CLASSIFICATION AND TREATMENT OF VENEREAL DISEASES
BY A BRAZILIAN INDIAN TRIBE

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South American Indians do not strictly separate the fields of magic, religion, and medicine. Medical beliefs are normally integrated into a larger magico-religious complex which in turn determines the form and content of those aspects of medical practices which, to them, are essential.

Some of the commonest notions for the causation of disease and illness are: sorcery, soul-loss (or soul-theft), spirit intrusion (frequently manifested by "possession"), and intrusion of pathogenic objects. This last seems to have a symbolic character, being only the materialization of a disease-producing principle or force; for instance, the pathogenic objects extracted from the sufferer by the shaman may be "invisible." A less common, or less important, idea among South American Indians is that disease may be the consequence of violating tribal laws or customs.

Most South American tribes hold several notions of disease causation simultaneously; often one of these ideas predominates but this need not be the case. This is true of the people to be discussed today, the Fulniô or Aguas Belas, Pernambuco State, in northeastern Brazil.

Diagnostic methods of primitives are preponderantly methods of divination, and involve the entering into contact with supernatural forces by the shaman in order to learn about the cause and character of the affliction. For this purpose artificial trance is resorted to by the practitioner, and in South America drugs are commonly used to induce it. Drugs, however, may be used by laymen as well as by professional healers, and not necessarily to induce a trance. If a drug is administered to a patient, and is effective physiologically, it is because of the drug's spiritual force, its magic power, or because of the spirits which inhabit or govern it.

Over most of South America the treatment or healing rite by the shaman is remarkably uniform. The "classic" procedure may consist of four steps: (1) fumigation of the patient with tobacco smoke by the shaman, who also sings; (2) the trance; (3) massage and sucking of the afflicted spot together with extraction of the pathogenic intrusive object; and (4) the external application or internal dosing of drugs or herb infusions.

Natural factors as the cause of disease and death is most exceptional among the South American Indians. Where such instances have been recorded they are usually associated with ailments introduced by Caucasians; in other words, the inference is that the Indians distinguish natural cause of disease (imported by Whites) and supernatural cause of disease (all others). The inference is based on differential treatment for the two classes of ailments, the use of native pharmacopoeia for the White man's diseases, and magical practices (or a combination of both magic and drugs) for the other.
The objection to this is that perhaps the Indians are only distinguishing two sets of magic. Perhaps this may have been the case with the Brazilian tribe with which I stayed in 1951-1952.

The Fulniô than numbered some 1,200 individuals, and though in some degree acculturated to Neo-Brazilian ways, they still form a discrete element in the population of the semi-arid scrub-forest of northeastern Brazil. These Indians speak their own language and retain a surprising amount of aboriginal tradition, particularly in regard to social organization and magico-religious beliefs. They are administered by the Brazilian Indian Service. The dispensary at the Post was limited in its resources and facilities; it was presided over by an elderly Brazilian pharmacist who died not long after my arrival, after which time there was no one to treat the Indian patients. These, as a matter of fact, preferred to dose themselves with native concoctions or to have recourse to the shaman, who was really as efficacious as the deceased pharmacist. The latter was of the folk school of medicine and had such notions as "a child inherits its blood from the father alone."

The Post Administration recorded only annual births and deaths of its wards, but not sickness rates. However, the pharmacist had kept holographic notes on at least the number of individuals reporting for treatment, recording primarily class and dosage of medicines supplied. An examination of his incomplete records reveals the following vague breakdown of venereal cases during 1950-1951.

<table>
<thead>
<tr>
<th>Disease</th>
<th>1950</th>
<th>1951</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Blenorrhagia</em> (Gonorrhoea)</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td><em>Bubão</em> (Lymphogranuloma inguinale)</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td><em>Cancra molle</em> (Chancroid)</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td><em>Fogajem</em> (Granuloma venereum)</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>54</td>
<td>51</td>
</tr>
</tbody>
</table>

These figures cannot be accepted as being meaningful. First, they indicate only those individuals who presented themselves for treatment, and do not represent a venereal rate for the tribe; second, it is not known whether these portray continuing cases or new ones, or a combination of both; my own impression is that they are continuing cases because of the close agreement in figures for the two years.

No laboratory facilities or trained personnel were available to determine correctly the precise nature of the venereal afflictions indicated. For instance, how does one distinguish accurately between chancroid and primary syphilitic chancre except by means of laboratory techniques? Furthermore, the possibility of mixed infections, chancroid and syphilis, or the latter and gonorrhoea, or any other combination, was seemingly ignored in such records as were available. Thus, identification of venereal disease was made largely, if not entirely, on a subjective basis, that is to say, by visible symptoms, precisely as the Indians themselves did.
There were no data on syphilitics as the administration's attitude was that at least one-third of the Indian population was so afflicted (this would be 400 cases!), and therefore it was pointless to keep records. The medical and social implications of this passive attitude may well be imagined.

According to the pharmacist's records, the last time any Fulniô Indians reported for treatment of syphilis, allegedly presenting evidence of primary chancry, was in 1950. One male Indian received weekly injections of neosarphenamine, and intramuscular injections of bismuth salicylate (also at five to seven days interval), but he soon tired of this course and left off coming for treatment. The second man, same complaint, quit in disgust at the end of the first week. The indicated chemical preparations are supplied by the Indian Service. In 1951 a third Indian came in to learn what was wrong with his penis, and left after finding out, never returning for treatment.

In early 1952 a traveling medical doctor of the Brazilian Public Health Service came through the region and stayed some weeks at the nearby small town of Aguas Belas. At my request he examined a number of Indians whose names had been recorded at the dispensary. There were two problems here: (1) most of the aborigines refused to cooperate in this invasion of their privacy, and again (2) owing to a lack of laboratory facilities, the physician could give only an approximate diagnosis, particularly in the more exotic venereal afflictions or manifestations.

With respect to children, infant mortality is notoriously high throughout Northeast Brazil, with tetanus, gastro-enteritis, and the dysenteries leading the list, but the possibility of deaths resulting from congenital syphilis must not be ignored. Also present in the tribe were blind infants, perhaps from maternal gonorrhoea, although trachoma is also endemic to the region.

Venereal diseases among the Fulniô have been contracted through the local Neo-Brazilian populace of the depressed economic class so common to this area. These afflictions are referred to by both Portuguese and Fulniô terms. It is clear that the Indian classification of these ailments is based on the symptoms presented at any given time by the victim in question. Thus, no clear-cut distinction is made by the aborigines between gonorrhoea and syphilis, but rather various stages or manifestations of either disease may be described and treated as several distinct illnesses according to symptomology. They recognize eight distinct venereal diseases, although interestingly enough, they will occasionally use one Fulniô word to indicate two different ailments, yet at the same time employ distinct Portuguese terms for the same two diseases. The Indians also refer to them generally as "White man's sickness" (doença do branco).

**Gonorrhoea**

1) Da- to'á, called in Portuguese esquentamento ("heating"). The victim has a burning sensation in the urethra, quite often with pain on urination or defecation, and there may be acute retention of urine. Occasionally
there is fever and headache. This may be Cowperitis, an acute infection of Cowper's gland occurring early in gonorrhoea. The Fulniô treat this with the tiny fruit of a woody vine called maracujá de estralo (Passiflora sp.), which is pounded up together with one fourth part of pé de pinto or pega-pinto (Desmodium sp.), and made into a hot tea. The sufferer takes only one dose (about a pint) of this concoction and is "soon cured."

2) Datao, in Portuguese, blenorragia. Although the name of this affliction is identical to that described before, informants insisted that the disease "is a different one" and more difficult to cure, as it is more persistent. Symptoms are painful urination and a thick, purulent urethral discharge, usually white or yellow but sometimes bloodstained; there is no associated fever or headache, but in the case of males painful nocturnal erections may occur. This condition is probably acute urethritis or "standard gonorrhoea."

To treat, one uses a mixture of four plants or trees: the twigs of lenta-cavallo (Portulaca grandiflora Hout.), half a tuber of pega-pinto (q.v.), a handful of pounded arueira bark (Schinus therebentifolius Rad.) and a like quantity of pounded bark of espinheiro branco (Acacia martii Benth.). These are boiled together with water in a clay pot, and the patient drinks a cupful once daily for three days, following which the entire body is bathed in a stream. Informants aver that this medicine is exceedingly unpleasant to take since one of the ingredients, espinheiro branco, stinks so vilely; furthermore, one's fellows know precisely what is afoot since this characteristic odor is perspired and exhaled by the person dosing himself.

3) Fetalwa, known in Portuguese as formigueiro ("ants' nest"). The victim is first aware of his sad condition when he attempts to urinate; a burning sensation is experienced in the urethra, and urine sprays forth from more than one orifice. Alarmed, the sufferer examines himself and discovers to his horror a small hole in the glans. These holes increase in number until the man is urinating like a fountain, spraying in every direction and frightening him to distraction. Pus may also be expressed from the multiple orifices upon manual pressure. The condition is probably due to a gonococcal infection of the para-urethral ducts.

The Indian victim treats himself by making a paste of scraped bark from the arueira tree (q.v.) and from the imburana vermelha (Bursera leptophloeus M.), setting this aside overnight "in the dew" (a characteristic procedure of European folk-medicine). On the following day the patient applies this paste to his afflicted organ, the effect of the arueira element being "to burn the sores closed." Supplementary treatment consists of burning any skin, hide, or leather; reducing it to a powder by pounding; and applying this to the aggrieved parts twice weekly until a cure is effected.

**Syphilis**

4) Milho, called in Portuguese, capim (a general term referring to many of the Graminaceae, but in slang, meaning "money"; the latter allusion is
probably because the sore looks vaguely like a small coin). The condition begins as a tiny painless pimple on the genitalia, rapidly increasing in size until, as informants say, "it is as large as the first joint of a man's forefinger." Possibly it is the primary chancre of syphilis. However, it could also be chancreoid (Ulbus molle), "soft chancre."

According to the Fulniô, there is only one sure way to rid oneself of this sore, and that is by burning it off. One persuades a friendly Neo-Brazilian to buy aqua-fortis (nitric acid) in the nearest town, and then dips a twig into the liquid, touching the sore briefly with the acid, and at once removing the applicator. Informants declared that this treatment, which they undoubtedly learned from local Neo-Brazilians, is excruciatingly painful, the unfortunate victim clutching his genitalia and running about madly fanning the aggrieved parts, trying not to bellow with pain. The Indians thought at the same time that there was something faintly humorous about such a procedure and the reactions therefrom, remarking that "one sees all sorts of queer sights at the men's bathing place." (Through modesty, the sexes bathe apart in the nearby Rio Ipanema.)

5) Se-lêi sê, in Portuguese, known as hostelia (pustule). The term refers to a painless macular eruption appearing usually on the chest and abdomen. A male afflicted with such a rash is nicknamed by the Indians, kelekenho, and if a female, kelekenüso; both terms signify "jaguar." Apparently this represents an eruption characteristic of secondary syphilis which tends to disappear of its own accord with the passage of time. Cure is effected by utilizing the scraped bark of an arboraceous plant called pau de tiyd (Caseria sylvestre Sw., or C. brasiliensis), which is mixed with the local fiery cane rum (cachaça). The concoction is bottled, corked, and buried in soft earth; each day the patient arises at dawn, uncovers the bottle and drinks a swig measuring three fingers, following which the bottle is re-corked and again buried. Treatment continues until the contents are consumed, whereupon the offending rash should disappear; should it stubbornly persist, the course must be repeated.

6) Etaiyone, known also as cavalla. In the Fulniô language eáiyâ means "horse"; this plus the Fulniô feminine suffix results in eáiyone or "female horse." Here the Indians have, for some reason, ignored the correct Portuguese term for mare (egus), and in translation they merely substitute a Portuguese feminine ending for the word "horse" (cavallo), resulting in cavalla, which term, however, in Brazilian speech means something quite different . . . a marine fish (Cybium cavalla Cuv.). In other words, a case of neologism.

The disease called eáiyone or cavalla attacks the Shank of the penis just below the glans, eating away the flesh around the member by ulcers characterized as being deep, with sloughy base and ragged bleeding edges.

The affliction spreads to the surrounding tissues of the scrotum and abdomen, often the skin being black and oedematous, and healing takes place with much scarring. Informants described with much shuddering such cases known to them, avowing that "if a man is not careful, his penis will drop off." To the Fulniô, the disease is "rotten," and the sufferer's
stink is scarcely borne by his fellows. This horrible description sounds very much like a phagedenic chancre of syphilis, resulting from secondary infection of the sore with pyogenic organisms.

To treat this dread condition one scrapes a quantity of bark from the bom-nome (or bom-homem) tree (Maytenus rigida M., or Notopanax cocleatum), adds a bit of water, and carefully grinds the mixture to a paste which is then toasted over a fire. This is again reduced to a fine powder and sprinkled over the offending parts three times daily "until cured."

**Lymphogranuloma Inguinale?**

7) Etá telúlianè, in Portuguese, bubão (bubo) or mula ("mule"). One or both of the victim's inguinal glands swell up, if not properly treated, to the size of a small lemon and then may burst, giving rise to a flow of thick, purulent discharge. If proper medical treatment is resorted to at once, the swollen glands may subside without suppuration. Concurrently with his distended groin, the sufferer shows signs of general constitutional disturbance, such as fever, malaise, and loss of weight. This condition may be climatic bubo; however, it should be pointed out that the alternate Portuguese term, mula ("mule"), is also used to indicate another affliction, epididymitis (vulgarly known in the USA as "blue-balls"), which is associated with acute gonorrhoea. A third, very likely possibility is that it is a chancreoid (Ulcer molle) infection involving the lymphatic glands and also producing buboes (abcesses).

In any case, treatment is heroic as the patient is obliged to take a draught consisting of from four to eight ounces of raw castor oil, prepared locally since the castor bean (Ricinus communis) is commonly grown as a cash crop, following which a gourd of bitter infusion of pounded bark of tambori (Enterolobium timbovua L.) is swallowed; the regime continues daily until the symptoms disappear. One Indian who claimed to have cured himself by the foregoing method displayed abundant scar tissue in the groin as a result of self-healing.

**Granuloma Venereum**

8) Etá telúlianè. Although the native name of this affliction is identical to the disease just described, it is considered by the Indians as a different one (which indeed it is) and also known to them by the Portuguese word, fogálem ("burning"). According to the Fulniö, it is almost impossible of cure; this ailment differs from the other of the same Indian name in that the lymphatic glands are rarely involved. Symptoms consist of genital lesions which eventually become confluent and form vegetations, giving the appearance of large, shining warty areas of granulation tissue which often spread to the abdomen and thighs. The disease persists for months or even years, and whatever treatment resorted to by the Fulniö seems to have little or no effect, one of the reasons why these Indians fear this affliction so greatly, as well they might. Patients must be sent by the Indian Service to Recife, the State capital, for medical treatment.
In the Fulnĩ6 village there lived an Indian of the Shucurũ tribe, located some sixty miles as the crow flies to the northeast in the Serra de Ararobã. This man, called Serra-Azul ("Blue Mountains"), and married to a Fulnĩ6 woman, frequently called on me, and later on the Public Health Service officer, Dr. Bandeira, in an effort to have a personal cure effected, since herbal dosage was to no avail and the tribal shaman refused to help him.

The soles of the feet and the palms of the hands of Serra-Azul were covered with large scaly sores, some scabbed over and others broken and bleeding. (He always insisted on shaking hands whenever we met and parted!) The feet were notably affected, dry, heaped-up rupial lesions extending to the ankles and lower legs. Because of broken crusts of sores and raw cracks over the soles of the feet, the Indian experienced a good deal of discomfort in walking, and one foot was considerably swollen. Serra-Azul also complained of headache, joint-pains, and occasional loss of appetite. He admitted to having had gonorrhoea "several times," but thought that a cure had been accomplished through self-dosage of the nature already described. It was the opinion of the visiting medical officer that Serra-Azul's case represented one of gonococcal affection of the skin, perhaps hyperkeratosis.

This Shucurũ Indian was disliked by the Fulnĩ6, and the shaman refused to see him because Serra-Azul once killed a Fulnĩ6, apparently in performance of his duty as a native policeman appointed by a former inspector of the Indian Service. The Fulnĩ6 regarded his condition of misery as being well merited, and declared that the soul of his victim was thus punishing the "murderer."

The tribal shaman, to whom Serra-Azul had unavailing recourse, himself suffered from a condition which was possibly chronic gonorrhoeal arthritis. This man, also a leader of the Duck Clan (Fále dato), had an enormously swollen knee joint which caused his lower leg to be drawn up to the extent that he was obliged to hobble about with a bobbing gait.

As the shaman had previously been a man of violent passion and quick temper, abusing his supernatural powers, according to village malcontents, Fulnĩ6 opinion was that this affliction was a supernatural visitation on the shaman for some sin or breach of taboo. He himself admitted his former excesses and culpability, but explained to me that his guardian spirits, his etóiya takwá-lha and etí lha, became vexed with his behavior, failing to extend to him their usual protection, and not sending him his ailment on their own hook.

It may be noted from these particular cases that while the Fulnĩ6 generally regard venereal afflictions as being due to "natural causes," thus if a man has relations with a diseased woman, he falls ill as a consequence, all the same the aboriginal notion of disease resulting from supernatural interference still persists, particularly in regard to secondary manifestations (perhaps not quite understood) or stubborn persistence of the more feared afflictions.
Also, there is a good deal of magical belief and practice even with respect to treating oneself with herbal concoctions, some ideas being apparently borrowed from European folk-medicine practices by way of the local Neo-Brazilian populace. In the overall sense, despite acculturation and, shall we say, dubious efforts at education by the paternalistic Indian Service, one gets the impression that it is difficult for the Fulniô to relinquish entirely their ancient belief that disease is largely inseparable from supernatural forces or sin. In this respect, many Americans are, perhaps only to a lesser extent, in the same position as the Fulniô.

NOTE

(1) This paper was delivered at the Second Annual Kroeber Anthropological Society meetings in Berkeley on May 17, 1958.

MEDICAL REFERENCES

Cecil, Russell L. (M.D.), Editor


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