ORIGINAL ARTICLE

To Determine the Frequency of Malnutrition among Children Presenting With Measles

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ABSTRACT

Aim: To determine the frequency of malnutrition among children presenting with measles.
Study Setting: Pediatrics Department, Khyber Teaching Hospital, Peshawar.
Duration of Study: Six months 6/7/2018 to 6/1/2019.
Study Design: Cross sectional study
Methodology: 142 subjects were studied. All the children were subjected for the detection malnutrition according to Gomez classification.
Results: Mean age was 3 years with SD ± 2.16. 67% children were male while 43% children were female. 80% children were with malnutrition and 20% children were normal.
Conclusion: Frequency of malnutrition was 80% among children presenting with measles.
Key words: malnutrition, children, measles.

INTRODUCTION

Measles is the most communicable disease which is caused by Morbilivirus and Paramyxoviridae family[1]. It is prevalent all over the world. In developing countries, it is epidemic[2]. In children <5 years of age, it is mostly the cause of mortality[3]. Increased mortality is correlated with poverty, malnutrition and secondary bacterial infections[4]. Approximately one hundred thousand subjects at the age of five involved and twenty thousand die[5].

The objective of the study was to determine the frequency of malnutrition among children presenting with measles.

METHODOLOGY

This cross sectional study was conducted after permission from ethical committee in Pediatrics Department, Khyber Teaching Hospital, Peshawar for a period of six months from 6/7/2018 to 6/1/2019. Sample size was 142 using 76.3% proportion of malnutrition children with measles. Sampling technique used was non probability sampling.
Inclusion Criteria: All children presenting with measles, age 1-5 years and either gender were included.
Exclusion Criteria: H/o intake of any type of multivitamin therapy in the last three months and children with previously diagnosed malnutrition on history and medical records were excluded.
Data collection procedure: After approval from hospitals ethical committee, the study was performed. Cases with H/O measles were included. All the children were selected according to Gomez classification. The collected data was analyzed in SPSS version 22.

RESULTS

The detail of results is given in tables 1,2,3,4,5,6,7

Table 1: Age distribution

Age	n	%age
1-3 years	97	68%
4-5 years	45	32%
Total	142	100%

Mean age was 3 years with SD ± 2.16

Table 2: Gender distribution

Gender	n	%age
Male	81	57%
Female	61	43%
Total	142	100%

Table 3: Weight

Weight	n	%age
<10 Kg	94	66%
>10 kg	48	34%
Total	142	100%

Table 4: Gomez classification

Gomez classification	n	%age
Mild (grade 1) 75%–90% WFA	54	38%
Moderate (grade2) 60%–74% WFA	43	30%
Severe (grade 3 <60% WFA)	17	12%
Total	114	80%

Table 5: Malnutrition

Malnutrition	n	%age
Yes	114	80%
No	28	20%
Total	142	100%

Table 6: Malnutrition W.R.T age distribution

Malnutrition	1-3 yrs	4-5 yrs	Total
Yes	78	36	114
No	19	9	28
Total	97	45	142

Chi square test= P value was 0.9541

Table 7: Malnutrition W.R.T Gender Distribution

Malnutrition	Male	Female	Total
Yes	65	49	114
No	16	12	28
Total	81	61	142

Chi square test= P value was 0.9904

DISCUSSION

In this study, mean±SD of age was 3±2.16. 61% children were male while 43% were female. 80% cases were with malnutrition and 20% were normal. In a study by Sudhir MS et al[6], it is observed that 80% malnourished children developed measles. It is in accordance with the study by Junejo et al i.e. 74%[7], by Rehman et al i.e.71.3%[8] and by Khan i.e. 66.8%[9]. Same observations were in another study by Khan M et al[10].

CONCLUSION

Frequency of malnutrition was 80% among children presenting with measles.
Conflict of interest: Nil

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