



Malaria and Opium Control in Iran

A GLANCE at two major health developments in Iran, achieved in little more than a decade, illustrates the dramatic contributions health workers have made to the well-being of a people.

Iran is one of the many countries with shortages of transportation, communication, industry, equipment, trained personnel, and administrative organization to overcome in its coordinated development. In addition, until 1950, malaria and opium addiction prevented a large proportion of its population from functioning effectively.

Malaria

Despite the lack of national statistics, one could see that large numbers of workers were

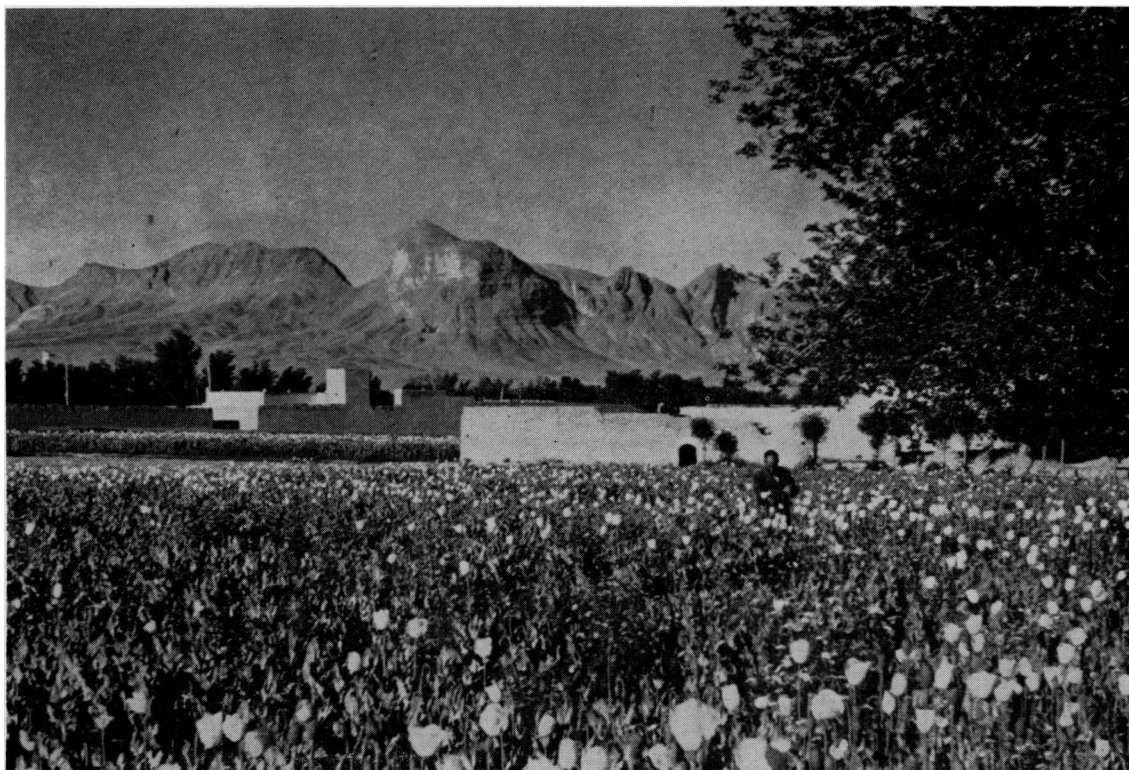
suffering attacks of malaria during the growing season. For example, along the Caspian Sea in the north adequate rainfall should have made the land particularly productive. But throughout history malaria had caused it to be known as the "poisonous region."

DDT spraying commenced in 1947 with the first demonstration programs supported by the Near East Foundation and the United Nations. They showed that the transmission of malaria could be controlled rapidly by spraying the insecticide on the walls where *Anopheles* mosquitoes, engorged with malarious blood, rested.

In 1950 the Iranian Seven Year Plan Organization began a national program of malaria control. The U.S. Technical Cooperation Administration (now the U.S. Operations



A malaria control team from the Iranian Ministry of Health crosses a footbridge near the Caspian Sea. The U.S. International Cooperation Administration supplied sprayers and DDT for such teams.



Fields of opium poppies, once conspicuous near every village in central and southern Iran, had disappeared by 1956. Strictly enforced laws forbid cultivation of the plant.

Mission, International Cooperation Administration) contributed insecticide, technical guidance, and administrative support. The World Health Organization supplied malarialogists, entomologists, and technical grants to further scientific guidance. Despite difficulties brought on by the oil crisis and the political pressures of the once strong Tudeh (Communist) Party, the antimalaria work continued to expand. The campaign has been described in detail (E. E. Palmquist and F. F. Aldridge: *Malaria control in Iran*. Pub. Health Rep. 69: 976-981, October 1954).

The progress against malaria can be gauged. In the Caspian area the spleen indexes of village children have dropped from 95 to an irreducible 2 percent. Formerly, every clinic there saw hundreds of cases each year; now only sporadic cases are confirmed.

Throughout much of the plateau which comprises most of the country, malarimetric indexes have fallen dramatically. Malaria still exists in Iran, especially in the southern part of the Iranian plateau. But antimalaria cam-

paign workers are concentrating on eliminating the residual reservoir so that the disease can be eradicated in Iran. The work is now supported predominantly by income from Iranian oil and is being administered entirely by Iranians.

Opium

To the casual observer, the most obvious indication of the importance of opium in Iran was the large amount of precious agricultural land devoted to the opium poppy. Of course, not all of this easily transportable product was used in Iran, but it is safe to assume that only a small fraction was turned to legitimate medical uses.

The number of addicts was not known, but it was apparent that the narcotic was in fairly common use. While it is true that the surroundings appear less harsh under the influence of opium, the loss of vitality and strength, diminished sense of responsibility, the general inertia, and the expense generally overshadow any benefits conceivable to users. They become dulled and wasted.

By 1956, the opium poppy, previously grown near every village in central and southern Iran, had disappeared. Effective legislation forbidding its cultivation had been hammered through. With the firm support of the Shah and some exemplary penalties, the law has been strictly enforced.

Iran has accomplished a great deal through its own efforts to combat addiction. The public health education division of the Public Health Cooperative Organization (a former administrative pooling of Iranian and United States funds, equipment, supplies, and technicians) contributed to widespread education and publicity through talks, posters, and other information media. Medical, narcotics, and laboratory advisers from ICA and WHO worked with Iran's limited treatment facilities to ease the turmoil which follows suppression of the availability and use of the drug. Drugs to be used temporarily during withdrawal were supplied. An ICA hospital administration consultant helped to expand and reorganize hospital facilities to care for those severely affected by withdrawal.

Enforcement officers for antinarcotics work were trained in a school started with the help of ICA, and scientists, under UN grants, were trained abroad in laboratory techniques for detecting usage. Contact with neighboring countries on the narcotics problem has been fostered by the UN and the CENTO Pact. Agricultural advisers of ICA and the Food and Agriculture Organization helped to supply new crops to fill the gap created by suppression of cultivation and marketing of the product.

The cost of opium has increased to 40 times its 1956 price, out of reach of most users, and the

number of users has been reduced by at least two-thirds. Villagers, dulled for decades, have given up opium and turned to the production of crops and flocks badly needed to support the development of the nation. The effect of Iran's achievement on the international traffic in illicit drugs alone deserves worldwide interest, assistance, and cooperation.

Other Changes

International teamwork has led to other achievements in Iran. To mention a few—the newly emphasized concept of preventing disease has resulted in 12 million vaccinations; typhus outbreaks have been cut short by DDT dusting; women are experiencing a challenging liberation as nursing becomes a respected and useful profession; a widespread health education program is reaching the people; basic public health laboratory methods are being adopted; the largest city in the world without a sanitary water distribution system now has one; and rural sanitation workers are being trained to work on the environmental factors important to the villagers' health.

In these achievements no one worked alone, everyone worked together toward similar goals. Iranians worked with the Near East Foundation, ICA, WHO, UNICEF, Rockefeller Foundation, and others inside and outside the country. Together they formed a team which caused a country to change for the better.

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