

ORIGINAL ARTICLE

PREVALENCE OF UPPER RESPIRATORY TRACT INFECTION IN CHILDREN AND WORRIED PARENTS: A CLINICAL STUDY

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ABSTRACT:

Background: Children are more susceptible to get infected to variety of pathogens. Upper respiratory tract infections are the most common group of illnesses in young children. Children with recurrent illnesses are of great concern for parents and influence their family interactions. The present study was conducted to evaluate the prevalence of upper respiratory tract infection in children. **Materials & Methods:** This study was conducted in the department of pediatrics in 2012. Children age ranged 1-5 years were enrolled in this study. Children who had recurrent upper respiratory tract infections were selected and put in group I (50). Those who had some other complaint except upper respiratory tract infections were put in group II (50) (control). All parents were asked to fill out the questionnaire. Both groups were recruited in a 3 month period between January 2012 to March 2012. All patients were measured for weight, height, and body mass index. **Results:** The prevalence rate was 50%. In group I, all 50 children had both the parents while in group II, 49 children had both parents. 1 children had 1 divorced parent in group II. Average children in a family was 1.7 in group I and 2.3 in group II. Group I constituted 20.11% and group II 13.4% of allergic constitution. URTI in group I had 18.6 days a month and 7.4 days a month in group II. Group I had 7.1 days and group II had 1.3 days of average fever in a month. Average antibiotic use was 2.4 days in group I and 0.5 day in group II. The average days of hospitalization in group I was 10 days and in group II, it was 5 days. All parents of 50 children in group I were worried about their children while in group II only 22 children parents were found worrying about their children. The difference was significant (P<0.01). 12 children in group I and 1 children in group II were tired when they were not well. The difference was significant (P<0.02). When parent are worried about their children, their worryness was taken away by either nobody in group I (0) and group II (5), buy spouse in group I (32) and group II (30), by consulting pediatrician in group I (30) and group II (7), by buying medication in group I (45) and group II (20), By keeping child in house or on bed in both the groups. The difference was significant (P<0.05). **Conclusion:** Author concluded that upper respiratory tract infection is common among children. Proper care of children is necessary as this age group is more likely to get infected. Parents of children found more worried about he health of their children who had upper respiratory tract infection as compared to parents of children who had some other complaint.

Key words: recurrent, upper respiratory tract infection, worried parents

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INTRODUCTION

Children are more susceptible to get infected to variety of pathogens. Upper respiratory tract infections are the most common group of illnesses in young children. Children with recurrent illnesses are of great concern for parents and influence their family interactions. When children are ill, daily routines are changed and the parent usually adjusts to the need of the child. When the child suffers from recurrent infections,

daily routines and family functioning can be disturbed for long periods of time.¹

Children with upper respiratory tract infection may not be doing well in the school although, the children may have no critical or serious health problem. During the in-between days they may be relatively normal but the subsequent infectious episode may already be emerging. Sometimes, the parents are reassured that everything is fine or some laboratory examinations are conducted to exclude immunologic disorders. Further evaluation is may be

carried out by the pediatrician.² Most of the time the condition can be addressed as being a normal stage in childhood. Occasionally, older siblings may contaminate the younger children or they could be infected from daycare centers. However, when the infections persist and no abnormalities are detected, it is very difficult for the pediatrician to treat the child.³

Few studies have demonstrated that physical properties of domestic indoor air play important role as it contains relative humidity or damp housing conditions leading to common cold and respiratory illness. However, field studies of the effects of humidity on respiratory disease have taken place in kindergarten, schools, barracks and offices, and some reports have suggested that higher humidity was associated with lower absenteeism or the occurrence of upper respiratory tract infection, but the findings have not always been consistent.⁴

The present study was conducted to evaluate the prevalence of upper respiratory tract infection in children.

MATERIALS & METHODS

This study was conducted in the department of pediatrics in 2012. Children age ranged 1-5 years were enrolled in this study. Children who had recurrent upper respiratory tract infections were selected and put in group I (50). Those who had some other complaint except upper respiratory tract infections were put in group II (50) (control). All parents were asked to fill out the questionnaire. Both groups were recruited in a 3 month period between January 2012 to March 2012. All patients were measured for weight, height, and body mass index. Results thus obtained were tabulated

and subjected to statistical analysis using chi square test. P value<0.05 was considered significant.

RESULTS

Table I shows that both groups contains equal number of males (25) and females (25). The prevalence rate was 50%. In group I, all 50 children had both the parents while in group II, 49 children had both parents. 1 children had 1 divorced parent in group II. Average children in a family was 1.7 in group I and 2.3 in group II. Group I constituted 20.11% and group II 13.4% of allergic constitution. URTI in group I had 18.6 days a month and 7.4 days a month in group II. Group I had 7.1 days and group II had 1.3 days of average fever in a month. Average antibiotic use was 2.4 days in group I and 0.5 day in group II. The average days of hospitalization in group I was 10 days and in group II, it was 5 days. Graph I shows that all parents of 50 children in group I were worried about their children while in group II only 22 children parents were found worrying about their children. The difference was significant (P<0.01). 12 children in group I and 1 children in group II were tired when they were not well. The difference was significant (P<0.02).

Table II shows that when parent are worried about their children, their worryness is taken away by either nobody in group I (0) and group II (5), buy spouse in group I (32) and group II (30), by consulting pediatrician in group I (30) and group II (7), by buying medication in group I (45) and group II (20), By keeping child in house or on bed in both the groups. The difference was significant (P<0.05).

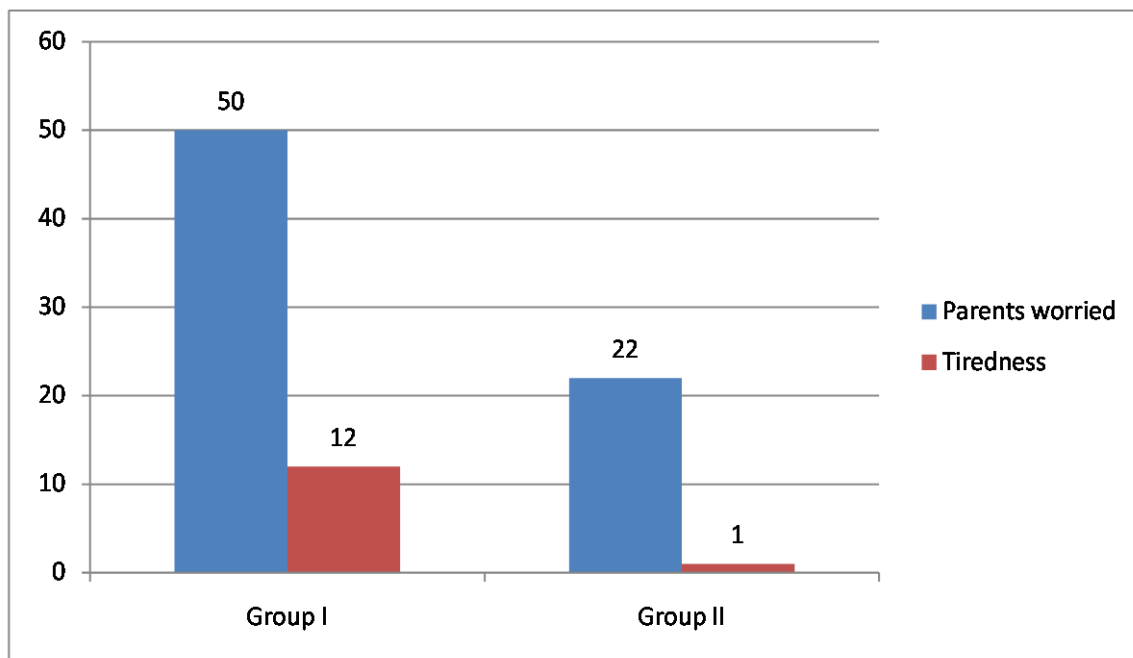
Table I Clinical characteristic in children in both groups

Gender	Total- 100				P value
	Group I		Group II		
Number	Male	Female	Male	Female	
Family with two parents	50		49		1
Divorced parents	0		1		1
Children in family	1.7		2.3		0.2
Allergic constitution	20.11%		13.4%		0.05
URTI (days a month)	18.6		7.4		0.01
Fever (days a month)	7.1		1.3		0.01
Antibiotic use	2.4		0.5		0.2
Hospitalization	10		5		0.04

Table II Incidence of worried parents

	Group I	Group II	P value
Who takes worry			
No body	0	5	0.01
Spouse	32	30	1
Pediatrician	30	7	0.01
Internet	2	1	1
Buy medication	45	20	0.02
Keep child in house	49	12	0.01
Keep child in bed	12	1	0.03
Nothing	0	0	-

Graph I Worried parents and tiredness of children in both groups



DISCUSSION

Upper respiratory tract infection is common among children. It is caused by various factors one of which is dust and high humidity. World Health Organization report stated that the evidence suggests that high humidity favours the growth of moulds and bacteria, and increases the incidence of house mites and the survival of air borne pathogens; but it points out that low humidity tends to increase atmospheric dust, dry mucous membranes, and aggravate the irritation caused by tobacco smoke.⁵

The present study was conducted to evaluate the prevalence of upper respiratory tract infection in children and worryness of their parents. We included 100 children of age range 1-5 years who visited the department of pediatrics in 2012. Of which 50 found to have URTI while 50 had some other complaint. We put 50 children who had URTI in group I and other 50 in group II.

The prevalence rate was 50% in our study. A study conducted by Slatter⁶ found prevalence rate of 47% in his study. However Louhi found higher prevalence of 62% in his study.

In group I, all 50 children had both the parents while in group II, 49 children had both parents. 1 children had 1 divorced parent in group II. Average children in a family was less in group I as compared to group II.

When we took the history of allergy in other family member, we found that children in group I had more percentage of allergic constitution in their family as compared to group II. Sepa et al.⁷ proposed a mechanism of psychoneuro immunology. High parental stress and lack of

social support could influence the immune system by altering the hormonal and nervous signals. They related a number of disparate variables of social, environmental, and medical character to the presence of high parenting stress and a lack of social support for the mothers. They stated that with this correlation, previously found risk factors for the disease could be mediated by psycho-logical mechanisms. Boyce et al.⁸ showed that children with high environmental stress had altered immune reactivity, and therefore elevated rates of respiratory disease. They showed two types of children: children with high or low immune reactivity to the stress of starting school. Combined with family circumstances, children with high immune reactivity and whose parents reported large numbers of stressful life events had the highest rates of respiratory disease. In contrast, children with low immune reactivity showed low numbers of illness in both high- and low-stress families.

URT I in group I had 18.6 days a month and 7.4 days a month in group II. Group I had 7.1 days and group II had 1.3 days of average fever in a month. Average antibiotic use was 2.4 days in group I and 0.5 day in group II. The average days of hospitalization in group I was 10 days and in group II, it was 5 days.

All parents of 50 children in group I were worried about their children while in group II only 22 children parents were found worrying about their children. 12 children in group I and 1 children in group II were tired when they were not well.

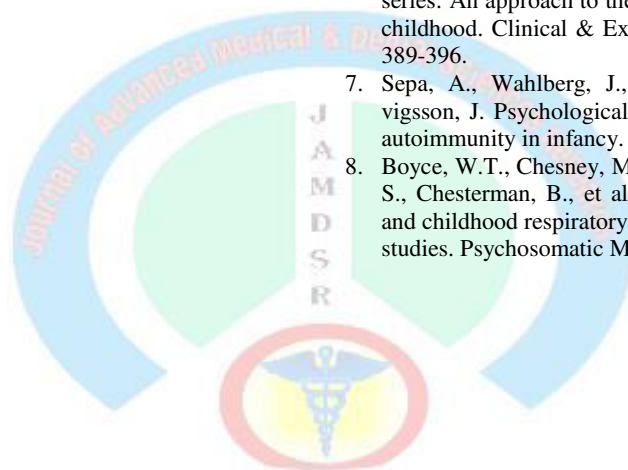
We found that when parent were worried about their children, their worriness was taken away by either nobody in group I (0) and group II (5), buy spouse in group I (32) and group II (30), by consulting pediatrician in group I (30) and group II (7), by buying medication in group I (45) and group II (20), By keeping child in house or on bed in both the groups.

CONCLUSION

Author concluded that upper respiratory tract infection is common among children. Proper care of children is necessary as this age group is more likely to get infected. Parents of children found more worried about the health of their children who had upper respiratory tract infection as compared to parents of children who had some other complaint.

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