THE CURRENT STATUS OF VACCINES IN CONTROLLING TYPHOID ENTERITIS: A PRELIMINARY REPORT

O A. Badejo, M.D

Routine Vaccination against typhoid fever is not generally practised in Nigeria and indeed in the tropics. With the increase in World trade and hence migration of people, many Non-Nigerians who claimed to have been vaccinated before coming into this country have found themselves in abodes and sorroundings which can be described as poor in sanitation and high in population density. Five out of every six of such individuals have been found to have various forms of typhoid enteritis. The Clinical features, morbidity and mortality of thirty cases are reviewed. The time factor between the immunization and the onset of the disease entity is discussed. It is speculated that the virulence of the infecting strain has a greater role to play in the high morbidity and mortality of this condition rather than the time lag between immunisation, the dosage of vaccines used and the onset of the disease.

THE ROLE OF SANITATION AND POPULATION DENSITY IN CONTROLLING TYPHOID ENTERITIS

O A. Badejo, M.D.

The Socio-medical problems posed by poor standard of hygiene in our over-crowded urban and suburban areas have been a matter of concern to health educators and hence researchers in communicable diseases. This concern has also generated such interest necessitating the need to review the association between sanitation, population density and the occurence of typhoid enteritis in Ife/Ijesha zone of Oyo State, Nigeria. Three zones were identified for this study; namely area of low population density and good sanitation, area of high population density and mixed sanitation, and area of high density with poor sanitation. 120 cases were reviewed in Ife/Ijesha zone. The analysis showed an occurence rate with a ratio of 1:5:15 in the zones identified and studied. This low incidence of typhoid fever treated from the low density zone with apparantly good hygiene suggest that improving the sanitation of the masses as well as avoiding over-crowding in endemic areas, may perhaps reduce the incidence of typhoid fever within any given community.

THE IMPACT OF THE LEVEL OF DEVELOPMENT ON HEALTH IN TOGO

Dr. Bagna, Isotou D.
Mr. Tchaboure Gogue, Ph.D.

Title : The Impact of the level of Development on Health in Togo

Abstract : Our object is to show how, in Togo, the problems of health are explained not only by the lack or insufficiency of financial means, but also by illiteracy, the level of instruction and certain socio-cultural behaviors.

To do this we have adopted a workplan with the following broad lines :

0. General Introduction : Presentation of Togo and posing of the problem.
1. Presentation of the sanitary situation : proposal and calculation of the ratios of health development for Togo.
2. The impact of the insufficiency of financial means on health in Togo.
3. The impact of illiteracy and the level of education on health in Togo.
4. The impact of certain socio-cultural behaviors on health in Togo
5. Conclusion : resumé and synthesis ; proposals.

Methodology : 1) Consulting documents on health in Togo
2) Carrying out a survey
3) Informal observations and interviews

MODERN THERAPY OF INTESTINAL AMEBIASIS AND GIARDIASIS

Samir Bassily, M.D.
Z. Farid; N. A. El-Masry; C. K. Wallace

The 2 main pathogenic intestinal protozoal infections are E. histolytica and G. lamblia, both prevalent in tropical and subtropical Asia and Africa. Metronidazole (a nitroimidazole derivative) is one of the most effective drugs for the treatment of either infections; however because of frequent side reactions of the drug and its incompatability with alcohol, other nitroimidazole derivatives were introduced. This report compares the therapeutic results and side reactions of 3 nitroimidazole derivatives: metronidazole, tinidazole and ornidazole. Only patients with 3 consecutive stool specimens examined by the merthiolate-iodine formaldehyde (MIFC) technique and containing cysts and/or trophozoites of E. histolytica or G. lamblia were included.

A total of 45 male patients (aged 9 - 65 years) had E. histolytica infection and the majority had episodes of moderate diarrhea and abdominal discomfort. Of these 17 received metronidazole at a daily dose of 1.5 gm for 10 days, 15 were cured (88%). 18 were treated with tinidazole at a dose of 1.5 gm daily for 10 days; 12 were cured (67%). 10 received ornidazole at a daily dose of 1 gm daily for 10 days; all were cured (100%). At least 10 stool specimens were negative for each patient for 3-5 weeks after completing therapy. Five patients had reactions after receiving metronidazole: two vomited, one had chest pain, syncopy in one and headache in another. Three patients had reactions after receiving tinidazole: one had headache, one had dizziness, and one anorexia. No side reactions were observed after ornidazole was given.

A total of 80 patients had G. lamblia of whom 20 received metronidazole 0.5 gm daily for 10 days; 19 were cured (95%). 30 received 2 gm single dose of tinidazole; 27 were cured (90%). 30 received 1 gm single dose ornidazole; 29 were cured (97%). There were no side reactions with any of the 3 drugs when given at a lower dosage for G. lamblia infection.

We conclude that ornidazole seems to be as effective as metronidazole for E. histolytica trophozoite and cyst intestinal infections and it is far less toxic. Tinidazole and ornidazole given in a single oral dose are equally effective for G. lamblia infection.

AN EXHAUSTIVE STUDY OF TWO MALARIA CONTROL STRATEGIES, CHEMOTHERAPY OF FEBRILE ATTACKS AND CHEMOPROPHYLAXIS, IN SAVANNA AND RICE-FIELD, FROM 1980 TO 1982; IN UPPER-VOLTA

D. Baudon Pierre-Jacques Chauvet
J. Roux; P. Carnevale; J. Vaugelade; C. Boudin; J. Chaize;
J. L. Rey; M. B Meyran; O. Brandicourt

- We compared two strategies of malaria control by chloroquine : systematic chemotherapy of febrile attacks (F.A.C.) and classical weekly chemoprophylaxis (CP).
- The entomological studies showed that malaria transmission is about 2,7 times less important in the rice-growing area than in savanna; it does not seem worth using entomological informations to estimate the efficiency of these strategies.
- Paludometric surveys showed that malaria prevalence is always less important in the rice-growing area. The C.P. conducted from 1981 to 1982 involved a significant fall of prevalence whereas F.A.C. had little effect on it.
- Immunologic studies showed that correctly performed C.P. involved a very significant decrease of fluorescent malaria antibodies rates, whereas F.A.C. produced little effect on this immunologic response.
- There was no difference of mortality (age group 1-2 years old) between the two control strategies F.A.C. and C.P.
- All these studies lead us to propose systematic chemotherapy of all febrile attacks as the control strategy (F.A.C.) of malaria in the investigated area. F.A.C. proved itself to be the easiest strategy practicable on field in the framework of Primary Health Care.

EFFECTS OF PREGNANCY AND LACTATION ON THE OCCURRENCE OF GIARDIA LAMBLIA AND OTHER PARASITES IN MAN IN THE GAMBIA, WEST AFRICA

D Befus

Studies with Giardia muris infection in mice have suggested that physiologic alterations resulting from pregnancy and lactation can lead to a recurrence of heavy trophozoite burdens in the intestine and cyst output in feces under conditions where infection was undetectable ("latent") but in retrospect, present. If this phenomenon occurs in human Giardiasis, it could have opposing but important epidemiologic implications for the newborn, as: 1) probability of infection would be high; or 2) maternal antibody levels against Giardia lamblia may be boosted and serve to protect the breast-feeding infant. In three rural villages in the Gambia, we have studied whether G. lamblia or other protozoa or helminths were present in a greater proportion of stools from pregnant/lactating women than from non-pregnant/non-lactating women. G. lamblia was equally common in both groups as were the other protozoans studied and hookworm. However, Ascaris lumbricoides eggs were found significantly more in stools from the pregnant/lactating group. Thus, in an area of endemic Giardiasis, enhanced cyst output did not appear to occur associated with physiologic alterations of pregnancy and lactation. Analysis of anti-Giardia antibody levels in the group requires study, as do the observations with a A. lumbricoides.

Supported by International Development Research Centre and Rockefeller Foundation.

G. RICHON

ABSTRACT AND POSTER VOLUME

XI INTERNATIONAL CONGRESS

for

TROPICAL MEDICINE & MALARIA

CALGARY, CANADA

SEPTEMBER 16 - 22, 1984