Utilization of Primary Health Care and Its Associated Factors among Women of Childbearing Age Living in Mogadishu-Somalia

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Abstract

Background: The Somali people have some of the worst health indicators in the world, with women and children most affected. Despite modest improvements in maternal and child mortality rates in the last five years, inequities amongst communities meant that some children and mothers are disproportionately exposed to otherwise avoidable and treatable diseases. The broad aim of this study is to assess utilization of Primary Health Care (PHC) and Its associated factors among Women of Childbearing age living In Mogadishu Somalia. **Methodology:** Descriptive and Analytical cross-sectional community-based study was conducted among Women of Childbearing age that were living in two districts (Hodan and Abdul-Aziz Districts)-Mogadishu-Somalia-From May 2019 to September 2019. A total of 395 of Women of Childbearing age were targeted during the study period. Descriptive and analytical statistics was used using Statistical package for social science (SPSS) version 20 statistical software. The data were showed tables, figures and graphs for describing the data. Results: The study found that Most of respondents were between 15 to 25 years 41.5% (395 sample sizes), while the age of group of >45 to 55 was only 6% (395 sample size). According to the district 76.5% of respondents were from Hodan, while 23.5% (395 sample size) of respondents were from Abdul-Aziz district. According to awareness to the need of a pregnant mother to be vaccinated at the Mother and child health (MCH) Most respondents 48.2% (395 Sample size) said that pregnant women may or may not need to be vaccinated. According to health-seeking decisions only 3% of ever married respondents were made by themselves whilst 97% of them were made by their husband. Age group was not significantly associated with the level of utilization of Primary Health Care (PHC); this is different from study in Kenya showing that age is an important factor in determining the use

of skilled assistance, early antenatal care visits and more than four antenatal visits. **Conclusion:** The study concluded and recommended that the level of utilization of primary health care is poor and lower than other studies around Somalia as well as World Health Organization (WHO). recommendation And the study recommended that enhancing awareness importance of primary health care (PHC) utilization and empowering women Health care-seeking behavior and their husbands.

Keywords

1. Background

Maternal mortality remains a public health challenge across many developing countries around the world. For instance, in 2013, about 289,000 women died to causes related to childbirth. Out of these deaths, about 179,000 were from developing countries [1].

In sub-Saharan Africa, women's lifetime risk of dying in childbirth stands at 1 in 38 relatives to 1 in 3700 from developed countries. In sub-Saharan Africa, Malawi reported the highest maternal mortality rated at 510 deaths per 100,000 live births which implied that 1 in every 34 women died during childbirth, in the same year [2].

Previous scholars asserted this public health challenge to preventable direct causes upon women's timely seeking of maternal health care services during and after gestation period [3] [4].

Health has been recognized as a fundamental human right, regardless of sex, political affiliation, social class or ethnicity, as well as the right to minimum condition of wellbeing, including the provision of medical care and public services for all people [5].

Improving health throughout the world is a gigantic task requiring global cooperation. The international health care system was first recognized at the first international scientific conference in 1851 [2] after which the World Health Organization (WHO) introduced a system of cooperation against the spread of diseases. A WHO conference held in Alma-Ata in 1978, proclaimed Primary Health Care (PHC), as a concept that calls for the overall promotion of health by supporting the individual, the family and the community, by defining the active participation of the community, their needs and ways to meet them [6].

The neglect of women's health needs was highlighted in 1985 when Rosenfield and Maine, in their article "Where is the M in MCH? ", called for action against the silent but vast problem of women dying in pregnancy and childbirth (Rosenfield & Maine 1985). They pointed out that maternal and child health (MCH) programs were addressing mainly the needs of the child and were overlooking the mother. In 1987 a Safe Motherhood Conference was held in Nairobi, Kenya,

which was the starting point for the Safe Motherhood Initiative (SMI). Awareness campaigns and meetings were started in developing countries in order to mobilise governments and policy-makers to take action against the long neglected problem of women dying in pregnancy and childbirth. In order to assess the magnitude of the problem, maternal mortality studies were performed in many countries. It was realized that many deaths occurred in silence and were never reported [7].

Poor usage of skilled attendance and maternal primary health care services results in high levels of maternal mortality in the developing countries. The maternal mortality ratio in Nigeria, for example, is estimated at 560 per 100,000 women [1]. Various studies have been done around the world to identify factors that influence the choice of child-bearing women's health care. Some of the identified factors include cost of services [2] [3] [4] [5] [6]; sociodemographic and educational level of the client [7] [8] [9] [10]; women's level of autonomy in making health care decisions [2] [5]; physical accessibility to health care services and the type of health services rendered, disease pattern and healthcare workers attitude also another Studies within sub-Saharan Africa have attributed such variations in maternal health outcomes and any issues related to pregnancy and childbirth within the region to socioeconomic disparities [2] [3] [4] [7] [10] [11] [12] [13]. Maternal deaths could be prevented if women were able to access and utilize good quality services, especially when complications arise [14]. However, in reality, most women experience serious barriers to accessing services or even if they do reach them, the services themselves are often of insufficient quality or effectiveness. Also, in recent years, sector-wide strategies focused on skilled attendance have aimed to generate demand as well as augment supply. Kenya has a massively growing population but more than half of its population makes up the majority of poor people living under the poverty line do not have enough earnings for their basic needs, food, water and shelter. They are therefore the people who rely most on government subsidies for health care. Unfortunately, they face many barriers in accessing health care and usually end up receiving poorer services than the minority rich population [12]. Ethiopia suffers from a severe shortage of both health personnel and accessible facilities. Approximately 30 percent of households were estimated to live more than 10 kilometres from the nearest hospital, health center, or health station. Urban areas with 4 - 6 percent of the total population have 44 percent of all health facilities [13]. Ethiopia is a leading contribution to the maternal death figure in SSA because of its high maternal mortality ratio. In Ethiopia maternal mortality rate was estimated to be 673 deaths per 100,000 live births which are among the highest in the world (14). According to the Ethiopian demographic and health survey (EDHS), the antenatal care (ANC), postnatal care (PNC) and skilled delivery care in Somali region was 21.5%, 8.4% and 7.4% respectively [15] Public health facilities in Somalia is generally inadequate and the quality of services at the existing health units is generally unsatisfactory In addition, the private sector, of which the pharmacy

often constitutes the prime location for consultation, play a major role in providing quality health care. However, due to financial constrains not all Somali populations use the facilities and people with the financial means mainly access the private facilities [14].

2. General Objective

The main purpose of this study was to assess Utilization of PHC and it's associated with Risk Factors among Women of Childbearing age In Mogadishu-Somalia.

The specific objectives of the study was:

1) To measure the utilisation of primary health care services among woman of childbearing age living in Mogadishu Somalia;

2) To assess the awareness towards primary health care among woman of childbearing age living in Mogadishu Somalia;

3) To determine the health facility factors contributing to the utilization of primary health care among women of childbearing age in Mogadishu Somalia;

4) To assess socio-demographic factors associating with utilization of primary health care among women of childbearing in Mogadishu Somalia.

3. Methods & Materials

3.1. Study Design

Across-sectional study design was conducted to obtain reliable information about the utilization of primary health care service among women of childbearing age, in Mogadishu, Somalia.

3.2. Study Population

The populations of Mogadishu are estimated to be 1.5 million according to (PESS Population by district final 2017). The target population is all women of childbearing age living Mogadishu.

According the final population estimate by district 2017 Mogadishu is composed of 16 districts which will be divided in to two equal strata each containing eight districts and each strata one district was selected by simple random sampling technique.

3.3. Study Area

The study was conducted in Mogadishu, the capital of Somalia. It is a coastal city in east Africa. It is home to over a 2 million inhabitants. Quantitative data was obtained from women of childbearing age living in two randomly selected districts in Mogadishu Somalia

3.4. Selection Criteria

3.4.1. Inclusion and Exclusion Criteria

Any women in childbearing age and living in the selected districts and accepted to participate the study.

3.4.2. Exclusion and Exclusion Criteria

Any women not in childbearing age and not living in the selected districts and refused to participate the study.

3.5. Sampling Techniques

After randomly selecting the districts two sub districts was randomly selected and then three main roads was randomly selected from each sub district, then every second house (1, 3, 5) will be selected. If the target population was not found in the second selected house the next house was taken until sample size is obtained.

3.6. Sample Size

In the calculation of sample size sloven formula was used since the target population is known:

Through random sampling Hodan and Abda-aziz has been selected and the sample size was obtained from the women childbearing age living in the two districts.

Hodan 24,897 + Abda-aziz 7704 and total target population is 32,601

$$n = N \setminus 1 + N * e^2 \quad \text{Where: n= is sample size.}$$

$N =$ is total population, which is the estimated women childbearing age living in the two districts and they 32,601.

$e =$ is desired error margin which is 0.05.

Therefore by simply applying the above values to the formula we got the following sample size: $n = 395$.

3.7. Data Collection

Data collection methods:

The data collected from structured questionnaire used in this study was developed and consisted of 4 sections which were used a well-designed questionnaire of the patients, the questionnaire comprises of 4 sections as follows.

Section 1: General characteristics of respondent in this part, there were 8 items asking general characteristics of respondent including, age of respondent, District from the respondents, Marital status, if not single, age of 1st marriage, income per month level,, living condition, Employment status and Level of education.

Section 2: include Awareness of the mothers towards MCH, knowledge about the maternal health services provided, family planning and so on.

Section 3: includes health facility factors which according to (Distance to health facility, Transportation method, Waiting time for health works, Service availability at needed time and Level of satisfaction).

Section 4: Primary health care utilization including (ANC visits, Timing of visit, and Vaccination status, Family planning and child spacing etc.).

3.8. Data Analysis

The raw data entered to the SPSS program of statistics version 20, in order to

analyses data. After data entry, the data processed and the required information obtained through the SPSS program. A comparison between the groups made using the Pearson chi square, a descriptive statistics, association between dependent and independent variables analyzed by calculating the Odd ratios and 95% confidence level. The processed information presented through Tables 1-3 and charts.

3.9. Ethical Considerations

Medical research involving human subjects raises ethical concerns about the subject's right to privacy; all study subjects will be asked to give informed consent and assured regarding confidentiality and anonymity of data. In order to make sure that the study is ethically kept, the researchers fulfilled the following issues.

3.9.1. Institutional Consent
Ethical approval for the study obtained from the researchers and ethics committee of Ministry of Health.

3.9.2. Informed Consent
To get signed letter of informed consent of the respondent, the researcher assistance introduced themselves to the participants and the study explained to the participants on the procedure. The purpose of the study explained to the respondents, they also informed about the criteria of being selected to participate in the study, procedures to follow and any risks and benefits which may be involve during the study. They also being informed about the duration of the study, and they assured that confidentiality was ensured.

4. Results

This chapter covers the analysis and interpretation of finding about the utilization of primary health care and its associated factors among women of childbearing age in Mogadishu, Somalia. Data of the questionnaire were analyzed using SPSS version 20. The obtained results have been sorted out into four main heading: Socio-Demographic Information, Awareness towards Primary Health Care, Health Factors and Level of Utilization Primary Health Care Service.

4.1. Univariate Analysis; Socio-Demographic Information

Eight questions were related to the demographic information mainly about variables such as Age of Respondent, Marital Status, Level of Education, Living Condition, District, Employment Status, as well as Daily Income.

According to age distribution, Most of respondents were between 15 to 25 years (41.5%) while the age of group of >45 to 55 were only (6%). According to the district 76.5% of respondents were from Hodan, while 23.5% of respondents were from Abda-aziz district.

Table 1. Describes the demographic characteristics of the respondents.

Variables		Frequency	Percentage
Age	15 to 25 years	164	41.5%
	>25 to 35 years	111	28.2%
	>35 to 45 years	96	24.3%
	>45 to 55 years	24	6.0%
	Total	395	100%
District	Hodan	302	23.5%
	Abda-aziz	93	76.5%
	Total	395	100%
Marital Status	Single	96	24.2%
	Married	149	37.8%
	Divorced	112	28.3%
	Widowed	38	9.7%
	Total	395	100%
if not single, age of 1st marriage	<18 years	121	40.5%
	18 to 25 years	139	46.5%
	>25 years	39	13%
	Total	299	100%
Average daily income	<3 $	113	28.7%
	3 to 6 $	201	50.8%
	>6 $	81	20.5%
	Total	395	100%
Employment status	Employed	33	8.3%
	Unemployed	362	91.7%
	Total	395	100%
Living condition	IDP	352	89%
	Non IDP	43	11%
	Total	395	100%
Health seeking Decisions if ever married	My husband	290	97%
	My self	9	3%
	Total	299	100%
Level of education	Illiterate	188	47.5%
	Primary Education	86	21.8%
	Secondary Education	85	21.5%
	University level	36	9.2%
	Total	395	100%

Table 2. Details the health facility factors.

Variables		Frequency	Percentage
Distance to health facility	<2.5 km	213	53.9%
	>2.5 km	182	46.1%
	Total	395	100%
Transportation method	Bus	107	27.1%
	Walking	219	55.4%
	Bajaj	69	17.5%
	Total	395	100%
Waiting time for health works	<15 minuets	54	13.6%
	15 to 30 minuets	187	47.4%
	>30 minuets	154	39%
	Total	395	100%
Service availability at needed time	Not available	236	59.7%
	Available	159	40.3%
	Total	395	100%
Attitude of health workers	Good	172	43.5%
	Average	139	35.2%
	Poor	84	21.3%
	Total	395	100%
Level of satisfaction	Good	229	58%
	Poor	166	42%
	Total	395	100%

Table 3. Describes the utilization of primary health care.

Variables		Frequency	Percentage
ANC visits	Never visited	118	39.5%
	1st trimester	139	46.5%
	2nd and 3rd trimester	42	14%
	Total	299	100%
Delivery	At health centre	84	42%
	Home /TBA	116	58%
	Total	200	100%
TT Vaccination status	Never been vacated	214	54.2%
	1 to 3	94	23.8%
	>3	87	22%
	Total	395	100%

Continued

Family planning and child spacing	None, or only breast feeding	173	56.5%
	Condom	5	2.3%
	Implant	24	8.6%
	Injection contraceptive	47	14.4%
	Oral contraceptive pills	72	18.2%
	Total	299	100%
feeding program for pregnant and lactating women	Never	91	32.6%
	Once	119	42.7
	More than once	69	24.7%
	Total	279	100%

According to the living status 89.0% were Non-IDP campus while 11.0%, were IDP camps.

According to the marital status 37.8% were married, while only 9.7% were widowed. Regarding to the level of education 47.5% of respondents were illiterate, 9.2% were university. According to the employment 8.3% were employed, and 91.7% were unemployed.

According to the average daily income most of 50.8% of respondents were between 3\$ to 6\$, while 20.5% were >6\$. Regarding Age of the 1st marriage 40.5% were <18 years old, while only 13% were >25 years.

Speaking of health seeking decisions only 3% of ever married respondents were made by themselves whilst 97% of them were made by their husband.

Figure 1 shows awareness to primary health care.

Awareness of the participants assessed by the following questions, participants who get the correct answer of 60% of the question considered as having a good awareness, however those get less than that categorized as poor awareness.

4.2. Health Facility Factors

Speaking of distance to the health facility 53.9% are less than 2.5 km away from health facility.

Most of respondents 55.4% come to the health facility by walking, while only 17.5% come by Bajaj Regarding the waiting time 47.4% wait 15 to 30 minutes.
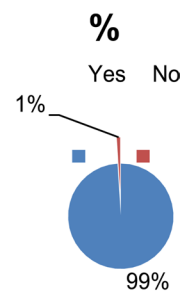

Figure 1. Describes how many respondents heard of mother and child health center.

According to the attitude of health workers most of respondents 43.5% categorized them as having good attitudes. Regarding level of satisfaction, 42% of participants were poorly satisfied to the health facility.

4.3. Utilization of Primary Health Care

The utilization of primary health care among women of childbearing age were assessed by their level of using the common primary health care services such as ANC, Vaccination, Delivery, Family Planning, Feeding of Pregnant and Lactating Women.

According to the timing of visits most of respondents among those visiting the ANC (181) only 22.1% of them had visited in their 1st trimester while 77.9% visited in their 2nd and 3rd trimesters.

Regarding Delivery 42% of respondents was delivering in health facility whilst 58% of them were delivered by TBA.

Speaking of TT vaccination most of participants 54.2% have never been vaccinated while only 22% of them have been vaccinated more than 3.

According to family planning and child spacing most of participant have none or only used breastfeeding as family planning method, while the most common used method was oral contraceptive 18%.

Regarding the pregnant and lactating women feeding program, 32.6% of respondents have never benefited from the feeding program while only 24.7% of them used more than once.

Figure 2 shows the level of utilization.

The level of utilization among participants depends on their utilization of each primary health program, the level has been categorized into three categories which, proper utilization, Average utilization and not utilizing.

Participants that utilize more than 80% of primary health care are considered as good utilization category, while those with 50% to 79% are categorized as average utilization and those having less than 50% are considered as poor utilization.
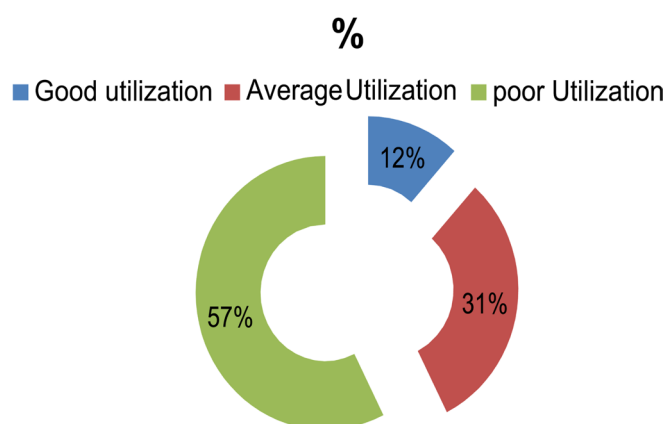

Figure 2. Describes the level of utilization of primary health care among respondents.

5. Discussions

The utilization of primary health care documented in this study is 57% poor utilization while 31.1% is average and only 11.9% is good.

ANC visits among the participants of this study demonstrated that only 14% of them had on their 1st trimester. This result is also higher compared to 2011 EDHS reported where only 11% of women in Ethiopia made their first antenatal care visit before the fourth month of pregnancy [8].

Many factors are related to the utilization antenatal care, including the health seeking decisions, in which this study showed that participants that make the health seeking decision by them are 85.7% of those who attend antenatal care in their 1st trimester.

Maternal education is strong factor in determining health service utilization, with 61.7% of those with good utilization of primary health care service are at university level.

Many factors are related to the utilization antenatal care, including the health seeking decisions, in which this study showed that participants that make the health seeking decision by themselves are 85.7% of those who attend antenatal care in their 1st trimester This result is relevant with study in Nigeria Women whose husband approves of antenatal care were more likely to have used prenatal care than women whose husband did not approve of ANC [9] Maternal education is strong factor in determining health service utilization, with 61.7% of those with good utilization of primary health care service are at university level. This is consistency with the findings from elsewhere in the World (Letamo, 2003; Stephenson, 2006; Navaneetham, 2002). There are a number of explanations for why education is a key determinant of health service use. Education is likely to enhance female autonomy so that women develop greater confidence and capability to make decisions about their own health [10].

6. Conclusions

This study demonstrates the level of utilization of primary health care among women of childbearing age as well as factors that are determining the level of utilization

The level of utilization of primary health care is poor and lower than other studies around Somalia as well as WHO recommendation.

Factors such usage of 1st marriage, level of education, level of awareness, service availability at needed time and employment status are significantly associated with level of utilization.

Age of respondents, average daily income, marital status and distance to health facility were significantly associated with the utilization of primary health care in this study.

7. Recommendations

The awareness of Women of childbearing is important factors in utilization pri-

mary health care as shown in this study, awareness campaigns with pre-structured and well designed as well as in coordination with ministry of health and local authorities through well-trained community health workers with target structured message and boosters as well use of media.

Service availability at needed time is also a significant factor; since women are always busy with their child and home needs in the morning which the working time for most of health facility, its recommended that working hours for providing primary health should redesign and service availability at any needed time should be strengthened through coordination of health workers and monitoring by the ministry of health

Awareness of husband regarding the right of women for healthy b pregnancy care as well as safe giving birth is crucial factor in achieving safe motherhood.

Further researches in other contributors such the knowledge and attitude of women in childbearing age.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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