# Major Factors Contributing and Available Management Options To Late Vaginal Bleeding In Pregnant Women Attending Banadir Hospital

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#### Abstract

The Aim of the study is To identify major factors contributing to late vaginal bleeding in pregnant women attending Banadir hospital And specifically To identify socioeconomic risk factors associated with late vaginal bleeding in pregnant women and finally To find out the most appropriate management of late vaginal bleeding in pregnant women. This study was retrospective study was conducted at Banaadir hospital. The target population of this study was all 3rd-trimester pregnant women with bleeding attended in Banadir hospital from January to May 2019 The study used non probability sampling method. Our study finding placental abruption represented about 38% of all risk factors, followed by placenta previa which contributed about 30% of the causes followed by trauma 14%, uterine rupture 4% infections 8% and others 6%. 84% of study populations were low socioeconomic status, while 16% middle socioeconomic status. The study also finds out that 82% not attending antenatal care centers previously while 18% were visiting antenatal care centers. The study also revealed that 88% of study populations were multipara, the study also found the majority of mothers 32 (64.0%) were between the ages of 26-35 years old. 70% of all study population were managed surgical intervention (caesarean section), where 24% were managed medical treatment and remaining 6% were managed with conservative management. We conclude our study that Maternal morbidly and mortality could be prevented significantly if women and their families recognize pregnancy problems promptly and seek health care. Through this study we found that the risk of late vaginal bleeding was higher among women with less basic education, who belonged to the poorest family, who were older, had higher parity and who did not attend any antenatal care visits. We recommend to provide information, education and communication to pregnant mothers to increase their awareness. To the best of our knowledge, no studies have been conducted in Somalia to identify risk factors for late vaginal bleeding.

# 1.0 Background

Vaginal bleeding in the late stages of pregnancy is common. However, bleeding can be a warning sign among 3<sup>rd</sup>-trimester pregnant women. Late pregnancy bleeding occurs when placenta separates from the uterine wall and it is called placenta abruption, or when placenta sits low in the uterus partially or completely covers the opening of the birth canal and that is called placenta

Previa, there are some other causes like trauma, tumors, infections, and others. Many vaginal bleeding in the late pregnancy occurs after (>20 wk. Gestation and before birth). Vaginal bleeding is a common complication during pregnancy, which is observed in about 1/4 of pregnancies and in half of cases can lead to maternal and prenatal complications. If vaginal bleeding happens during pregnancy some adverse pregnancy outcomes, including perinatal mortality and morbidity, low birth weight and preterm delivery will be increased. Vaginal bleeding during 2<sup>nd</sup> and 3<sup>rd</sup> – trimester of pregnancy (The last 6 months of a 9 month 's pregnancy) involves concerns different from bleeding in the first three months of the pregnancy. Any bleeding during the second and third trimesters is abnormal. Bleeding from the vagina after 28th week of pregnancy is a true emergency. The bleeding can range from very mild to extremely brisk and may and may not be accompanied by abdominal pain. Hemorrhage (another word for bleeding) and its complications is the most common cause of death in over the world especially in sub- Sahara Africa. Vaginal bleeding is a common and alarming symptom during late pregnancy. (Michael D. Hnat, july 2005). It was pointed out that vaginal bleeding that occurs near the time of membrane rupture would likely be associated with increased risk of perinatal morbidity, especially during a shorter latency period to delivery. In Mumbai, India it was observed that higher percentage of death was caused by hemorrhage during pregnancy which leads to higher rates of anemia ((Fernandes, march 2014).

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#### The specific objectives which guided this research were:

- 1. To determine the major causes of late vaginal bleeding in pregnant women.
- 2. To identify socioeconomic risk factors associated with late vaginal bleeding in pregnant women.
- 3. To find out the available management provided to late vaginal bleeding of pregnant women at Banadir hospital.

#### 2.0 Methodology

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#### 2.1 Research design and Study Site

This study adopted both qualitative & quantitative cross sectional approach using desk review Of secondary data from medical records for analyzing factors contributing to late vaginal bleeding conducted on January to May 2019 at Benadir hospital Wadajir district. Benadir Hospital is one of the largest hospitals in Mogadishu, it locates in Wadajir district, and Wadajir district lies in the south-west of Mogadishu.

#### 2.2 Sampling and data collection procedure

During studying data collection period from Jan-May, we found that a number of population that was registered during study period was 150 respondents but 50 respondents of them was included in the study based on inclusion criteria while the rest was excluded our study.

The study was employ non-probability-sampling methods, which every one of the respondents was have equal opportunity to be selected that are Systematic Random Sampling method.

Before starting the study, the researcher was taken an introductory paper from jamhuriya university then the researcher see permission from the authority of the hospital, when was approved data collection team started to collect the data from hospital records. The data collection team took January to May to complete the data collection and was submitted to the researcher data collection sheet, consisted of age, address, gravida, parity. Gestational age and Factors contributing to late bleeding (placenta abruption, placenta Previa, vasa Previa and rupture of the uterus and others).

#### 2.3 Data Collection Instrument

A questionnaire was used to collect data from hospital records using well designed data collection sheets. Data collection sheets consisted of: Age, Address, Gravida, Parity, Gestational age, and Factors contributing to late bleeding, socioeconomic factors associated with late vaginal bleeding, and appropriate management.

#### 2.4 Data analysis

The researchers used frequencies and percentage distributions to analyze data then presented using text forms and tables which were designed with SPSS program (20.0). Item analysis used to determine age groups, parity, socio economic risk factors, and the factors of study.

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#### 2.5 Ethical consideration

The study "write the title" was conducted at Banadir hospital. Permission were obtained from the ethical review board of JUST and Banadir hospital administration to carry out the study.

#### **2.6 Study Limitations**

There were some limitations that faced by the researcher during the study, and they include: The cases admitted in Banadir hospital were confined only those cases that needed medical and/or surgical interventions or treatment that cannot be done outside of the hospital. Some of the interested groups that do not need hospitalization due their actual condition were not counted in the study as they were not registered in the hospital records.

#### 3.0 Results

# 3.1 Respondents by age of the mother

Valid	Frequency	Percent(%)
15-25	13	26.0
26-35	32	64.0
36-45	5	10.0
Total	50	100.0

Table 3.1 Respondents by age of the mother

From Table 3.1 The majority of mothers 32 (64.0%) were between the age of 26-35,13 (26.1) were between the age of 15-25, 5 (10.0%) were between the age of 36-45.

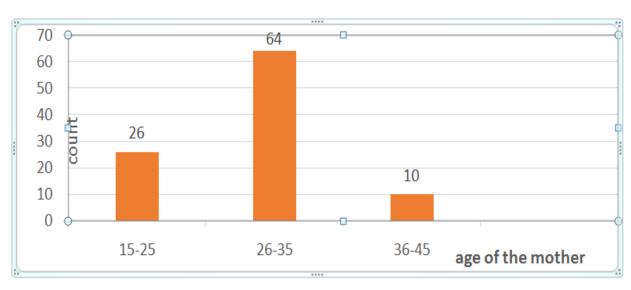


Figure 3.1 Age of the Mother

# **3.2 Parity Distribution**

Valid	Frequency	Percent (%)
Nulliparous	6	12
Multipara	44	88
Total	50	100

**Table 3.2 Parity distribution** 

From Table 3.2 The majority of the parity distribution 88% (44 cases) were multipara, where 12% (6 cases) were nulliparous.

Figure 3.2 Parity Distribution

# 3.3 Gestational age group

Valid	Frequency	Percent (%)
6-7 months	10	20
8-9 months	40	80
Total	50	100

Table 3.3 Gestational Age

From Table 3.3 According to the gestational age is 80% (40 cases) were 8-9 months of gestational age, 20% (10 cases) were 6-7 months of gestational age.

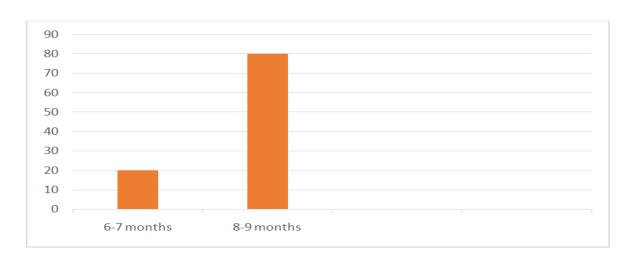


Figure 3.3: Gestational Age

# 3.4 Major Causes to Late Pregnancy Bleeding

Valid	Frequency	Percent (%)
Abruption Placenta	19	38.0
Placenta Previa	15	30.0
Uterine Rupture	2	4.0
Trauma	7	14.0
Infections	4	8.0
Other	3	6.0
Total	50	100.0

Table 3.4 Major Causes to Late Pregnancy Bleeding

From Table 3.4 The majority of causes to late pregnancy bleeding is placenta abruption which represent 19(38%) of all cases, followed by placenta Previa which represents 15(30%) and trauma 7 (14%), infections 4 (8%) and others 3 (6%)uterine rupture 4% each of all factors.

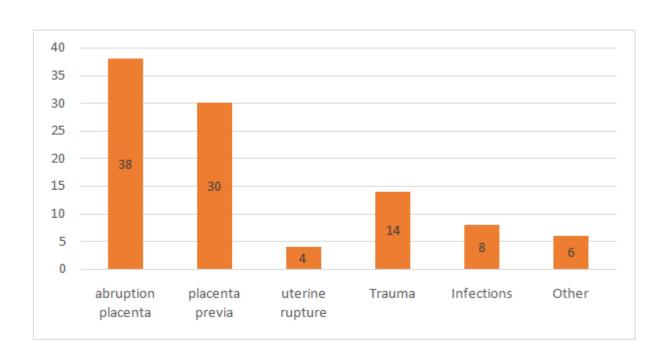


Figure 3.4: major causes of late pregnancy bleeding.

#### 3.5 Previous antenatal care visits

Valid	Frequency	Percent (%)
Visited ANC	9	18
Not Visited ANC	41	82
Total	50	100.0

Table 3.5 Previous Antenatal Care Visits

From Table 3.5 More than half of study groups 41 (82%) were not attended antenatal care centers previously, the remaining 9 (18%) of study group were visiting antenatal care centers. Unfortunately most of the pregnant mothers who complained vaginal bleeding and

admitted in banadir hospital not visited antenatal care centers.

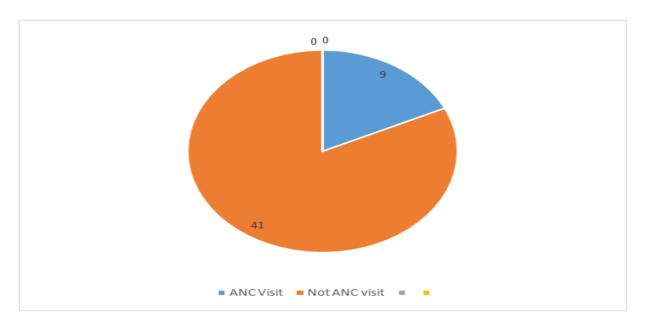


Figure 3.5: previous antenatal care visits.

# 3.6 Socio-economic

From table 3.6 Majority of the mother 42(84%) were low socioeconomic status (poor family), followed by 8 (16%) of the mother who were middle socioeconomic status.

V	alid	Frequency	Percent
	low	42	84.0
	Middle	8	16.0
	Total	50	100.0

Table 4.6 socio-economic

Figure 3.6 Socio-economic

# 3.7 Management to the late pregnancy bleeding

Valid	Frequency	Percent (%)
Surgery	35	70.0
Medical Treatment	12	24.0
Conservative Mgt	3	6.0
	50	100.0

Table 3.7 Management to Late Pregnancy Bleeding

From table 3.7 According to the management to late pregnancy bleeding 35 (70%) of the cases were managed surgical intervention, while 12 (24%) of the cases were managed medical treatment, and the remaining 3 (6%) were managed with conservative management

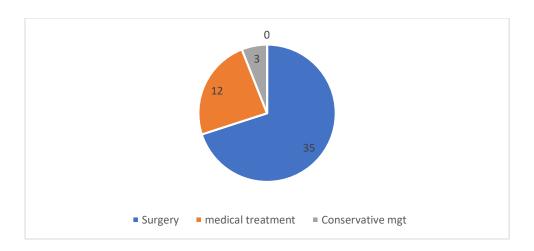


Figure 3.7 Management to Late Pregnancy Bleeding

#### 4.0 Discussion

# 4.1 Demographic Characteristics of respondents

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As the study founded the majority of mothers 32 (64.0%) were between the ages of 26-35,13 (26.1) were between the age of 15-25, 5 (10.0%) were between the age of 36-45. and According to parity distribution The study revealed that 88% of study populations were multipara, while 12% of study group were nulliparous and According to the gestational age 80% (40 cases) were 8-9 months of gestational age, 20% (10 cases) were 6-7 months of gestational age. The study also find out that 82% of study group were not attending antenatal care centers previously while 18% of the study population were visiting antenatal care centers.

The study shows that the age groups between (26-35 years old) represent the majority of the cases attended and admitted in Banadir hospital for the factors contributing late pregnancy bleeding and this study shows majority of the cases are multipara and their gestation age group was between 8-9months. Unfortunately, this study also shows most of the pregnant mothers who complained vaginal bleeding and admitted in banadir hospital not visited to the ANC.

The previous studies founded that the risk of late vaginal bleeding including placenta Previaincrease with age and risk is also more Parity, are carrying more than one fetus (WHO, Managing complication of pregnance and child birth, 2017).

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While the other Previous study shows Approximately 50 percent of placental abruptions occur before 36 weeks' gestation, resulting in adverse outcomes secondary to prematurity (ELLEN SAKORNBUT, late pregnance bleeding, april 15 2007).

# 4.2 Major Causes to Late Pregnancy Bleeding of Respondents

The findings proved the leading factor that contributed late pregnancy bleeding to the cases admitted in Banadir hospital was placenta abruptions which represented 38% of all factors, followed by placenta prevue which represented 30%, trauma 14%, uterine rupture 4% infections 8% and others 6% each of all factors. Based on the analyses of chapter four the findings exposed that placenta abruption is the major cause that contributed late vaginal bleeding in all pregnant women admitted in Banadir hospital. In comparison to the literature shows that Abruption placenta is the most common life-threatening cause of bleeding during late pregnancy, accounting for about 30% of cases. It may occur at any time but is most common during the 3<sup>rd</sup> – trimester. While the Placenta previa accounts for about 20% of bleeding during late pregnancy and is second most common during the 3rd trimester (ELLEN SAKORNBUT, april 15 2007).

# 4.3 Socio-economic Characteristics of respondents

According to the socioeconomic risk factors associated with late vaginal bleeding among pregnant women the study was found that 84% of study populations were low socioeconomic status (poor family), while 16% of the interest group had middle socioeconomic status. Previous study in Ethiopia shows the most women in our country belong to the low socioeconomic class. It may not be because of ignorance that they

do not go to hospital, but because they cannot afford it. On the other hand, most of these women are ignorant about the consequences of vaginal bleeding. (Zerai Kassaye, 2005)

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# 4.4 Management to Late Pregnancy Bleeding of Respondents

According to the analyses retrieved that 70% of all study population are managed surgical intervention (caesarian section), where 24% were managed medical treatment and remaining 6% were managed with conservative management. This study shows Most of the cases were managed surgery (caesarean section) and represented 70% of all cases. As the previous study results that Cesarean delivery is usually used for the women presented with late vaginal bleeding including placental abruption and placenta Previa (Heine, july 2018).

Other study shows A decision-to-delivery interval of 20 minutes or less resulted in improved neonatal outcomes in a case-control study of severe abruption (Sakornbut E1, April 2007).

#### 5.0 Conclusion

Through this study we found that the risk of late vaginal bleeding was higher among women with less basic education, who belonged to the poorest family, who were older, had higher parity and who did not attend any antenatal care visits. Similarly, the risk of late vaginal bleeding was also increased for a woman who had previous cesarean delivery, previous placenta abruptions, the women with multiparty. Lack of antenatal care attendance, which had the strongest association with late vaginal bleeding in pregnant mothers, is a potentially modifiable risk factor, in that increasing the access to and availability of these services can be targeted. Antenatal care attendance provides an opportunity to screen for other potential risk Factors for antepartum stillbirth, as well as to provide counseling to women, and thus, helps to ensure a successful pregnancy outcome. Having realized the weaknesses in the health service in Somalia there is need for training health

workers providers in the concept of focused ANC, with specific emphasis on scheduling of visits, continuity of provider for each client, incorporating PMTCT and developing an Individual Birth Plan (IBP) to respond to existing knowledge gaps.

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Inadequate action on social determinants of health. The conflict in Somalia has had negative impact on the social determinants of health resulting in political instability, population displacement, unemployment, weak health and educational institutions, environmental effects, gender disparity and food insecurity. Effects on the conflict stricken society include lack of social cohesion, fear and insecurity, distress and increasing levels of mental disorders due to social upheaval.

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The Risk Factors of Acute Appendicitis in Childern at Selected Hospitals in Mogadisho Somalia

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**ABSTRACT** 

Appendicitis is one of most common surgical emergencies, in its disease course, the appendix

becomes inflamed and swollen as intestinal bacteria multiply in the lumen, recruiting white blood

cells and forming pus. The objective of this study was to determine the Risk factors of acute

appendicitis at selected hospitals (Digfer, Shafi, and Medina) in Mogadishu Somalia.

The study design was descriptive, quantitative design and were conducted at selected hospitals.

The sample size was 192 cross sectional, draw from 384 by using Keisha and Leslie formula for

calculating sample size. Administrated closed-ended questionnaire was used as data collection

tools and the study employed statistical package for social science SPSS version (20.0) for data

analyzing and data was present descriptive statistics graphs and frequencies tables.

The study found 192 patients who had appendicitis and the majority those patients 81(42.2%) were

between the age of 14-18, 68(35.4%) were between the age of 10-13, 26(13.5%) were between 6-

9 years and the 17(8.9%) were between the age 0-5 also the results shown that 126(65.6%) of the

patients were male while female only formed 66(34.4%). And the Majority of the patients. Our

study found, most responders were eaten low fiber diet and drink ground water, and also majority

of the responders didn't diagnosed by histopathology due to cost.

The people eat high fiber diet and drinking clean water to prevent appendicitis, the patients feel

lower abdomen to visit the health centers and the government provide free health care to low

income people.

**Keywords:** Appendicitis, risk factor of appendicitis at selected hospitals in Mogadishu Somalia

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# 1.0 Background of the study

Appendicitis is defined as inflammation of the vermiform appendix, the most common surgical emergency in children and young adults with abdominal pain. The current standard of care for patients with appendicitis is the surgical appendectomy, either laparoscopic or open. A non-operative strategy with antibiotics is favorable in some cases and emerging evidence suggests there could be wider applicability. Rupture can then either lead to a contained abscess or widespread soiling of the abdominal cavity. (Paul Froggatt, 2018).

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The risk of developing appendicitis during a lifetime is reported to be 8.7% for boys and 6.7% for girls. The overall negative appendectomy rate among all children is suggested to be 8.4%, but in children under 6 years of age, the rate has been reported to be as high as 56.7%.

Postoperative abscesses, hematomas, and wound complications are all complications that can be seen after appendectomies. "Recurrent" appendicitis can occur if too much of the appendiceal stump is left after an appendectomy. This acts just like an appendix and can become occluded and infected just as with the initial episode. Therefore, it is important to ensure that there be very minimal and preferably no residual appendiceal stump after an appendectomy. If left untreated, appendicitis can lead to abscess formation with the development of an enter-cutaneous fistula. Diffuse peritonitis and sepsis can also develop which may progress to significant morbidity and possible death. (Jones & Deppen., 2019).

The gold-standard treatment for acute appendicitis is to perform an appendectomy. Today the laparoscopic appendectomy is preferred over the open approach. Most uncomplicated appendectomies are performed laparoscopic ally. In cases where there is an abscess or advanced infection, the open approach may be needed. The laparoscopic approach affords less pain, quicker recovery, and the ability to explore most of the abdomen through small incisions. Situations, where there is a known abscess from a perforated appendix, may require a percutaneous drainage procedure usually done by an interventional radiologist. This stabilizes the patient and allows the inflammation to subside over time enabling a less difficult laparoscopic appendectomy to be

performed at a later date. Practitioners also start patients on broad-spectrum antibiotics. There is some disagreement regarding preoperative antibiotic administration for uncomplicated appendicitis. Some surgeons feel routine antibiotics in these cases are not warranted, while others give them routinely. There have also been several studies promoting the treatment of uncomplicated appendicitis solely with antibiotics and avoiding surgery altogether. (Zani A, 2019).

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Pilot study showed, majority of people were eating low fiber diet (rice and spaghetti), which increased chance of developing of acute appendicitis among patients in hospital staying.

Acute appendicitis is one of the commonest surgical emergencies, in its disease course, the appendix becomes inflamed and infected by intestinal bacteria, leading to swelling and eventual wall rupture if left untreated. If ruptured, the abdominal cavity is then susceptible to widespread infection, leading to sepsis and death. Patients with ruptured appendicitis have longer hospital stays, more complications, and higher mortality than patients who do not progress to rupture. (Thomas SH, 2003).

Given the consistent progression to perforation and potential health gains with early treatment, rates of rupture have been advocated as a public health measure of access to medical care. Expressing the concern at the lack of progress in the prevention and control of acute appendicitis in the world particularly in sub Saharan countries region. (Andersen BR, 2005).

#### **Specific Objectives: -**

- 1.To determine patient demographics and characteristics of acute appendicitis at selected hospitals (Digfer, Shafi, and Medina).
- 2.To identify risk factors of acute appendicitis at selected hospitals (Digfer, Shafi, and Medina).

#### **METHODOLOGY**

#### 3.0 Study Designs

Cross sectional study was Used for this research, which means that the sample was take from the study population and the information was obtained at the same time on a particular point in time.

#### 3.1 study site and Target population

In this study, we have chosen at Selected Hospitals (Digfer, Shafi, and Medina) in Mogadishu was conduct as more case about acute appendicitis study. They are the right people to give their views on the issues concerning acute appendicitis.

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The study population comprised of patients diagnosed with appendicitis admitted was selected hospitals (Digfer, Shafi, and Medina) in Mogadishu, these patients elective and emergency surgery.

The target population was be all Consenting patients between 0 up to 18 years with presenting at Selected hospitals (Digfer, Shafi, and Medina), with diagnosed by the attending clinician to have appendicitis.

#### 3.2 Sample Size and Instrument for data collection

To determine the idea sample size for a population, the study was use Keisha and Leslie formula

which is 
$$n = \frac{Z2pq}{d2} = \frac{Z2p[1-p]}{d2}$$

Where n is required sample size

d- precision/error: A precision of 5% will be used

Z- Stand normal deviation corresponding to 95% confidence interval which is 1.96

P- Prevalence and risk factor of acute appendicitis hospitalization patients in hospitals 50%

$$n = \frac{(1.96)2*0.5(1-0.5)}{(0.5)2} = 384 \text{ patients}$$

The study continuous 1 year, but this study was conduct January 1st, up to June 30.

quantitative data analysis was be used to analyze the data in this study, the research was be proceed to field work to collect date, the data collection instrument was be the use of questions the data analysis will perform by analyzing classification and showing in any format that makes possible much understand descriptive and deferential statistics will be necessary to use at this stage to calculate the correction variable (Risk factors of acute appendicitis among children at selected Hospitals (Digfer, Shafi, and Madina)

#### 3.3 Data Processing and Analysis

The data will be gathered major data collection instruments used in this study will be primary data that included questionnaire, and secondary data such as study documents. The choices of these

instruments were guided by the data requirements and the objectives of the study questionnaire during data collection, the researcher will determine gathering a reliable and valid data.

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The data collection scientific calculation, and Statistical package of social scenes (**SPSS**) and excelwas used tables and charts to present the data. And Interpretation to the tables and graphs by using descriptive.

#### 3.4 Ethical Consideration and Approval

Ethical approval for the study was obtained from the Institutional Research Hospitals, Faculty of Health Science, and Jamhuriya University for Science and Technology.

Verbal consent was give subject who agreed to be part of the study after explanation of the aim of the study and re-assurance of confidentiality of the information.

#### 3.0 Results

#### 4.1 Age of the Respondents

variables	Frequency	Percent%
14-18 yrs	81	42.2
10-13 yrs	68	35.4
6-9yrs	26	13.5
0-5 yrs	17	8.9
Total	192	100.0

#### Table: 4.1 age of the respondents

As the result shows table shows the age of the majority 42.2 % of the respondent aged between 14-18 % years old, 35.4 % of the respondents aged 10-13 % years old, 13.5% of the total respondent aged between 6-9 years old and finally 8.9% 0-5 yrs.

#### **4.2** Gender of the respondents

Variables	Frequency	Percent%
Male	126	65.6
female	66	34.4
Total	192	100.0

# **Table 4.2 Gender of the respondents**

As the result shows table, On the gender of the respondents, the study found that the below figure summarizedemographics in gender characteristics the results shown that 65.6% of the respondents were male while female only formed 34.4%. This indicates that the most respondents of the patients were male gender.

### 4.3 Education of the respondents.

variables	Frequency	Percent%
Primary education	89	46.4
Secondary education	67	34.9
Quran	36	18.8
Total	192	100.0

**Table: 4.3 Education of the respondents** 

As the result shows table shows, that the researchers classified the levels of education of respondents into Secondary education is the greatest percentage value of 46.4%, while 34.9%. Primary education, and finally 18.8 % Quran of the respondents.

# 4.4 What is demographic region from?

Variables	Frequency	Percent%
Benadir Region	83	43.2
Galmudug	67	34.9
Jubo land	30	15.6
South West land	12	6.2
Total	192	100.0

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Table: 4.4 what is demographic region from?

As the result shows table shows the demographic region of major of the patients 43.2 % Benadir Region, 34.9 % of the them Galmudug, 15.6 % of the patients from Jubo land and finally 6.2 % of the patients South West land. This indicates that most of demographic region of respondents is Benadir Region.

# 4.5 Do you have any chronic disease like?

Variables	Frequency	Percent%
Diabetes mellitus (DM)	13	6.8
no have chorionic diseases	178	92.7
Chronic obstructive	1	2
Total	192	100.0

Table 4.5 Do you have any chronic disease like?

As the result shows table, 92.7 % no have chorionic diseases, 6.8 % of the patient have Diabetes mellitus (DM), and finally 1 % of Chronic obstructive.

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### 4.6 Which type of food do you eat?

Variables	Frequency	Percent%
Rice	98	51.0
Spagate	86	44.8
beans	8	4.2
Total	192	100.0

# Table 4.6 which type of food do you eat?

As the result table shows the researchers interest to know which type of food that the patient eats. 51.0% of the patients eat rice, 44.8 % of them Spagate and finally 4.2 % of the patients eat beans. The result indicates the most common of the people is rice.

#### 4.0 Discussion

This chapter deals with the discussion of the study interpreted from the analysis. The findings of the study are discussed in relation to the objectives, need for the study and related literature of the study.

#### 5.1 Discussion

As the study found 192 patients who had appendicitis and the majority those patients 81 (42.2%) were between the age of 14-18, 68 (35.4%) were between the age of 10-13, 26 (13.5%) were between 6-9 years and the 17 (8.9%) were between the age 0-5 also the results shown that 126 (65.6%) of the patients were male while female only formed 66 (34.4%). as well as 89 (46.4%) their education level was secondary and 67 (34.9%). were Primary education, while the majority of the patients 83 (43.2%) their residence was Benadir Region, 67 (34.9%) were come from Galmudug, 30 (15.6%) of the patients were from Jubbo land and finally 12 (6.2%) of the patients were from South West land.

Similarly, other studies show in children and in adults, appendicitis is a common emergency condition occurring at any age, but usually between 10 and 20 years. There is a male preponderance, with a male to female ratio of 1.4 to the overall lifetime risk is 6.7 % for females and 8.6 % for males in the USA. (Shaffer N, 2019).

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Acute appendicitis represents the most common surgical cause of acute abdominal pain among children. It accounts for one third of abdominal pain admissions to the surgical ward. Boys are affected more than girls with a life time risk of 8.67% vs. 6.7%. (McKay R, 2018)

Which is supported by a study conducted in India. 100 patients diagnosed as acute appendicitis and observed that male were more in number (55%) than female shows that male predominance in acute appendicitis is one of the remarkable factor and most of the sufferer were in the age group of 15 to 30 years and has observed that Pain abdomen was in 100%, fever was in 81% and vomiting in 75% of the patients which is almost close to 99%, 76% and 56% respectively (K. Suresh Babu and S. Savitha, 2017)

#### 5.0 Conclusion

Appendicitis is one of most common surgical emergencies, in its disease course, the appendix becomes inflamed and swollen as intestinal bacteria multiply in the lumen, recruiting white blood cells and forming pus. The objective of this study was to determine the Risk factors of acute appendicitis at selected hospitals in Mogadishu Somalia. As the study found 192 patients who had appendicitis and the majority those patients 81 (42.2%) were between the age of 14-18, 68 (35.4%) were between the age of 10-13, 26 (13.5%) were between 6-9 years and the 17 (8.9%) were between the age 0-5 also the results shown that 126 (65.6%) of the patients were male while female only formed 66 (34.4%).

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# Prevalence of Acute Calculus Cholecystitis among Female Child Bearing Age at Shafi Hospital Mogadisho Somalia

Vol: 4, No: 1 (2019)

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#### **Abstract**

Acute cholecystitis is a pathology in which the gallbladder wall becomes inflamed. Gallstones are the primary triggering factor of cholecystitis; they are present in more than 10% of the population and their presence increases with age. The main factors for the formation of gallstones are estrogen, pregnancy, cirrhosis, diabetes melitis, obesity and hemolytic disease.

Gallstone disease is a common reason for non-gynecologic operations during pregnancy and is the major non-obstetric cause for hospitalization. Pregnancy may accentuate gallbladder stone formation. Alterations in hepatobiliary function occur during pregnancy to create a lithogenic environment.

Conclusion our study is to investigate the prevalence of acute calculus cholecystitis among female childbearing age. the objectives: To investigate the prevalence of the most common age acute calculus cholecystitis among female childbearing age. To identify the risk factors associated with gallstones among pregnant women. To determine the most common predisposing factor to gallstones formation. With the sample size of 72, and the questionnaire was self-administered and also the target population was selected from hospital patients and the data was analyzed and interoperated by SPSS and Excel.

Recommends educating of community specially women to reduce the effect of the diseases that can be easily treated. Providing free health care for those women with low income level. Mother

should visit the doctor every trimester to check up her health condition and to provide

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**Keywords:** Acute calculus cholecystitis, Prevalence, Childbearing age, cholecystectomy.

#### 1.1 Background of the study

consultation.

Acute cholecystitis is a pathology in which the gallbladder wall becomes inflamed. Gallstones are the primary triggering factor in 90% of the causes of cholecystitis; they are present in more than 10% of the population and their presence increases with age. The main factors for the formation of gallstones are estrogen, pregnancy, cirrhosis, diabetes melitis obesity and hemolytic disease however, in approximately 2 to 15% of cases, acute cholecystitis can occur without the presence of gallstones, and these are named acute acalculous cholecystitis (AAC), a condition that is diagnosed with increasing frequency in critical patients and is reported worldwide. (Mendez-Sanchez N, 2006).

The first surgical management of acute acalculous cholecystitis was accidentally undertaken when Jean-Louis Petit (1674-1750), a Parisian surgeon, in 1743 incised an abdominal wall lesion that turned out to be the inflamed gallbladder firmly adherent to the abdominal wall. He thus became the first to describe a cholecystostomy. In 1867 Dr J. Bobbs performed surgery on a patient for a mass presumed to originate from the ovarium, which however turned out to be an enlarged stone-filled gallbladder. Cholecystostomy was later performed by Sims, Kocher and Tait in the succeeding decade. It was not until 1882, however, that Langenbuch, a German surgeon, performed the first cholecystectomy at Lazarus Hospital in Kiel, Germany. The procedure was successfully performed on a 43-year-old patient with chronic cholecystitis, biliary colic and morphine addiction. By 1897, he had performed 100 cholecystectomies with a mortality rate of about 20%. In 1985, almost one century later, technical developments made it possible for Erich Mühe, also from Kiel, to perform the first laparoscopic cholecystectomy (Lap-C) (2).

The overall prevalence of acute acalculous cholecystitis worldwide is 10-20% and about 10 % in the Western world. The formation of gallstone disease is multifactorial as witnessed by prevalence figures that vary between different ethnical populations as well as between countries. It is inordinately high amongest American natives and lowest in black Africans.

More than 80 % of people with acalculous cholecystitis are asymptomatic and their disease clinically silent. The cumulative rate of biliary complication in asymptomatic is about 3% over 10 years, while 1-3% of those with symptomatic gallstone disease develop acute cholecystitis (AC) each year following diagnosis. In Scandinavia, 50% of those eventually treated for acalculous cholecystitis developed their disease by the age of 23-38 in female reproductive age.(Birnholz JC:, 1998).

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Globally, cholelithiasis is a condition which affects approximately 20 million American women with million new cases diagnosed each year. Women of reproductive age are 4 times more likely than men of similar age to develop gallbladder diseases. Epidemiologic studies indicate that the incidence of acalculous cholecystitis rises abruptly as women enter the childbearing years. In fact, several studies show a direct relationship between parity and risk of developing biliary stones. (Glenn F, 2000).

#### **Specific objectives of this research:**

- 1. To investigate the prevalence of the most common age acute calculus cholecystitis among female childbearing age.
- 2. To identify the risk factors associated with gallstones amongst pregnant women.
- 3. To determine the most common predisposing factor to gallstones formation.

#### 2.0 Methodology:

#### 2.1 Research design.

This study follows cross sectional descriptive research design. The researcher has to use facts or information already available, and analyze in Shafi Hospital.

# 2.2 Study site and Target population

Population refers to the entire group of people that the researcher wishes to investigate at Shafi hospital. The study population is 90 which attended at Shafi hospital.

The target population is the patients who were attended Shafi hospital.

### 2.3 Sample Size and Instrument for data collection

From the target population of 90, the researcher selected 72 respondents as the sample size. From 01/02/2019 To 08/05/2019.

The researcher used Slovene's formula to select the respondents of the study from the population; using the following formula:

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

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The questionnaire of the study will developed by the researchers to collect information about prevalence of acute calculus cholecystitis among the most common age female childbearing.: so that this was enabled to make the items in the questionnaire as valid as possible.

#### 2.4 Data processing and analysis

This part addresses, processing and analysis. The data was collected through descriptive analysis. The data was collected from the study area, edited, collate and tabulated. Data will collected through questionnaire and interview, and A-4 point liker scale will used to measure the output of each item answered by the respondent. SPSS statistical computer software was used to tabulate the data.

#### 2.5 Ethical Consideration and Approval

Under this, the respondents were informed that participation is voluntary so that they made informed decision to participate or not. The researcher also got with an introductory letter protecting respondents through data confidentiality also minimizes links between answers and identifiers, to avoid putting respondents in trouble. In addition, the researcher avoids racial or tribal remarks, which are not gender sensitive.

#### 3.0 Results

The results of the study were presented using tables.

# 3.1 Gender of the respondents

Table: 3.1 gender of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	30	41.7	41.7	41.7
	female	42	58.3	58.3	100.0
	Total	72	100.0	100.0	

# 3.2 Age of the respondents

Table: 3.2 age of the respondents

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	19	26.4	26.4	26.4
	24-35	33	45.8	45.8	72.2
	36-55	20	27.8	27.8	100.0
	Total	72	100.0	100.0	

# 3.3 Gallbladder disease is more common in female gender.

Table: 3.3 Gallbladder diseases are more common in female gander.

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	49	68.1	68.1	68.1
	Disagree	23	31.9	31.9	100.0
	Total	72	100.0	100.0	

# 3.4 Females with obesity have an even increased risk of stones formation.

Table: 3.4 Females with obesity has an even increased risk of stones formation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	51	70.8	70.8	70.8
	Disagree	21	29.2	29.2	100.0
	Total	72	100.0	100.0	

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# 3.5 Gallbladder disease can be preventable.

Table: 3.5 Gallbladder diseases can be preventable.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	41	56.9	56.9	56.9
	Disagree	31	43.1	43.1	100.0
	Total	72	100.0	100.0	

# 3.6 The risk of gallstone formation during low solubility of cholesterol.

Table: 3.6 The risk of gallstone formation increases with the decrease in the degree of solubility of cholesterol.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	57	79.2	79.2	79.2
	Disagree	15	20.8	20.8	100.0
	Total	72	100.0	100.0	

#### 4.0 DISCUSSION

During the reproductive years, women have a 4-fold higher prevalence of gallstones than men. Among age-matched women and men hospitalized for cholecystitis, therefore gallbladder disease is a significant cause of morbidity for young, otherwise healthy women. The female gender has a most compelling association with gallstone disease, especially during the fertile years.

This study was both prospective and retrospective study concerning risk factor of prevalence of acute calculus cholecystitis among female childbearing age. This study put into consideration of 72 respondents as sample size to determine about the Topic under study in Shafi Hospital Mogadishu Somalia. In our study shows Gallbladder disease is more common in female gander and young age, 45.8% of the respondent shows between 24-35 years old, because the risk is related to the number of pregnancies.

This study appear to has some similarity with other studies in the literature; **In Nigeria** January 2013; pregnant women (14–43 years of age) Twenty-one (56.8%) of the 37 women with gallstones were 30 years of age or younger. **In Pakistan; Karachi** from June 2013 till March 2015. The occurrence was higher in females (14.8%) than in male participants (5.7%). Mean Age ≥25 years. **In America;** September 1999(NHANES III) the overall prevalence of gallstone disease was found to be 7.9% in males and 16.6% in females, with a progressive increase after 20 years of age.

But there are some variation in other studies; **In Ghana**; KomfoAnokye Teaching Hospital, Kumasi between 2009 and 2012. The study shows: 55% were females. Age  $\geq$  40 years, Prevalence increased steadily by age, Mean age was  $47\pm18$  years. **In Iran**; 2001 May; 16(5):564-7. Massarrat S. While the prevalence in the men and women in the age group 31-40 years was very low (0.3% in men and 1.8% in women), **In India:** hospital Jamshedpur, Jharkhand: INDIAN JOURNAL OF

RESEARCH VOLUME-6 | ISSUE-8 | AUGUST-2017 | male: female 1:4, Maximum number (29%) of patients belonged to the age group of 35-45 years followed by the age group of 25 to 34 years (26%). below 25 years aged were least in number (1.8%).

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#### **5.1 Conclusions**

This Study is to investigate the prevalence of acute calculus cholecystitis among female childbearing. With the objectives: To investigate the prevalence of the most common age acute calculuscholecystitis among female childbearing age. To identify the risk factors associated with gallstones amongst pregnant women. To determine the most common predisposing factor to gallstones formation. With the sample size of with the sample size of 72, and the questionnaire was self-administered and also the target population was selected from hospital patients, teachers, students and the data was analyzed and interoperated by SPSS and Excel.

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# Determinants of Pheumonia in Under Five Years Children at Community Level In Hodan District Mogadishu Somalia

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**ABSTRACT** 

The study investigates the determinants of pneumonia in under five year's children at community level in Hodan district. The main objectives of the study was the baseline determinants which will

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# Determinants of Pheumonia in Under Five Years Children at Community Level In Hodan District Mogadishu Somalia

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**ABSTRACT** 

The study investigates the determinants of pneumonia in under five year's children at community level in Hodan district. The main objectives of the study was the baseline determinants which will

prove the current situation of pneumonia in the target population and support future strategic plan of interventions related to the pneumonia in less than five years of age. Study design was descriptive cross-sectional study design qualitative to identify Determinants of pneumonia in children less than five years at Hodan district. This study was used sampling procedure probability technique to collect data 2MCHs in Hodan district and sample size will 78 which draw from 100 of total population those who are attended in MCH. (Slovene formula which is  $N/1+Ne=100/1_{+025}$ 

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Keywords: pneumonia, children less than five years, Hodan district

#### 1.0 Background

Pneumonia is the single largest infectious cause of death in children worldwide. Pneumonia killed 920 136 children under the age of 5 in 2015, accounting for 16% of all deaths of children under five years old. Pneumonia affects children and families everywhere, but is most prevalent in South Asia and sub-Saharan Africa. Children can be protected from pneumonia; it can be prevented with simple interventions, and treated with low-cost, low-tech medication and care. In sub-Saharan Africa, care-seeking for pneumonia has improved from 36% in 2000 to 46% in 2010 for rural areas, and from 49% to 52% in urban areas. Pneumonia is defined by as an inflammation of the lungs caused by bacteria, viruses and fungi. In pneumonia infection, the lungs which are made up of small sac-like features called Alveoli which are usually filled with air when a healthy individual breathes are filled with pus and fluid, making breathing painful and reducing oxygen intake (WHO, 2016)

Pneumonia kills more than two children every hour in Somalia; the report indicates that 14,561 Somali children succumbed to pneumonia in 2015 alone – Which is more than two children dying every hour. This implies 24% of all less than five Mortality is due to pneumonia. The situation may get worse if drastic measures are not taken to save children's lives. ((Dr Abdinasir Osman Isse, 2017)

The situation is worse in Somalia. Food shortages as a result of drought in the country has left millions of children malnourished; making them more vulnerable to diseases including pneumonia, the Area Representative for Save the Children Puntland. "We are doing all it takes to

save these children. We should not ignore pneumonia at this critical time. More than 80% of the victims are children under two years old, many with immune systems weakened by malnutrition or insufficient breastfeeding and unable to fight the infection. Infants are at their most vulnerable in the first weeks of life. Save the Children is calling for 166 million under-twos to be immunized and for action to help 400 million worldwide with no access to health care. Half of all mothers in Africa have no health care around the time of birth. (Dr Said Abdiqafa rHange, 2017)

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#### **Specific Objectives of this study are:**

To determine factors contributed delay of seeking care among caregivers

To find out management methods used by the care givers

#### 2.0 Methodology:

#### 2.1 study design

Study design was descriptive cross-sectional study design qualitative to identify Determinants of pneumonia in children less than five years at Hodan district.

#### 2.2 study site and target population

The study was concern pneumonia under five children of age at Hodan district.

#### 2.3 Simple size and instrument for data collection

The sample size was 78 which draw from 100 of total population those who are attended in MCH and Structured, Survey Closed ended Questionnaires will used as data collection tools

#### 2.4 Data analysis and interpretations

The researcher employed statistical package for social science SPSS version (20.0) and data will present descriptive statistics Graphs and frequencies tables.

#### 2.5 Ethical considerations

Ethical approval for the study was obtained from the Institutional Research Board, Faculty of Health Science, Jumhuuriya University for Science and Technology. Verbal consent will give each subject who agreed to be part of the study after explanation of the aim of the study and re-assurance of confidentiality of the information

#### 3.0 **Results:**

# 3.1 Respondent by gender

variables	Frequency	Percent%
male	16	20.5
female	62	79.5
Total	78	100.0

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# 3.1 Table4.1 Respondent by gender

3.1As the result shows majority of the respondents 62 (79.5%) were female and 16 (20.5%) rest of respondents were male.

# 3.2 Respondent by age

variables	Frequency	Percent%
20-25	29	37.2
26-30	27	34.6
31-40	16	20.5
41-50	5	6.4
50 and above	1	1.3
Total	78	100.0

# Table 3.2 Respondent by age

The majority of the respondents 29(37.2%) were b/w the age of 20-25, 27(34.6%) were b/w 26-30, 16(20.5%) were b/w 31-40, 5(6.4%) were b/w 41-50 and 1 (1.3%) above 50.

#### 3.3 Respondents by marital status

Variables	Frequency	Percent%
singe	21	26.9
married	41	52.6
divorced	7	9.0
windowed	9	11.5

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Total	78	100.0

# Table 3.3 respondents by marital status

The majority of the respondent 41(52.6%) were married, 21(26.9%) were single,9(11.5%)were windowed and 9(9%) were divorced.

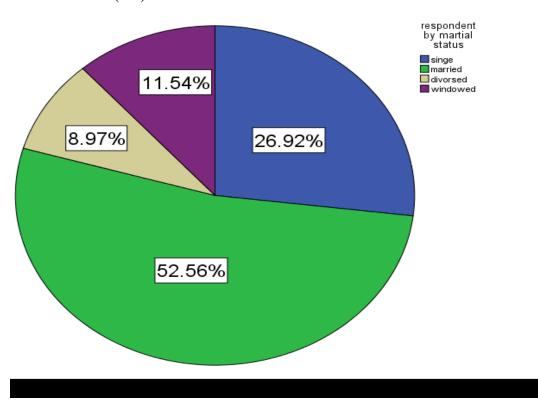


Figure 3.3 respondents by marital status

#### 3.4 Where are you come from (Place of residence)?

category	Frequenc	Percent%
	y	
urban	66	84.6
rural	12	15.4
Total	78	100.0

# 3.4Table Where are you come from (Place of residence)?

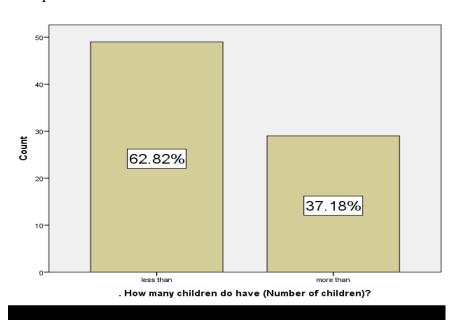
As the result shows majority of the respondents 66 (84.6%) were Urban and 12 (15.4%) rest of respondents were rural.

3.5 How many children do have (Number of children)?

categories'	Frequenc	Percent%
	y	
less than 4	49	62.8
more than 4	29	37.2
Total	78	100.0

# 3.5 Table how many children do have (Number of children)?

As the result shows majority of the respondents 49 (62.8%) were less than 4 and 29 (37.2%) rest of respondents were more than 4.



#### 3.6 What is the highest level of education attained by the mother of the child?

Categories	Frequency	Percent%
Illiterate	22	28.2
Primary	16	20.5
Secondary	20	25.6
Tertiary	20	25.6
Total	78	100.0

#### 3.6 Table what is the highest level of education attained by the mother of the child?

Most of the respondents 22 (28.2%) were illiterate, 20 (25.6%) were primary as well as 20 (25.6%) were secondary and 16 (20.5%) were tertiary.

# 3.7 Do you know pneumonia?

Do you know pneumonia?	Frequency	Percent%
Yes	37	47.4
No	41	52.6
Total	78	100.0

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### Table 3.7 Do you know pneumonia?

Most of the respondent 41(52.6%) were not know pneumonia and 37(47.4%) were know pneumonia.

#### 3.8 Have you seen pneumonia before?

Have you seen pneumonia	Frequency	Percent%
before?		
Yes	35	44.9
No	43	55.1
Total	78	100.0

### Table 3.8 Have you seen pneumonia before?

Most of the respondent 43(55.1%) were had not seen pneumonia before and 35(44.9%) were had seen pneumonia before?

#### 3.10 Is there any delay in healthcare for the sick newborn?

Is there any delay in healthcare for the	Frequ	Percent%
sick newborn?	ency	
Yes	67	85.9
No	11	14.1
Total	78	100.0

#### 3.10 Table is there any delay in healthcare for the sick newborn?

As the result shows majority of the respondents 67 (85.9%) were delay in healthcare for the sick newborn and 11 (14.1%) were not delay in healthcare for the sick newborn

# 3.11 If yes what are reasons for delays in seeking healthcare for the sick newborn?

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If yes what are reasons for delays in seeking healthcare for the sick	Freque	Perc
newborn?	ncy	ent
		%
Cost and accessibility issues	23	29.5
lack of transport from place of residence	12	15.4
Lack of knowledge of danger signs in newborns	38	48.7
Others	5	6.4
Total	78	100.0

### 3.11 Table if yes what reasons are for delays in seeking healthcare for the sick newborn?

Most of the respondents 38 (48.7%) were Lack of knowledge of danger signs in newborns, 23(29.5%) were Cost and accessibility issues as well as 12 (15.4%) were lack of transport from place of residence and 5 (6.4%) were others.

# 4.0 discussion

As the result shows majority of the respondents 62 (79.5%) were female and 16 (20.5%) rest of respondents were male and 29 (37.2%) were b/w the age of 20-25, 27(34.6%) were b/w 26-30, 16(20.5%) were b/w 31-40, 5(6.4%) were b/w 41-50 and 1 (1.3%) above 50 as well as 41(52.6%) were married, 21(26.9%) were single,9(11.5%) were windowed and 9(9%) were divorced and also 22 (28.2%) were illiterate, 20 (25.6%) were primary as well as 20 (25.6%) were secondary and 16 (20.5%) were tertiary and Most of the respondents 25(32.1%) were housewife, 24(30.8%) were others, 14(17.9%) were nurse, 10(12.8) were teachers, and 5(6.4%) were business.

According to the previous study results the Majority of the caretakers (96.4%; 268/278) were female and 82.4 % (229/268) were mothers of the children. Most of the caretakers were aged 21-35years, 45.0% (125/278) had attained secondary level education and 76.3% (212/278) were married and also slightly more than half, 194 (51.9%) were in the lower socioeconomic class and 84 (22.5%) and 96 (25.7%) in the middle and upper socioeconomic classes, respectively (Doreen tuhebwe, Elly tumushabe at el, 2013).

Most of the respondent 41(52.6%) they did not know pneumonia and 37(47.4%) did know pneumonia. And also study founded 43(55.1%) had not seen pneumonia before and 35(44.9%) had seen pneumonia before, And 43(55.1%) did not know danger sign of pneumonia and 35(44.9%) did know danger sign of pneumonia, 67 (85.9%) were delay in healthcare for the sick newborn and 11 (14.1%) were not delay in healthcare for the sick newborn but also38 (48.7%) were Lack of knowledge of danger signs in newborns, 23(29.5%) were Cost and accessibility issues as well as 12 (15.4%) were lack of transport from place of residence and 5 (6.4%) were others. And also Most of the respondent 26(33.3%) were caused by only bacteria, 25(32.1%) were not know the cause pneumonia 16(20.5%) were caused bacteria, virus and fungal, 7(9.0%) were caused virus and 4(5.1%) were caused fungal.

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#### 5.0 conclusion

The study was done and evaluation highlights the challenges in care seeking for pneumonia in a district of Hodan, starting with inadequate knowledge about danger signs among children with pneumonia, insufficient home management practices and, potential for treatment seeking delays along the process. The gaps in the first-line community management system at the VHT level and perceived lack of medicines at the facility level may also exacerbate the poor health seeking behaviors. Comprehensive interventions geared at increasing symptom recognition, improving health seeking behavior and the quality of services at the community level and health facilities are needed to reverse this trend

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# Major Factors Contributing and Available Management Options To Late Vaginal Bleeding In Pregnant Women Attending Banadir Hospital

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#### Abstract

The Aim of the study is To identify major factors contributing to late vaginal bleeding in pregnant women attending Banadir hospital And specifically To identify socioeconomic risk factors associated with late vaginal bleeding in pregnant women and finally To find out the most appropriate management of late vaginal bleeding in pregnant women. This study was retrospective study was conducted at Banaadir hospital. The target population of this study was all 3rd-trimester pregnant women with bleeding attended in Banadir hospital from January to May 2019 The study used non probability sampling method. Our study finding placental abruption represented about 38% of all risk factors, followed by placenta previa which contributed about 30% of the causes followed by trauma 14%, uterine rupture 4% infections 8% and others 6%. 84% of study populations were low socioeconomic status, while 16% middle socioeconomic status. The study also finds out that 82% not attending antenatal care centers previously while 18% were visiting antenatal care centers. The study also revealed that 88% of study populations were multipara, the