LEPROSY IN INDIANS IN FIJI

In connection with Oberdoerffer's theory of a relationship between the distribution and incidence of leprosy and the eating of aroid plants of the Colocasia type,* inquiry was made (in 1941) of Dr. C. J. Austin, of the Makogai Leper Colony, about the dietary habits of Indians living in Fiji.

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* According to Oberdoerffer, the plant involved in Nigeria is *Colocasia antiquorum*, but Clark, whose studies had apparently led Oberdoerffer to his theory, stated that the one used there as a staple is *Xanthosoma atrovirens*. *C. antiquorum*, according to the Bureau of Science, Manila, has been reduced by Merrill as a synonym of *C. esculenta*.

This inquiry was induced by a statement made by Oberdoerffer (personal communication) in disagreeing with an opinion that a racial element is responsible for the fact that leprosy is as mild among Indians living in Burma, where they eat little taro, as it is among Indians at home. He asserted that among Indian immigrants in Fiji, "where no rice is available and where they have to eat taro," leprosy is as severe as among the Fijians. He held that reports show that, although L3 cases are most frequent among Fijians, L2 cases are equally common in both groups.

The reply of Dr. Austin is of such interest in connection with the broader question of the racial factor in leprosy that, with his permission, it is published here despite the fact that the colocasia theory is in disrepute.

TO THE EDITOR:

With respect to the inquiry regarding the dietary habits of Indian immigrants in Fiji, I am attempting to obtain other views regarding the relative amount of taro consumed by them, but will give here my own opinion based on local inquiries.

There is no justification whatever for the statement that no rice is available in Fiji and that in consequence the Indian immigrants have to eat taro. There is not the slightest question that rice is still the staple diet of Indians here. My own impression is that they eat very little taro at all, and this is the only point on which I feel I should like confirmation before being too dogmatic. It is quite definite, however, that taro is in no part of Fiji to be regarded as the staple diet of the Indian immigrant.

On the other hand, it is quite true, as I have several times pointed out, that while L3 cases are more common among Fijians, L2 cases are no less frequent among Indian immigrants. In fact, the disease seems on the whole to be rather more severe among the latter than the former, at least in so far as that is indicated by the data recorded at the time of admission. I have gone over the records of our present Indian inmates and find that 59 per cent of them were admitted as L2 or L3 cases, whereas only 36 per cent of Fijians were so classified on admission. A survey of the records of the first twenty-one years of this hospital shows that 45 per cent of Indians were of that severity, but only 33 per cent of the Fijians. That a much higher proportion of Indians than of Fijians improved under treatment does not affect this point.

There is of course a possibility that some of our cases classified as L2 in the past may have been actually tuberculoid. In fact, I

can recall several instances of that kind. This factor, however, would have applied to both races, and I am reasonably confident that it does not apply to any material extent to our present series, among whom the preponderance of severe lepromatous cases among the Indians is greater than is shown by the earlier figures.

Why there should be the discrepancy that exists between figures in India and here, I am at a loss to explain, but there does not seem to be much evidence to incriminate taro. We pride ourselves on the fact that the Indian in Fiji is healthier than in India and that, on the whole, he lives under much better conditions. At present one can only theorize, as Oberdoerffer does, on very slender grounds. Does the fact that we have a very definite cold season in Fiji play any part? May it possibly mean that the two extremes are missed—that in India there are missed more of the advanced cases, who are less likely to be hopeful of improvement in the voluntary hospitals there, and that here we miss the very early and less obvious cases under our compulsory system? I should be reluctant to admit the latter possibility, as doubtless the Indian workers in India would be regarding the former one.

There is no doubt, though, that some of our new admissions, particularly among the Indians, should have been admitted earlier. The Fijians, as a whole, are a more stable and less isolated community than the Indians; and since they live under their own chiefs, who are responsible to the government for statistics, they are more easily traced. Also, the higher proportion of Fijian medical practitioners as compared with Indian medical practitioners doubtless plays a part. From the point of view of prevention, it is most important to make sure of the isolation of the more obvious and infective cases, dangerous to the community, and to trust to the slow education of the people—particularly of the Indians—and to their realization, from the discharge of early cases, of the value of early treatment from a personal point of view.

Incidentally we are trying diphtheria toxoid here, and from the objective point of view are not greatly impressed. I have been surprised, though, at what I take to be the psychological effect in producing a very marked subjective sense of well-being, even in the presence of obvious standstill of the disease.

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