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# ROLE OF HEALTH AWARENESS IN PROMOTING MEASLES IMMUNIZATION AND ELIMINATION OF THE DISEASE.

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## 1. ABSTRACT

The descriptive cross sectional study conducted in Khartoum state, Karrari locality among mothers to study the awareness role in promoting Measles immunization and elimination of the disease. The target population consists of mothers having children less than five years old, 192 mothers were selected for the study through the Questionnaire which was designed to gain the requested information. The study revealed that the socioeconomic level of targeted group is generally low which is associated with lack of awareness, knowledge of the mothers towards immunization against measles is high (82%), but the awareness on the role of the vaccination on protecting against the disease is relatively low (40%). It has been concluded that the low socioeconomic status, gab of information on measles vaccination importance in addition to the weak health education activities leads to low coverage of measles immunization in the targeted area leading to raising risk factors of higher prevalence of measles in the area. The study recommended that Ministry of health must conduct extensive health education campaign targeting mothers with basic information on the importance of measles vaccination in the protection against the disease, in addition to that immunization from house to house using family cards should be followed so that to ensure all children has been vaccinated in the area.

KEYWORDS: Measles, Vaccination, Awareness.

# 2. INTRODUCTION

Measles an acute highly infectious disease caused by specific virus of the group mayo viruses .It is clinically characterized by fever and catarrhal symptoms of the respiratory tract followed by atypical rash Measles is associated with high morbidity and mortality in developing countries<sup>[1]</sup>, in India measles is a major causes of morbidity and mortality, during 2011 number of causes was 33,634 with 56 deaths. In Georgia 3,190 cases registered in 2014, in 2015 over 23,000 cases of measles have been reported across several countries Bosnia, Croatia, and France. In Africa during 2014 in Nigeria had 7,055 cases and Angola more than 12,000 cases. In 2002 -2009 there were 180-284 suspected measles cases reported.<sup>[2]</sup> By the end of 2014 there were 1,730 measles cases registered in Sudan, and 3.173 suspected cases and they were 441 confirmed cases and five deaths, Kassla state has 365 confirmed cases and five deaths while Red sea state there have been 263 cases and four deaths.<sup>[3]</sup> The end of 2015 measles has spread in more than 11 localities in Algadaref and Kassala, and Darfur states.<sup>[4]</sup>

## 2.1 Rationale

Many mothers in targeted area do not know the aim of vaccination in addition to that some of them believe that vaccination stops the child growth.

Measles is a fatal disese especially in childern suffering from malnutrition and general weakness and easily can transmitted between childern leading to high prevalence of morbidity and sometimes mortality..

#### **2.3 OBJECTIVES**

#### **General objective**

Study The Role Of Health Awareness In Promoting Measles Immunization And Elimination Of The Disease.

### **Specific objectives**

- 1. To identify the level of awareness of the mothers about measles vaccine of children less than five year.
- 2. To assess attitudes, practices of mothers on the importance of measles vaccine for their childern.

# 3. MATERIALS AND METHODS

# 3.1. Study design

Descriptive cross sectional study conducted among mothers in Khartoum state, Karrari locality, to study the

Knowledge, attitudes and practices of mothers about importance of measles vaccine.

#### 3.2. Study area

The study area is (Karrari) locality which is one of Khartoum localities, located on the north of Umm Dorman locality and bordered by UM Beda from the west and south ,um Dorman from south east and the Northen State from the North with total area of 4774 KM square represented quarter of the Khartoum state. (Alfateh) district population is 39,724 inhabitants.

### **3-3- Study population**

The target population consists of mothers having children less than five years old.

#### 3-4- Sample size

A sample size of (192) mothers was selected using the following statistical formula which is.

n=the sample size

z=standard normal variable (1, 96)

 $d^2$ =marginal error equal to (0, 05)

$$n = \frac{(1,96)^2 * 50 * 50}{(25)^2} = \frac{96040}{25} = \frac{384 = 192}{2}$$

# **3-5-** The sample selection techniques

	Ν	Sample
Alfteh1	170	92
Alfteh2	230	100
Total	400	192

# **3-6-Data collection**

#### (1) Questionnaire

Questionnaire was designed to gain the requested information on knowledge, attitude and practices of mothers towards measles vaccination

#### (2) Interviews

Interviews with ministry of health staff to obtain information about measles vaccine.

### 3.7. Data analysis

Data was analyzed by excel program.



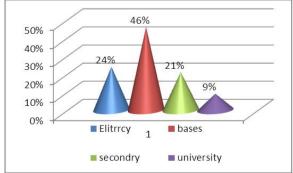


Figure 1: show the mother's Educational level-Khartoum state- karri locality 2016 n= 192

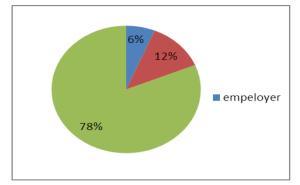


Figure 2: describe the mother's occupation types-Khartoum state- karri locality 2016 n=192.

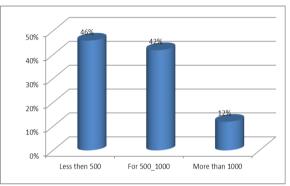


Figure 3: show the father's income level – Khartoum state - karri locality 2016 n=192

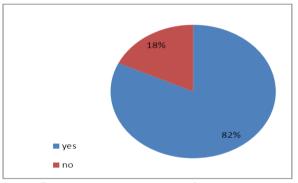


Figure 5: show the knowledge of mothers towards vaccination against measles – Khartoum state – karri locality 2016 n=192

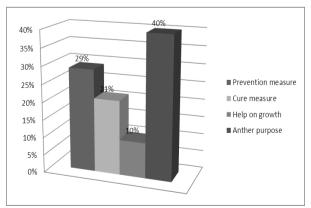


Figure 7: show the mothers knowledge about importance of vaccination against measles- Khartoum state – karri locality 2016 n=192

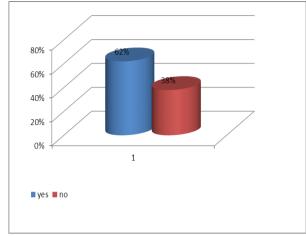


Figure 9: show the mothers immunization status against measles Khartoum state – karri locality 2016 n=192

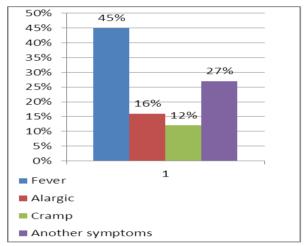


Figure 10: show the mothers knowledge of the side effect of measles vaccine- Khartoum state – karri locality 2016 n=192

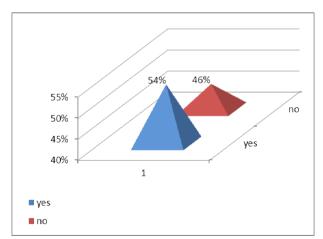


Figure 11: show the percentage of children infected with measles-Khartoum state –karri locality 2016 n=192

Figure 12: show the suitable place for infected child – Khartoum state – karri locality 2016 n=192

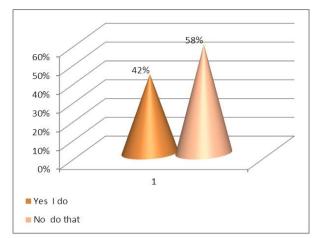


Figure 13: shows the practice of mothers towards child suffering from severe pain after vaccination whether if they would avoid vaccination or not Khartoum state – karri locality 2016 n=192.

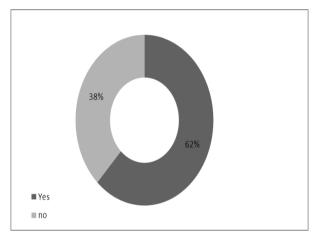


Figure 23: shows the preference of practicing house to house vaccination Khartoum state – karri locality 2016 n=192.

#### **5- DISCUSSION**

The results shows that 24% of mothers are illiterate and 78% of them are housewives, so the educational level is generally low which is associated with lack of awareness.

Majority (89%) of families' income is less than 500 Sudanese pounds per month, which is less than 100 USD according to the official exchange rate, this gives indications of the socioeconomic status of families in the area.

The results shows that knowledge of the mothers towards immunization against measles is relatively high (82%), this result agrees with the study of bulletin of the world health organization year 1999.<sup>[5]</sup>

The mothers' knowledge about the importance of vaccination against measles is relatively low, only (40%) knows that the importance of immunization is to protect against the disease, this result agreed with the study of Nigahat Nasr, 2007 conducted in India which reported

that 45% of mothers knows the importance of the vaccine in the prevention of Measles.

The study reported that majority of mothers had been vaccinated against measles, (62%).indicating the efficiency of the national immunization program at that time, still the percentage is not as requested.

The study showed that majority of mothers know the side effects of measles vaccine, this should assist in accepting vaccinating their children consequently raising vaccination coverage. Also it has been clarified that more than half of the respondents (58%) will not avoid practicing immunizing their children because of these side effects.

The results shows that (54%) of those who are vaccinated among the study group had been infected after vaccination, according to respondents attitudes, the study revealed that (62%) of mothers preferred house to house vaccination for their children, this is agreed with the study of (Nadir), 1999 in Pakistan which indicated that 62% Preferred this type of service.

### 6. CONCLUSION

This study concluded that low socioeconomic status, shortage of information on measles vaccination importance among mothers in addition to lack if health education activities that should be accompanying immunization service, leads to low coverage of measles immunization in the targeted area leading to raising risk factors of higher prevalence of measles in the area.

#### 7. Recommendations

- 1. Continuous assessment of cases and sentinel surveillance sites should be started in the area to detect any measles cases.
- 2. Extensive health education program is required to raise awareness among mothers on the importance of measles vaccination in the protection against the disease.
- 3. House to house immunization using family cards to raise the immunization coverage and ensure all children targeted has been vaccinated.

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