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# INCIDENCE AND TYPE OF MALARIA IN ALL FEBRILE CHILDREN UP TO FIVE YEARS OF AGE

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**Abstract:**

***Objective:*** *to describe the nature and occurrence of malaria in all feverish young people up to the age of five who visited Childern Hospital Multan*

***Study Design:*** *descriptive / cross working*

***Place and Duration of Study:*** *This research was conducted between 1 July 2016 and 31 December 2016 in the Emergency and Outpatient Clinic of Childern Hospital Multan*

***Materials and Methods:*** *As the main complaints lasting 24 hours or more, all youngsters between 1 month and 5 years of age with any history of temperature were included in the study. The test was carried out in the laboratory and the presence of malaria and the presence of malaria were positive or negative, regardless of whether it was present or not.*

***Results****: A total of 253 children were ğu 2,5 years (mean age 1.48 ± 0.500). The rate of female children was 151 (59.7%) and 102 (40.3%). The presence of this disease was present in 17 (6.76%) patients. Malaria incidence was present in 17 (24.1%) patients. 15 (88,23%) malaria, 2 of these 17 cases (11.76%) they had falciparum, although malaria species. The mother (0.003 p value), the father (0.038 p value) and the financial position (p value <0.001) had important issues related to the emergence of malaria in the information position children.* ***Conclusion:*** *The prevalence of malaria is defined as the most advanced type vivax in all fiery children less than five years of age for visit to OPD*

**Key Words:** *Malaria, Fever, Children, Falciparum, Vivax*

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## INTRODUCTION

Malaria has become a dangerous and fatal problem and has particularly disturbing effects on the physical form and vitality of children in the state.1,2 They are undernourished and have less resistance. These figures have spread over 5 million in 2016. There are some countries that do this, although there may be no 2015.3 reports assessed by the evaluations of the World Report on malaria exposed in about 216 million cases of malaria in 91 countries. Malaria completed 3 consecutive years without cases. In particular, the World Health Organization (WHO) approved 7 countries Pakistan, but Armenia, States, Maldives, Turkmenistan, Morocco and Kirguistán.4 In recent years, like Arab Emirates, malaria has eradicated the situation is still fatal. The total number of cases of malaria was determined to be 1.933.000 from 874.000, which is the final date of 1100 cases.5. Although the readings are accessible from different sanatoriums on this issue, the problem is the oversimplification of the results on people in malaria cases and keeping increasing. It also increases the need for work that provides the current level of difficulty. The compound facts at this center would mean the magnitude and magnitude of malaria in young people up to 5 years of age with a fever in the Sindh region. As a result of this study, it was possible to prohibit or reduce the additional diseases as the distribution of reserves and different approaches could be planned to monitor these children.

## MATERIALS AND METHODS:

This meaningful transverse research was presented to 5 years old from both sexes Young consecutive 1 month to 31st December 2016 with 31 December 2016 July . Children who had previously been treated for malaria or those who did not suffer from high-grade fever were ignored recently. The sample size is 38.3% for malaria.6, security level 95% and 6% overall accuracy frequency is designed for research with Raosoft calculator. The size of the basic sample was found in 253. The information obtained from the maternity and the laboratory test was carried out after the updated agreement of the mothers. An intravenous blood analyzer (2-3 ml) was collected for microscopy. Each patient received a patient demographic note, so that a proforma could be organized, the mother and the father, whether completed or not, socioeconomic status, population, malaria emergence, information position, and malaria were positive or negative. The figures were recorded with SPSS 21 and analyzed. The mean ± standard deviation was designed for age. The incidents and rates for gender, mother and father's enlightening position, financial position, shelter, malaria and malaria species were designed. Chi-square test, age, gender, outcome (frequency and type of malaria) on the mother and father, financial situation and location of the room was made to equalize the variance of learning. The value of P uştur0.05 is important.

**RESULTS:** Table No.1: Initial features of patients (n = 253)

| | n | % |
|---|---|---|
| **Age, years** | 1.48 ±0.51[1] | |
| ≤2.5 years | 131 | 51.8 |
| >2.5 years | 122 | 48.2 |
| **Gender** | | |
| Male | 151 | 59.7 |
| Female | 102 | 40.3 |
| **Area of residence** | | |
| Rural | 198 | 78.3 |
| Urban | 55 | 21.7 |
| **Educational status of the mother** | | |
| Illiterate | 33 | 13 |
| Secondary | 106 | 41.9 |
| More than equal to | 114 | 45.1 |
| secondary | | |
| **Educational status of the father** | | |
| Illiterate | 33 | 13 |
| Secondary | 135 | 53.4 |
| More than equal to | 85 | 33.6 |
| secondary | | |
| **Economic status** | | |
| Lower | 81 | 32 |
| Middle | 119 | 47 |
| Upper middle | 53 | 20.9 |

The vast majority of patients from 253 young peoples (.52.5 years old (mean age 1.48 ± .500 years). The percentage of young women was 102 (40.3%) and 151 (59.7%) lower in young men. The majority of the children came from rural areas in 198 (78.3%) rural areas and 55 (21.70%) in urban areas. Most parents (45.10%) had average netting scores, but most parents (53.4%) had primary education. (Table 1)

Malaria was detected in 17 (6.71%) patients. 15 (88.23%) vivax malaria species malaria In these 17 patients, 2 (11.76%) were falciparum. (Figures 1 and 2). mother (p-value 0.003), father (p-value 0.038) and financial status (p-value <0.001) The teaching position was insignificant with respect to the exact variables of malaria, if there were significant problems with the emergence of malaria in young people (p> 0 , Value 05). (Table 2)

Table No.2: Comparison of the presence of malaria according to baseline characteristics (n = 253).

| | Presence of Malaria | | |
|---|---|---|---|
| **Variables** | **Yes (n=17) n (%)** | **No (n=236) n (%)** | **Total n (%)** | **p-value** |
| **Age, in years** | | | | |
| ≤2.5 | 11 (64.7) | 120 (50.8) | 131 (51.8) | 0.26 |
| >2.5 | 6 (35.3) | 116 (49.2) | 122 (48.2) | 9 |
| **Gender** | | | | |
| Male | 13 (76.5) | 138 (58.5) | 151 (59.7) | 0.14 |
| Female | 4 (23.5) | 98 (41.5) | 102 (40.3) | 4 |
| **Residence** | | | | |
| Urban | 2 (11.8) | 53 (22.5) | 55 (21.7) | 0.30 |
| Rural | 15 (88.2) | 183 (77.5) | 198 (78.3) | 2 |
| **Educational status of mother** | | | | |
| Illiterate | 8 (36.4) | 25 (10.8) | 33 (13) | 0.00 |
| Literate | 14 (63.6) | 206 (89.2) | 220 (87) | 3 |
| **Educational status of father** | | | | |
| Illiterate | 6 (27.3) | 27 (11.7) | 33 (13) | 0.03 |
| Literate | 16 (72.7) | 204 (88.3) | 220 (87) | 8 |
| **Economic status** | | | | |
| Lower | 12 (70.6) | 69 (29.2) | 81 (32) | <0.0 |
| Middle/Upper | 5 (29.4) | 167 (70.8) | 172 (68) | 01 |
| Middle | | | | |

Figure No.1: Presence of malaria

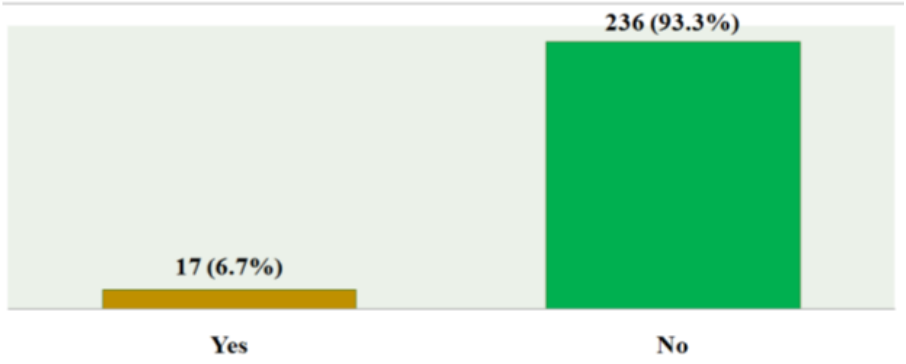
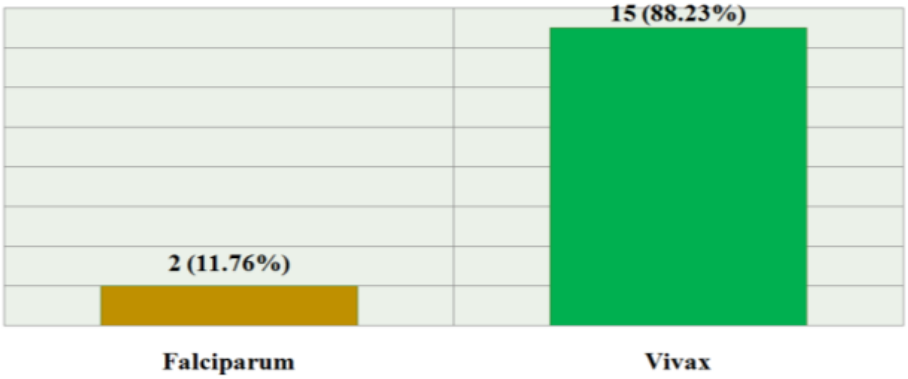



Figure No.2: Type of malaria (n=17)




## DISCUSSION:

Malaria is still a primary public health offender in Pakistan. An investigation conducted in 2013 revealed that more than 60 percent of Pakistani residents live in areas with a prevalence of malaria7. It is claimed that there are 500.000 malaria inflammation and 500.000 malaria inflammation every time in Pakistan. This indicate that the rate of malaria in Pakistan is increasing despite malaria-modifying programs.7 More than one million cases of malaria were noted in the Eastern Mediterranean region, 22 percent from Pakistan.8 In this study, malaria was common in 6.7% of cases. Young people under the age of 5 with the majority of Plasmodium vivax species. The results of our study are different from the large number of studies in Pakistan where the frequency of malaria is very advanced. Yasinzai MI et al. In a study of 6,129 suspected cases, 38.3% of malaria parasites were found to be positive. However, in relation to the findings of the study, an advanced event of pollution Plasmodium vivax.9 Plasmodium vivax, shown by Plasmodium Fazil M et al. Plasmodium falciparum indicated that they were monitored in Vivax while most people had an infection, while in most cases Plasmodium falciparum Quetta, Zhob, Baluchistan East and Khuzdar. . In 2012, according to the Plasmodium vivax and Plasmodium Falciparum.15 report of two predominant species Plasmodium vivax in Pakistan, these species partially accounted for more than one-half of the infections and indicadas15 revealed more than one quarter of infections. By the way, Plasmodium Vivax is the most important community type found in popular studies. Nevertheless, the appearance of the right Plasmodium infection is still divided into Pakistan but only in the uncomfortable areas of the world. The main reason why the formation and manufacturers of species approaches a variety of malaria parasites is problematic, imagine.

## CONCLUSION:

The prevalence of vivax type was higher in all febrile adolescents until the age of five years. The enlightening position and socioeconomic location were noteworthy issues.

**Conflict of Interest:** The study has no conflict of interest to announce by any writer.

## REFERENCES:

1. Kumar A, Valecha N, Jain T, Dash AP. Burden of malaria in India. Retrospective and Prospective view. AMJ Trop Med Hyg

2007;77(6 Suppl); 69-78.
2. Caufield LE, Richard SA, Black RE. Undernutrition as an underlying cause of Malaria Morbidity and Mortality in children less than 5 years old. AMJ Trop Med Hyg 2004;71 (2 Suppl):55-63.
3. WHO | World malaria report 2017 - World Health Organization. Available at: http://www.who.int/ malaria/publications/world-malaria-report-2017/en/
4. Malaria Fact Sheet. Available at: http://www. who.int/mediacentre/factsheets/fs094/en/
5.http://www.who.int/malaria/publications/country-profiles/profile_pak_en.pdf
6. Yasinzai MI, Kakarsulemankhel JK. Prevalence of human malaria infection in Pakistani areas bordering with Iran. J Pak Med Assoc 2013; 63(3):313-6.
7. Aamer AK, Meera V, Muhammad FN, HumayoonSS.
8. WHO: World malaria report. Geneva: World Health Organization; 2011.
9. Fazil M. The frequency of various human malaria parasite infections at Private Clinic in Mardan district of Khyber Pakhtunkhwa: a study of 230 cases of Malaria. Pak Paed J 2013;37(3):173-6.
10. Gill MK, Makkar M, Bhat S, Kaur T, Jain K, Dhir
G. Thrombocytopenia in malaria and its correlation with different types of malaria. Ann Trop Med Public Health 2013;6:197-200.
11. Yasinzai MI, Kakarsulemankhel JK. Prevalence of human malaria infection in bordering areas of East Balochistan, adjoining with Punjab: Loralai and Musakhel. J Pak Med Assoc 2009;59:132–135.
12. Yasinzai MI, Kakarsulemankhel JK: Frequency of human malaria infection in south east area of Balochistan, District Lasdella. Pak J Biol Sci 2012; 28:167–170
13. Yasinzai MI, Kakarsulemankhel JK. Incidence of human malaria infection in northern hilly region of Balochistan, adjoining with NWFP, Pakistan: district Zhob. Pak J Biol Sci 2008;11:1620–1624
14. Farooq MA, Salamat A, Iqbal MA: Malaria–an experience at CMH Khuzdar (Balochistan). J Coll Physicians Surg Pak 2008;18:257–258
15. WHO. World malaria report 2012. Geneva: World Health Organization. 2012. Available from: http://www.who.int/malaria/publications/world_ma laria_report_2012/wmr2012_full_report.pdf
16. Bouma MJ, Dye C, Van der Kaay HJ. Falciparum malaria and climate change in the northwest frontier province of Pakistan. Am J Trop Med Hyg 1996;55(2):131-7.
17. Gething PW, Elyazar IR, Moyes CL, Smith DL, Battle KE, Guerra CA, et al. A long neglected world malaria map: Plasmodium vivax endemicity in 2010. PLoS Neglected Trop Dis 2012; 6(9): e1814.
18. Tatem AJ, Jia P, Ordanovich D, Falkner M, Huang Z, Howes R, et al. The geography of imported malaria to non-endemic countries: a meta-analysis of nationally reported statistics. Lancet Infectious Dis 2017;17(1):98-107.