CODEN [USA]: IAJPBB ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES
http://doi.org/10.5281/zenodo.3261431

Available online at: http://www.iajps.com Research Article

FREQUENCY OF VACCINATED CHILDREN AMONG MEASLES CASES

Dr Tehmina Maqbool[1], Dr Iqra Aslam[2], Dr Hafza Hashmi[3]
[1] Childrens' Hospital and Institute of Child Health, Lahore
[2] Wah Medical College, Wah Cantt
[3] Islamabad Medical and Dental College (IMDC), Islamabad

Article Received: April 2019 **Accepted:** May 2019 **Published:** June 2019

Abstract:
Aim: ***To*** *estimate the frequency of vaccinated children among measles cases*
Methods: *One hundred and thirty 130 diagnosed cases measles (presence of typical maculopapular rash or pathognomonic koplik's spots, fever and any of these coughs, coryza or conjunctivitis) of either gender with age range of 1-12 years were selected from Pediatric Department of Federal Government Polyclinic Hospital, Islamabad. Detailed history and clinical examination for measles considering their medical record regarding vaccination status was done. The frequency of vaccinated children among measles cases was noted.*
Results: *In this study, out of 150 cases in Rifaximin Group, 30.67%(n=23) and 36%(n=27) were between 20-50 years of age while 69.33%(n=52) in Rifaximin and 64%(n=48) in Placebo Group were between 51-80 years of age, mean+sd was calculated as 54.42±9.21 years and 56.14±10.81 years respectively, 49.33%(n=37) in Rifaximin and 45.33%(n=34) in Placebo Group were males whereas 50.67%(n=38) in Rifaximin and 54.67%(n=41) in Placebo group were males. On comparison of both groups, we found recurrence rate as 28% in Rifaxomin and 53.33% in Placebo group, p value was 0.002 showing a significant lower rate in Rifaximin group.*
Conclusion: *The use of rifaximin shows significantly lower rate of recurrence of hepatic encephalopathy when compared to placebo*
Keywords: Hepatic encephalopathy, treatment, Rifaximin, Placebo, recurrence

Corresponding author:
Dr.Tehmina Maqbool,
Childrens' Hospital and Institute of Child Health, Lahore

QR code

Please cite this article in press Tehmina Maqbool et al., ***Frequency Of Vaccinated Children Among Measles Cases.,****Indo Am. J. P. Sci, 2019; 06(06).*

INTRODUCTION:

Measles is known as a highly contagious viral illness, cases presents with fever, rash, malaise, coryza, cough, and conjunctivitis,[1] pre-school age population is commonly involved in this disease.[2] World Health Organization (WHO), clarifies that this morbidity is a leading cause of childhood mortality. However, the rate of mortality was reduced to 60% in 2005 when compared with 1999. The statistics of 2008 are evident that this rate was further controlled to 77% within the South-East Asian countries.[3] In Pakistan, annual mortality due to measles was recorded 20,000 in 2008,[4] which is still higher and ranked in top 47 countries. UNICEF accelerated sustainable measles mortality reduction activities and makes up a large proportion of measles deaths in the Eastern Mediterranean Region and worldwide.[5]

Despite universal use of measles vaccines in recent decades, epidemics of the disease continued to occur. Understanding the role of primary vaccine failure (failure to sero-conversion after vaccination) and secondary vaccine failure (waning immunity after sero-conversion) in measles epidemic is important for the evaluation of measles control programmes in developing countries. In our country measles vaccine is given free as a single dose through EPI at 9 months, while many affording parents take it through private pediatricians by paying for vaccination.[6] Previously in 2002, frequency of vaccinated children in measles cases was determined and recorded as 71.6%.[7]

The rationale of the study is that in our clinical experience in last two years a great number of children presenting with measles are recorded in our population while no data was recorded regarding the status of their vaccination, however, it is necessary to record recent data of measles in vaccinated children.

PATIENTS AND METHODS

One hundred and thirty 130 diagnosed cases measles (presence of typical maculopapular rash or pathognomonic koplik's spots, fever and any of these cough, coryza or conjunctivitis) of either gender with age range of 1-12 years were selected from Pediatric Department of Federal Government Polyclinic Hospital, Islamabad. Due informed consent of the parents of participants was taken. All participants were clinically examined and history of was also taken. We recorded the rate of vaccinated children among all these cases. All the collected data was analyzed with the help of computer soft SPSS-20.

RESULTS:

In this study, of 130 cases, 81.54%(n=106) were between 1-6 years of age while 18.46%(n=24) were between 7-12 years of age, mean±sd was calculated as 4.55±2.24 years. (Table No. 1)

Of these 59.23%(n=77) were male while 40.77%(n=53) were females. (Table No. 2)

Frequency of vaccinated children in measles was recorded in 64.62%(n=84). (Fig. 1)

Table 1.

Age(in years)	Number of patients	%
1-6	106	81.54
7-12	24	18.46
Total	**130**	**100**
Mean±SD	**4.55±2.24**	

Table 2.

Gender	Number of patients	%
Male	77	59.23
Female	53	40.77
Total	**130**	**100**

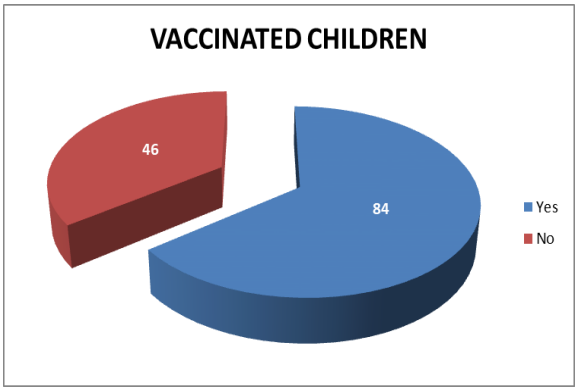

Fig. 1

DISCUSSION:

In our study, 81.54%(n=106) were between 1-6 years of age while 18.46%(n=24) were between 7-12 years of age, mean+sd was calculated as 4.55+2.24 years, 59.23%(n=77) were male while 40.77%(n=53) were females, frequency of vaccinated children in measles was recorded in 64.62%(n=84).

The findings of our study are consistent with a previously study by Basheer F and others in 2002,

frequency of vaccinated children in measles cases was determined and recorded as 71.6%.[7]

Previous data (1985-88) reveal that 42% of cases affected with measles were pre-school.[8]

Our results are similar to those of study by Masoud et al in Egypt where 79.4% cases of measles were previously vaccinated.[9] Similar results were obtained by Nsungu M in Zimbabwe where 69% of the cases during a measles outbreak were vaccinated.[10] Another study by Chaudhry MZ also found 50% of cases to be vaccinated in a study carried out at Allied Hospital Faisalabad.[11]

According to a recent survey[11] in our country, most patients belonged to the poor class making 61.90 %, rest of the patients belonged to middle and lower middle class, moreover most of the patients studied were vaccinated according to the EPI schedule and rests were partially vaccinated, non-vaccinated, vaccine was not available to them, they did not have awareness and some parents were careless regarding vaccination.

However, our data is primary in recent years, someother trials should also be done to validate our findings. Moreover, vaccine quality and the risk factors involved in making vaccine in-effective may also be ruled out in further trials to control this morbidity in young children.

CONCLUSION:

- We concluded that the frequency of measles is high among vaccinated children. So, it is recommended that every patient who present with measles, should be sort out for vaccination history. However, it is also required that every setup should have their surveillance in order to know the frequency of the problem.

REFERENCES:

1. Moss WJ, Griffin DE. Measles. Lancet 2012; 379:153.
2. Muhammad A, Irshad M, Khan B. A comparative study of measles complications in vaccinated versus non-vaccinated children. JPMI 2011;25:4-8.
3. WHO, Weekly Epidemiological Record (WER) 4 December 2009, vol. 84, 49 (pp 505–516). Available from http://www.who.int/wer/2009/wer8449/en/ index.html
4. UNICEF, Campaign on track to protect 63 million children against measles in Pakistan 28 March 2008. Available from http://www.unicef.org infobycountry/pakistan_43390.html
5. Cohen AL, Salam A, Bosan A, Perry R, Iqbal S, Qureshi SN, Cairns L, Mach O. Etiology of a suspected measles outbreak: preceding measles reduction activities in Pakistan. J Coll Physicians Surg Pak 2009;19(9):591-4.
6. Habibullah S. Measles Antibodies in Children Aged 5-7 Years in Karachi. Pak J Med Res 2012;51:68-71.
7. Basheer F, Ahmed S, Aatif M, Ali S. Frequency of vaccination in measles. Professional Med J Dec 2006; 13(4): 577-82
8. Atkinson WL, Orenstein WA and Krugman S. The resurgence of measles in the United States, 1989–1990. Annu. Rev. Med. 1992;43:451–63.
9. Masoud GM. Sero-epidemiological study of measles after 15 years of compulsory vaccination in Alexandria, Egypt. Alexandria journal of pediatrics, 1998;4(3):437-7.
10. Nsungu M. Measles vaccination status, delay in recognizing measles outbreaks and outbreak outcome. Cent Afr J Med 1995;41(11):336-9.
11. Rehan BS, Irshad M, Khan R, Amin S. A Survey Report on Measles in Pakistan. Annals 2013;19:286-92.