

COMUNICACIÓN CORTA – SHORT REPORT

Intestinal Parasitosis and Socioeconomical Conditions in locations of Fernandez Feo Municipality, Tachira, Venezuela*

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Poor socioeconomic-demographic, environmental health and hygiene conditions play a major role in intestinal parasites and diarrhea occurrence.

Ascaris, *trichocephalus*, *Necator* -all of which are human parasites-- are closely linked to fecal peril and especially prevalent among populations in developing countries, where fecal hygiene is insufficient or lacking. Epidemiological surveys seeking to evaluate the frequency of the various intestinal helminths are usually intermittent, few in number, and especially difficult to compare because of the different coprological techniques used.

However this may be, the respective prevalence of these worms depends on geographical, climatic, economic, and human conditions. Their effect on health is not negligible, especially on children's health and in particular when malnutrition also occurs.

To fight effectively against these verminoses, education and economic development must be promoted, but the present situation of the economy in most developing countries is postponing indefinitely the fight against fecal peril especially as its control is not seen as a priority.

We evaluated Fernandez Feo Municipality locations, Táchira, Venezuela (Figure 1), between 2002 and 2003, in regard to intestinal parasitosis and socioeconomical conditions.

Two different surveys were applied in studied period.

A passive data collection and an active survey giving instructions for voluntary submission of stools for coproparasitological examination were performed.

With 34,176 pop, municipality has 77.7% living in urban areas, 80% live in houses, 74% continuous water services, 56.5% proper sewage systems, 12.1% illiteracy, 60.7% scholarization.

In 2002, helminth infections were 2nd morbidity cause, 1379 cases (3.9% of municipality pop) and protozoan infections 3rd cause, 1224 cases (3.6%).

In this study, 120 individuals were invited to provide voluntary a stool sample.

We found 90.0% positive for at least one parasite:

90.0% corresponded to *Enterobius vermicularis* ($p < 0.01$),

32.5% to *Ascaris lumbricoides*,
6.7% to *Necator americanus*.

An intervention program were applied to 1200 houses in the municipality, giving antiparasitary treatment (albendazol) to 6378 individuals living in 7 different sectors.

In 2003, a considerable reduction was observed, helminth infections were 3rd in morbidity cause, 1161 cases (3.4%, $p < 0.05$) and protozoan infections 6th cause, 809 cases (2.4%, $p < 0.05$).

Social conditions although were evaluated and considered in this program, could not be significantly improved due to national socioeconomical issues. More than 84% of the population living in these settings corresponded to the level IV of the Graffar socioeconomical classification (IV/V).

Sanitary education was implemented regarding the importance of preventive measures to avoid intestinal parasitosis.

Present study results indicate that there is high parasitic infection prevalence in the community where personal hygiene and sanitary conditions are poor and may be one of the contributing factors for transmission within the families.

Intervention strategies including health education program should be applied.

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Figure 1. Area of Study: Fernandez Feo Municipality, south of Tachira state, western Venezuela.

