged above 50 year.

Table 3.1 Age distribution

Age distribution.	Frequency	Percent%
15-30	14	28%
31-50	24	48%
>51	12	24%
Total	**50**	**100%**

3.2 Distribution of the study sample according their marital status

Most of the respondents of this study 29(58%) were married, while 12(24%) were divorced and 9(18%) were single.

Table 3.2 marital status

marital status.	Frequency	Percent%
Single	9	18%
Married	29	58%
Divorced	12	24%
Total	**50**	**100%**

3.3 Distribution of the study sample according their duration of diabetic

According to table respondent of this study 17 (34%) were duration <5 years, while 17(34%) were duration between 5—10 years and 16(32%) were duration >10 years.

Table 3.3 Duration of diabetic

duration of diabetic	Frequency	Percent
<5yrs	17	34%
5-10yrs	17	34%
>10yrs	16	32%
Total	**50**	**100%**

3.4 Distribution of the study sample according their control of diabetic

Most of the respondents of this study 33(66%) were control and 17(34%) were uncontrolled.

Table 3.4 Control of diabetic

control of diabetic	Frequency	Percent%
Control	33	66%
Uncontrolled	17	34%
Total	**50**	**100%**

3.5 Distribution of the study sample according their microalbuminuria

According to table the majority of the respondent of this study 31 (62%) were normoalbuminuric while 19(38%) were microalbuminuria.

Table 3.5 Microalbuminuria

Microalbuminuria	Frequency	Percent%
1-29 normal	31	62%
30-300 abnormal	19	38%
Total	**50**	**100%**

3.6 distribution of the study sample according the relationship between diabetic control and microalbuminuria

According to table the majority of the respondent of this study 31were normal with 28 control and 3 uncontrol while 19 were abnormal with 4 control and 15 uncontrol.

Table 3.6 relationship between diabetic control and microalbuminuria

Microalbuminuria	1-29 normal (31)	30-300 abnormal (19)
Control	28	4
Uncontrol	3	15
Total 50	**31**	**19**

3.7 Distribution of the study sample according the relationship between duration of diabetic and microalbuminuria

According to table the majority of the respondent of this study 31were normal with duration <5 (13), 5-10 (15) and >10 (3) while 19 were abnormal with duration <5 (4), 5-10 (2) and >10 (13).

Table 3.7 relationship between duration of diabetic and microalbuminuria

Microalbuminuria	1-29 normal (31)	30-300 abnormal (19)

Duration <5yrs	13	4
Duration 5-10yrs	15	2
Duration >10	3	13
Total 50	**31**	**19**

4.0

DISCUSSION

The study was a hospital based cross-sectional study, which included 50 subjects with type 2 diabetes mellitus. In our study, 28 were females and the other 22 were males. A 34% were duration <5 years, while 34% were duration between 5-10 years and 32% were duration >10years. A 66% were control and 34% were uncontrolled.

This study showed that 38% of the patients have MAU 62% were normoalbuminuric %) as shown in **table (4.6)** and **fig (4.6)** This result may indicate that the study community has a heavy burden of diabetic nephropathy. this is more than the prevalence of Rates shown the study from Sagamu 35.1%.(Amballi et al., 2018) and also study in southern India reported that the prevalence of MAU was 36.3%.(Varghese et al., 2001) and study Iran reported that the prevalence of MAU was 14.2%.(Afkhami-Ardekani et al., 2008) there are more varies studies that higher prevalence of MAU in our study. Study showed that the prevalence of MA of 44.6% among patients with type 2 DM attending in a tertiary clinic in Botswana.(Molefe-Baikai et al., 2018) also another study from Pokhara, Nepal reported the prevalence MAU was 45.5%.(Sigdel et al., 2008)

According the relationship between duration of diabetic and microalbuminuria, 19 of the respondents were microalbuminuria patient with duration <5yrs (4), 5-10yrs (2) and >10yrs (13) as shown in **table (4.8.)** This indicates the relationship between duration of diabetic and microalbuminuria, if increases duration of diabetic it develops diabetic nephropathy which cause increase of microalbuminuria. This agrees with a study from Pakistan which showed that there is a relationship between duration of diabetic and microalbuminuria.(Sheikh et al., 2009) also study from southern India showed same result.(Varghese et al., 2001)and also study from United Arab Emirates shows that.(Al-Maskari et al., 2008) but disagree with other study showed there is no relationship duration of DM.(Ramzi & Sulaiman, 2017)

There is relationship between microalbuminuria and glycemic control the study showed 19 of respondents had microalbuminuria 4 of them are controlled and 15 of them are uncontrolled as shown in **table (4.7)** which was in agreement with other studies.(Sheikh et al., 2009) , (Ramzi & Sulaiman, 2017) and (Bunza et al., 2014) so glycemic control is important risk factor of microalbuminuria.

5.0 CONCLUSION

This study is to explore assess the prevalence of microalbuminuria among type 2 diabetic patients at Ummah hospital in ABDIAZIZ district. The sample size of this study is 50 respondents 28 are female while 22 are male. The prevalence of microalbuminuria of this study is 38%. Microalbuminuria exhibits a direct relationship with increased duration of mellitus diabetes. Uncontrol of diabetic increase level of microalbuminuria.

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Screening for Helicobacter pylori infection among Mogadishu Somalia using serum antibody and stool antigen detection methods.

Abdi Wali Isse Ali, Dahabo Ahmed Warsame, Miski Duraan Mohamed, Shafie Ahmed Ali AND Abdirahman Mohamed Yusuf.

FACULTY OF MEDICAL LABORATORY SCIENCES