## **ORIGINAL ARTICLE**

# Assessment of Knowledge and Practices of Mothers Regarding Measles-2 Immunization for Children

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#### **ABSTRACT**

**Aim:** To assess the knowledge and practices of mothers regarding measles-2 immunization of children age up to two years.

Study design: Descriptive Cross Sectional.

Place and duration of study: UC-02 of Tehsil Nawabshah, Sindh from Feb. 15<sup>th</sup> to March 31<sup>st</sup> 2013.

**Methods:** This was a Cross Sectional study conducted on 96 mothers at UC-02 of Nawabshah.

**Results:** Overall 29.16% (28 out of 96) mothers were having knowledge and only 11.5% (11 out of 96) mothers were having practices of measles-2 vaccination.

**Conclusions:** Our findings state an insufficient knowledge of mothers about immunization of measles-2 in the selected area with partial practices, ignorance by family head, illiteracy and lack of education program for the community especially mothers regarding immunization & importance of disease control.

Keywords: Measles, Booster dose, Mothers, Children, Knowledge, Practices.

#### INTRODUCTION

Although successes in control of vaccine preventable diseases in the developed world, diseases such as measles still require better control particularly in developing countries with limited resources<sup>1</sup>. In the United States region measles has been eliminated since 2002<sup>2</sup>. Measles is one of the top ten causes of childhood mortality<sup>3</sup>. In our beloved country measles vaccine was introduced into expended program of immunization in 1978. The second dose of measles vaccine was added into expended program of immunization in 2009. The immunization coverage in Pakistan needs improvement<sup>4</sup>. It is apparent that in Pakistan the child mortality is higher then other underdeveloped countries<sup>5</sup>. Infant mortality rate 65.1/1000 and under five mortality rate 95.2/1000 is very high in Pakistan, if we compare with other neighbor countries like India having 30.1/1000 and 78.6/1000, Sri Lanka 18.5/1000 and 12.9/1000, china 20.2/1000 and 29.4/1000 respectively<sup>6</sup>. Responding to this situation, in 2001, the American Red Cross, UNICEF, the United Nations Foundation, the CDC. and WHO launched the Measles Initiative aimed at reducing the death rate from measles in Africa, where nearly 60% of measles deaths were occurring. In 2004, the Initiative extended its mandate to other regions notably, Asia, where measles was a significant burden. The Initiative adopted the WHO-UNICEF strategy to reduce measles mortality that is based on the experience in the Americas<sup>8,9</sup>. Factors such as knowledge, attitude and practices of parents and patients are also known to contribute to success or failure of immunization program<sup>10</sup>.

In Pakistan; introduction of second booster dose of measles vaccine in expended program of immunization in year 2009. Initially the first dose was to be given at 12 months and the booster at 18 months. Though the schedule was subsequently changed from November 2009 and the first dose is now given at the age of 9 months followed by booster dose at the age of 10 months. In such research work we have been come across into the knowledge and practices of mothers regarding measles immunization in instance of the introduction of the booster dose of measles.

#### **METHODOLOGY**

It was a cross sectional study carried out on 96 mothers at UC-02 of Tehsil Nawabshah, District Shaheed Benazirabad, Sindh from February 15<sup>th</sup> to March 31<sup>st</sup> 2013, to assess the knowledge and practices of mothers regarding measles-2 immunization of children age up to two years. A household registered with the lady health worker with children age up to two years were included while households without children age up to two years were excluded from the study. Sampling Technique was Simple Random Sampling. Sample size was

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calculated by assuming 50%; margin of error was 10% and 95 % confidence interval.

#### **RESULTS**

Analysis was performed on data from 96 mothers. Overall 29.16% (28 out of 96) mothers were having knowledge and only 11.5% (11 out of 96) mothers were having practices of measles-2 immunization. Our findings state an insufficient knowledge of mothers about immunization of measles-2 in the selected area with partial practices because of ignorance by family head, illiteracy and lack of education program for the community especially mothers regarding immunization & importance of disease control.

## **DISCUSSION**

Our study showed that 29.16% mothers were having knowledge and only 11.5% mothers were having practices of measles-2 vaccination. It is proved in a study carried out in Faisalabad of province Punjab that revealed higher perception of knowledge about 62.5% respondents was having awareness about child vaccination<sup>11</sup>. A study conducted in Karachi of province Sindh concluded that the knowledge of mothers about vaccination was inadequate with strong positive attitude and limited practices<sup>12</sup>. A study was carried out at Aga Khan University hospital Karachi of province Sindh on knowledge, attitude and practices regarding immunization among family practice patients which revealed a strong need for education program for the masses immunization, since major deficiencies were identified 13. The similar result identified that 64% of mothers were illiterate. The major reason of the low immunization coverage in Pakistan is illiteracy and the mothers do not know much about the importance of vaccination Child health care<sup>14</sup>. Another research revealed that 93.1% of the respondents tried to immunize their children from communicable and life threatening diseases such as measles and they also concluded that improving the educational status of parents could potentially enhance the immunization coverage<sup>15</sup>. In this context another study reveled that if mothers had any formal education then they would be more conscious to save their children from preventable diseases<sup>16</sup>

### CONCLUION

The study accomplished that parent's learning take part as a crucial role in immunization of the children. Those mothers who had educational background, having proper governmental medical conveniences and have less child are to be expected additional

responsive about child immunization. To circulate fundamental information about child immunization to every mother in appropriate approach at their door step. The main dilemma in the way of completion of vaccination among children are discontinuity of the governmental services, child sickness at the time of booster, not knowing the next injection of immunization and some time fear of temporary side effect of immunization. So it is suggested that there should be proper planning, monitoring and evaluation for the immunization program. More hard work should be made to raise the knowledge about immunization of booster dose to improve the maternal and child health conditions in respect of decline in morbidity and mortality amongst such age segment to meet up the millennium development goals.

#### RECOMMENDATIONS

- Immunization of measles-2 should be provided to children at their door step by concerned health authorities with enthusiasm and passion.
- Cold chain should be properly managed, checked and vigilantly observed by third party about actual efficacy of measles vaccine by alternate sources of temperature maintenance of measles vaccine during such 18 hours of electricity power interruptions in urban, rural and semi urban areas of our country.
- All the donor agencies can also play a significant roll by improving its disease early warning system more vigilant and bilateral cooperation between them and current decentralized provincial health authorities with concerned quarters to avoid maximum measles epidemics.
- A number of children are underprivileged of receiving immunization of measles-2 vaccine by sense of parents', irresponsibility, carelessness and tiredness to reach that place where the vaccination is provided. So such task force should identify these communities and with special attention to be focused on them.
- The majority of the rural and semi urban is uneducated and live in the backward areas. They have no any basic awareness about the health and immunization of their child. The best way to mobilize the community about the child immunization is community.
- Local organizations should conduct seminars, workshops and health programmers held with the participation of non government organizations and government health officials as well as local social activists, political leaders, school teachers, religious leaders especially imam massajids in their localities and villages accompanied by their zeal and zest with strong political commitment

- and full participation of existing district health system with honesty, punctuality, regularity, hard work and utmost contribution with strong devotion and dedication.
- To encourage and sensitize the parents about the child immunization during door to door visit because of the rural and semi urban communities have no access to print media and electronic media due to poverty and illiteracy.
- Salaries should be increased with hard area and risk allowances and bonuses to be awarded to those health concerns with certificates of appreciation and gold medals with due honor, distinction, respect and self-esteem.
- The health authorities should provide basic information to rural and semi urban people about their health via truly trained and competent lady health workers, lady health visitors and vaccinators visiting in their dwelling regularly and providing essential information about positive perspective of immunization of measles-2 vaccinations.

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