The SEP Report, Volume IV, Number 1. Proceedings of the Seminar on Smallpox Eradication and Measles Control in Western and Central Africa. Lagos, Nigeria, May 13-20 1969. Part I.

ROLE OF MIGRANT GROUPS IN THE TRANSMISSION OF SMALLPOX IN MALI

O. Sow[1]

The importance of population movements in the case of a communicable disease like smallpox is understood by all. Though strict legislation has solved the problem at the international level, the position is quite different within our countries. The special problem presented by migrant groups, over and above the difficulties in reaching them for vaccination, is the possibility that they may carry the disease from one part of a country to another and from one adjoining country to another, because immunization of these groups is incomplete.

In Mali, migrants constitute a considerable part of the population. Broadly speaking, the Peulhs, Tauregs and Bozos of the Central Niger Delta may be regarded as internal migrants, and the seasonal workers who periodically leave Mali for Niger, Ivory Coast, Ghana, etc., as emigrants.

The Peulhs' movement is connected with transhumance, a socio-economic phenomenon that has been a characteristic of this population of herdsmen for decades. The transhumance takes the form of an annual movement towards the pasturage along the banks of the Niger or of the Central Delta when the fall in the river's water level permits growth of a particular plant ("bowgou") on which the animals feed. These peoples are thus involved in two great movements between October and June, towards Lake Debo, and from Upper Volta towards the banks of the Ban. In the north of the country, Tauregs and Peulhs also move to the bowgou pastures of Lake Debo. These population movements involve some 100,000 people. Among internal migrants mention should also be made of the Bozo fishermen on the Niger, who move in search of areas of the Central Delta where there are plenty of fish.

As to the seasonal workers, economic circumstances oblige them to move towards the adjoining countries as soon as the harvest is over. These migrations often involve all the men of some villages in the north.

In addition, there are traders who go from market to market within an economic area. Though they are few in number their mobility often causes them to be missed during vaccination programmes. Thus in 1967 when one market was inspected we found that 70% of the traders had not been vaccinated.

We have then a large category of people who create many problems by their way of living. The scale of the problem, epidemiologically, may be seen from a breakdown of smallpox cases in the last two years.

[1]Chief Medical Officer, Division of Socio-Preventive Medicine, Ministry of Health, Bamako, Mali.

Outbreaks Definitely Traced to Migrants

	Outbreak No.	No. of Cases	Comment
1967	1	15	First case was a Peulh
	2	66	Transhumance area-first case was in a Poulh
	3	145	First case was a migrant from Niger
	4	9	
1968	1	21	First case was a Taureg
	2	7	
	3	41	
	4	65	
1969	1	1	
Total	9	370	

These cases represent more than three-fourths of all cases recorded in Mali during this three year period.

To cope with this problem, we need to know the transhumance axes and the assembly points which, by long tradition, have become virtually permanent, and to design programmes which take these factors into account. The possibility of a health care system for seasonal workers should be considered. Inter-frontier coordination of vaccination programmes is also required. When these operational and administrative aspects have been taken into account, the greatest possible allowance must be made for the psychology and mentality of the peoples, particularly the Tauregs and Peulhs. These constantly moving ethnic groups have usually escaped the medical attention of health units. The Peulhs have a religion of their herds and frequently look after their cows better than themselves. They must be sought out where their herds are located and vaccinated there. The fluidity and mobility of a people such as this also make the cooperation of the traditional chiefs necessary.

If this whole complex of factors is taken into account, it may be possible to remove the risk represented by migrants in our eradication programmes.