

MALARIA INCIDENCE IN THE TAL. MAVAL. DIST. PUNE, MAHARASHTRA STATE, INDIA.

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ABSTRACT

The present investigation was undertaken to study the prevalence of six Primary Health Centers, hospitals & pathology laboratory has revealed 30 malarial cases in last two years. However, during the past four years, its prevalence has been declining in Tal. Maval Dist. Pune. The source wise blood smears collection and examination of (positive) Malaria from the various Tal. Maval during 2012-2013 and 2013-2014 showed the percentage of total positive from active blood smears collected and examined was 0.0373 % and 0.0223%. These data were consolidated and analyzed to determine the trend in malaria incidence in the Tal. Maval. Dist. Pune (M.S.), India.

KEY WORDS: Incidence, Malaria, Maval.

INTRODUCTION

Malaria is endemic in most parts of the country. There is a lot of diversity in terrain features, ecological conditions, biology of vectors and immunological aspects. In order to use the limited resources available effectively, areas with high potential for malaria transmission with some similarities need to be identified. Stratification of areas for suitable and effective malaria control is one of the best strategies. Several species of Malaria cause extensive clinical and pathological damage of human being, it is because of this reason Malaria having attracted the attention of many workers.. India alone contributes about 70% .Currently 80.5% of the Indian population lives in Malaria risk areas (Dash et al.,2008) and around 85% of the total malaria cases are reported from the forested areas occupied by ethnic tribes of the country (Kumar *et al.*,2007). Epidemiology and prevention of malaria have become increasingly complex as a result of change in agriculture practices and movement of migrant population, vector resistance to commonly used insecticides and resistance of parasites to chemotherapeutic drugs. A well planned strategy is needed to study and provide evidence based information on the aspect of asymptomatic malaria as it has a direct bearing on malaria treatment, transmission dynamics and management to prevent mortality (Dash et al., 2008) 1992-1993 contributed to this area of research. The representative data studies of ultrastructure of malaria have enhanced these groups' biological and medical importance . Hence, this study was initiated to record the prevalence of malaria in Tal. Maval. Dist. Pune.

MATERIALS AND METHODS

The techniques used during the present representative data study are from the manual for laboratory technician published by Directorate General of Health Services (1985), which is a modification of the manual of basic techniques for Health Laboratory published by WHO (1980), it is revised version of an earlier manual by Etienne Levy Lambert (1974). The blood sample for the Present representative data study of malaria of man was obtained from different villages Tal. Maval (Figure 1).

The third finger of the left hand of the patient was held. The finger was wiped with a swab dipped in spirit solution and was allowed to dry. The finger was pricked firmly and rapidly with the needle or lancet. The first drop [of the blood was discarded. The next blood drops 3 or 4 or sufficient amount of blood was taken on a clean slide with smooth edges was take and used as spreader i. e. spread the blood in the form a thin and even smear. Then the slide was labelled with the patient number. The smear was left in the air to dry. The thin smear was fixed immediately in methanol (methyl alcohol) acetone free and kept for 2-3 minutes. The stain was washed off with buffered water. The water was drained off. The slides were placed on rack to dry with sloping position with the stained films facing downwards to protect them from the dust in the air.

Table 2. Villages wise Blood Smear Collection and Positive *P. falciparum* and *P. vivax* during 2013-2014

Sr.No.	Name of the villages (PHC)	Blood Collected and Examined	Smear and Positive		
			<i>P. vivax</i>	<i>P. falciparum</i>	Total
1	Adale	6705	00	00	00
2	Karla	8742	01	01	02
3	Khadkala	12218	04	00	04
4	Takave	5267	00	00	00
5	Talegaon	12415	03	02	05
6	Yelase	3844	00	00	00
	Total	43833	08	03	11

The source wise blood smears collection and examination of positive from the various villages of Tal. Maval. During 2012-2013 showed the percentage of total positives from active blood smears collected and was 0.0373%. During the year 2013-2014 the percentages of positive from blood smear collected and examined was 0.0223%. The findings are depicted in table 1 and 2 and figure 1. Several workers have contributed to this field such as Alcindele (1993). Berti *et al.* (1993), Coene (1993), Rahman *et al.* Sergiew *et al.* (1993), Ramsaswamy *et al.*(1992), Schultz (1992) and Yadav *et al.*(1993) have extensively prevalence of incidence of malaria in man.

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