MALIGNANT ANXIETY

A SYNDROME ASSOCIATED WITH CRIMINAL CONDUCT IN AFRICANS

by

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This is an attempt to describe a clinical syndrome which has hitherto received very little attention. It is widespread in Africa and has important medicolegal implications.

Malignant Anxiety (Lambo, 1960a) is a clinical term coined to describe the essential features of this syndrome after a close study of 29 patients and analysis of three major epidemics in Kenya, Eastern Nigeria and the Congo. The condition, which is unassociated with psychosis or mental defect, is most commonly found in detribalized people exposed to special stresses and would seem to be the commonest source of capital crime in Africa.

Detailed study of the pre-morbid traits of the patients in our series showed early evidence in 15 out of the 29 patients of faulty adaptation to the life situation in general. They were described as egotistic and morbidly sensitive: often moody, with periods of lethargy alternating with outbursts of restlessness. No single trait was pathognomonic.* There was also evidence of excitement and psycho-motor restlessness, with hyperactivity.

Although in 10 the social data concerning their early lives were somewhat scanty, 19 out of the 29 subjects studied in detail had shown inconsistent, and unstable emotional reactions to various but fortuitous social circumstances in their early years. Those reaction patterns had been manifest many years before the onset of this syndrome. Thus, they were unable to meet the adjustments required at puberty and reacted with immature hostility, resentment, and anxiety.

The most important clinical condition which resembles malignant anxiety but which can be differentiated from it in its diagnostic and prognostic features is *frenzied anxiety*. Frenzied anxiety states occur in brief attacks in the course of, or as sequels to, some of the major psychiatric disorders. They are found most commonly in schizophrenia, but also in hysteria, epilepsy, manic-depressive and organic states. They are culture-bound phenomena and constitute varying grades of unmotivated excitement with considerable confusion, but often without delusions or hallucinations. Clinically, frenzied anxiety is of pathoplastic significance only and not a disease *sui generis* (Lambo, 1955).

Malignant anxiety, on the other hand, is a syndrome; a protracted mental reaction to situational factors. Adverse social influences are preponderant. In this latter condition anxiety is a kind of permanent state of mind unassociated with any psychosis latent or manifest. In our experience malignant anxiety is a progressive and crippling disorder (usually in the inter-personal sphere) but without the measurable or demonstrable deterioration or disintegration of the personality which is the rule in the terminal stages of the psychiatric

* The examination included E.E.G., psychological tests (African T.A.T., etc.) and observation in groups, as well as detailed life-histories. Intravenous sodium amytal tests at the height of tension states were also carried out.

conditions with which frenzied anxiety is associated. Malignant anxiety, as identified and delimited by us, is resistant to purely physical therapy.

According to Carothers' (1948) observation in Kenya, and to Aubin who observed the Senegalese of French West Africa, the condition which they termed "frenzied anxiety" may clear up within a few days. There is no doubt that paroxysmal attacks of frenzied anxiety often clear up quickly, but a close examination of a series of 30 patients who manifested frenzied anxiety as an important symptom revealed some underlying personality defects, usually of a psychotic nature. However, judging by the detailed description of their cases, we suspect that the great majority of the patients observed by Carothers and Aubin belonged to one of the recognized disorders—schizophrenia, toxic psychosis, epilepsy, mental deficiency and many organic states—which one frequently meets in Africa.

Intensive follow-up study of 16 reprieved patients, out of this particular group of 29, was conducted for four years, even though this was hampered by many obstacles. Seven of them are now living normal lives while nine are still in institutions.

An important clinical finding in this series is the lack of any psychotic manifestations. We, therefore, disagree with some of the previous observers who believe that this condition can be regarded as a psychotic episode. We agree that in a sense, it constitutes "a very real type of insanity". In our present series of 29 selected patients out of 98 capital cases observed in Nigeria, only 2 could be classified as "insane" in the sense in which the law or the general public employs this term. In a series of 98 capital cases of malignant anxiety seen within 6 years, 51 (52 per cent.) were certified "sane", even though their psychological data and personal histories showed strong evidence of emotional instability and abnormal impulses. Other signs of maladaptation were observed in their day-dreams, outbursts of temper, and irascibility.

For some reason a certain group of symptoms appears to predominate. These symptoms are somatic and mental; according to our criteria, malignancy is assessed by the crippling and protracted course of the condition as well as by the presence of a disturbance of the quality of percepts of the patient's own body.* The latter is usually associated with impairment of the familiar quality of perceptions of the outer world, disturbed insight, mortal fear, apprehension, intense anxiety with or without confused excitement. Moderate to severe temporal disorganization is a common feature.

Infrequently, this state is associated with "acting out" of homicidal impulses in men and self-destructive tendencies in women. Three out of the five women referred to us and found to be suffering from malignant anxiety had attempted suicide by taking caustic soda or cutting their throats.

Somatic manifestations resembling angoisse, corresponding to sympathetic over-activity, have been recorded. This syndrome is not a component of, or an underlying factor in, confusional or twilight states associated with schizophrenia in Africans, nor is it concomitant with or symptomatic of some other psychiatric conditions of organic nature such as one encounters in epilepsy,

^{*} For example, the Leopard Men of Nigeria (a secret, savage and subhuman society), about which an observer (Cloete, 1955) writes: "The witnesses—there were witnesses on some occasions—said they had never seen a man. They had seen a leopard, or a thing on two legs and then had run away to call for help. Even if they knew the murderer they would not say, not merely because of their fear of reprisals, but because, to the African, a man becomes the thing he says he is, even if he isn't, by an act of faith ..."

subnormal personality, trypanosomiasis, subclinical encephalitis, or cerebral malaria as described under "African periodic psychosis' (Lambo, 1960a).

MALIGNANT ANXIETY AND CULTURAL FACTORS

The fear of bewitchment (actual or potential) is prevalent among the detribalized, semi-educated Africans who today form the bulk of partially urbanized African society. Morbid fear of bewitchment is the commonest cause of acute anxiety states in Africa. In the rural and primitive population it infrequently assumes malignancy, but without criminal conduct. In some of these cases, malignant fear associated with alimentary, and other visceral symptoms has been incriminated as the cause of death when prompt indigenous psychotherapy was not instituted.

When adaptation to new and stressful life situations becomes difficult for the African, anxiety with psycho-somatic manifestations (usually out of proportion to the stimulus) and with criminal behaviour is apt to occur in those with unstable personalities. Constitutional factors, social conditions and group relations have to be examined for possible explanation why these people behave so aggressively while the vast majority react differently to the same or similar social conditions.

Malignant anxiety in its sporadic or epidemic form may lead to crimes akin to *ritual murder*, which in the past was prevalent in the whole continent of Africa. The psychological attitudes and phantasies underlying these criminal acts are common in the reactions of their daily life. Here, I would like to allude to the well-known relationship between anxiety and aggression. As this is a rather complex psychodynamic problem requiring further exploration it is considered wise to reserve a more elaborate discussion.

In a cursory assessment of the relative frequency of this condition, it is now known that this mental maladjustment is more frequently seen in "marginal" Africans who are in the process of renouncing (or have unsuccessfully renounced) their age-old culture but have failed to assimilate the new.* Although it is in most cases encountered in sporadic form as indicated earlier, it sometimes assumes an "epidemic" form, especially in semi-primitive people whose socio-cultural conditions have been disturbed. In this latter group the average age is 40 years, while sporadic disorder occurs mainly between 45 and 55 years of age.

In its sporadic form it is commonly seen in labour camps, new industrial settlements, and artificial villages which are springing up on the new motor and rail roads and which lack the true traditional atmosphere and social structure of the indigenous village pattern. This syndrome only rarely arises *de novo* in undisturbed socio-cultural environment.

Each epidemic of this type had features of *folie communiquée*†, i.e. one or two abnormal individuals used either their social position and authority, or their aggressive power for the purpose of intimidating and forcing weak individuals to become members of a secret society with antisocial tendencies (see Case 2).

The following four cases will be reported in detail to illustrate some of the essential clinical features of the condition. Three of them were convicted for

^{*} See criteria of detribalization in "Survey of displaced and detribalized people in Yoruba country" (Lambo, 1960b).

[†] For example, Odozi Obodo in Nigeria, Leopard Men Society in Eastern Nigeria, Boro Society of Sierra Leone, Mau Mau of Kenya, etc., whose members, even in the middle of the 20th century, appeared determined to assert and vindicate their ancient rights and privileges.

multiple murder after being tried according to the English Criminal Law in Nigeria, and one was convicted for assault with intent to kill.

Case 1

Summary. Malignant Anxiety with criminal acts. Long-standing member of a secret cult. After the Government had banned their society he formed another secret society and had a good following. This was again banned, which forced him to move to the city to seek work, leaving his family in the village 65 miles away. Unable however to hold any job for more than

two weeks. Family history revealed significant loading. E.J., a heavily-built Nigerian, aged 48 years; married to three wives with two children. Convicted for murder. He was born in a small village of illiterate and primitive parents. Father was an aggressive man with overbearing manners. He was a village chief. He cared very little for them. Two of the five brothers were also away from the village looking for wage labour in big cities. One of the brothers is given to violent temper. The family histories, on

the whole, showed significant morbidity.

Present illness. He was seen by me at one of Her Majesty's Prisons after a long trial along with seven of his lieutenants. He did not admit that anything had been wrong with him until he came into a town about five years ago. "Things went bad right from the start", he said. As a result of his insecurity, both emotional and financial, he became mortally afraid of being a victim to "juju" (black magic) and within a short time developed the feeling that he was changing gradually within himself. In addition to this, he had feelings of emptiness of the head, attacks of shivering, and a sensation of constriction in his stomach. These symptoms were paroxysmal.

He subsequently moved to two other large towns and once again he could not settle. Finally, he returned to his village where his symptoms became worse. He noticed for the first time that "trances" followed episodes of intense anxiety and mortal fear. He decided to return

to the "fold" (secret society) to which he had belonged before he had gone to the urban area.

On the night of Tuesday, 17 March, 1959, he took a leading part in a murder which, according to him, was an uncommon practice in their secret society. He admitted to a further murder in the town at the height of his illness; that night he had an attack of excruciating anxiety, cold sweats and severe palpitation. After the murder he felt relieved, but only for a short paried. It was for this latter murder that he was convicted. short period. It was for this latter murder that he was convicted.

Psychogenic factors played an important part in this case, especially the break with lifelong adjustments and inability to form new adjustments, resulting in abnormal mental reaction with homicidal tendencies. This view is based on the character of both the paroxysmal and the

inter-paroxysmal symptoms.

When first seen as a capital case in the prison he was co-operative and frank. Physical and laboratory examinations, including skull X-ray, Kahn and C.S.F. revealed no sign of organic disease. His mental state at the time of the interview was normal. He was clear and coherent. His mood was appropriate. He described his pre-morbid personality as like that of his father, otherwise he "had never had any trouble". He mixed well, "in fact too well" in the village, where he started many societies and movements. His efforts in this direction were apparently poorly sustained.

A few days after the initial interview he started to be anxious, slept poorly, became rather excited but remained rational and co-operative. Most of the time he spent under observation (3 months and 13 days) he was intensely anxious, describing the changes in his personality as similar to those he had experienced earlier in the town. He had two "fury attacks" during which he attacked four prisoners and badly wounded two. He recovered from this pseudo-running amok within five hours but remained tense, anxious and mildly excited.

On several occasions during this period of observation he was tested on a modified form of T.A.T. based on African background. His reactions showed excessive anxiety and fear, with well-defined aggressive outbursts. His EEG showed a non-specific abnormality. Four out of 6 of his men showed similar electro-cortical abnormality. Two of his men had similar social experiences, with persistent adaptational failure in urban areas. The average age of these men was 45.5 years at the time of their arrest. Three described the same clinical state of malignant anxiety to which they had been subject in varying degrees.

The patient's behaviour in group was interesting. He dominated the scene with egotistical utterances. There, again, he had a large following in the prison until his first "fury attack".

He was later transferred to an asylum for custodial care "on the grounds of his insanity". He remained co-operative, helpful and a leader for three years. No deterioration in his personality occurred but he remained a chronically anxious, tense man, full of himself and rather boastful. No psychotic manifestations.

Case 2

Summary. Malignant Anxiety: This patient was appropriately diagnosed as "abnormal personality of undetermined origin" by the Prison Medical Officer before being seen by me. He was the leader of ten men convicted for multiple murder as a result of their activities as Leopard Men" (a secret, savage and subhuman society which broke out in Nigeria between 1946-51) with secret oaths and a very cruel initiation ceremony which was structured purposely

for "selecting the strongest men". "Any man wanting to commit a murder was initiated into the society and inoculated with the leopard charm, which would enable him to turn into a leopard whenever he wished". Even in this seemingly cultural situation excessive (manifest) anxiety and predisposition to violent aggression were factors of importance.

The social structure of this society and the entire sub-cultural setting resembled that of societies responsible for ritual murder in the tribal era. However, in those days (i.e. usually

pre-British era) they were socially acceptable to the tribe.

M.K.O., aged 52 years, male, was tribal chief in a rural district of Eastern Nigeria. His area started to undergo developments about two years previously. As a district chief and head

of many villages, he was also the supreme authority of the clan.

Family History. There was no history of nervous or mental disease in the family. His father was a "powerful chief" before him. His father and grandfather were great fetish worshippers. The patient was the eldest son of fourteen children. Five of the siblings were alive and two were with him charged for the same criminal offence.

Personal History. The patient was born in the Eastern Region. He had never been to school but was well grounded in fetish religious principles and practice. He has always been a dominant and "stimulating leader" who had participated in many "religious practices of very

high standards"

His previous personality showed that he has always been forceful, rather unscrupulous in his social relations and has for many years suffered from episodes of anxiety and phobic phenomena. He could remember two instances in his life when he became mildly excited,

confused and aggressive only for a brief period in each instance.

Present Illness. He noticed that because of the march of events his authority was weakening. The social changes were gradual at first but "within the last fifteen months the rate of change was phenomenal".

A year later he virtually lost his social position as a chief and at this time there were intrigues, "by young educated politicians", with the aim of selecting another chief. He became restless, lost his appetite and slept poorly. The episodes of intense anxiety and phobic states became more frequent. Later he found that he was changing—his body had altered and he had in a way lost touch with the past. Later, things in the outside world were also felt to be altering. There was an intense feeling of catastrophe but all the time "I retained my senses", he affirmed. He felt he was a helpless victim of witchcraft. He was full of "intense emotions" very tense, anxious and frightened. He said he thought he would "burst" at any time.

He agreed that the formation of the new society was a timely safety-valve which relieved his psychic pressure. Soon he found that the previous alteration he had subjectively experienced in his body found full expression in Leopard Society. Outside this masquerade he was anxiety-ridden, but as long as he masqueraded with his fellows as "leopards in action" he was secure and seemed to "find peace of mind". At a later stage he had many psychosomatic manifesta-tions, chiefly cephalic paraesthesiae, palpitation, "internal heat all over the body", "periodic

shaking" with muscular tension and mental agitation.

Physical and laboratory findings revealed nothing of importance. Two out of these ten men showed positive Kahn (blood) and one had sickle-celled anaemia. The patient had abnormal electro-encephalogram—non-specific type of abnormality. Three of the remaining nine showed similar (? abnormal) findings.

The psychological data for the whole group varied but they were on the whole typical for this group in terms of our previous experience—unscrupulous, emotionally unstable persons with the tendency towards neuroticism, immature and readily reactive. Their T.A.T.

tests revealed a welter of crude and aggressive phantasies.

During his period of observation he remained in good spirits but was still full of anxiety which, on occasions, amounted to severe emotional tension, during which he felt he should do something". He was, like the other members of the society, "sound in mind". They were tried, condemned to death and executed. No remorse was shown and no guilt was felt.

The Leopard Men Society was one of the most sensational examples of human regressive behaviour in 20th century Africa. The study of the reactions of these men (and of others studied) has thrown light on the regressions and maladjustments* and their compensations

taking place in some parts of Africa, undergoing very rapid changes.

The psycho-dynamics underlying the so-called "ritual transgressions of festivals" also underlies this abnormal mental reaction. The institutions of ritual murder, sacrifice, etc., in old Africa tended in a magical way to potentiate and strengthen life, a form of mystical power, compensating for an emotional frustration, a sense of inferiority or impotence or of insecurity. Many reactions in Africans classified as psychopathic or perverse (lying, aggressiveness, destructiveness, theft, delinquency, etc.) can be specifically explained in the light of these ideas.

In this case, the patient had all his life partially accepted a religious outlet as a means of unconsciously solving or sublimating a large part of his regressive relations with life. He was, however, chronically anxious and tense.

 See "Maladjustment and Delayed Maturation in Rural Africans—an EEG Investigation" (Lambo, 1960c). For further information of the frequency of EEG anomalies in the autochthonous population of Africa, see Verhaegen, P. (1956); Gallais et al. (1951); Mundy-Castle et al. (1953).

Case 3

Summary. Malignant Anxiety with psychopathic behaviour. His main symptoms centred round a defective adaptation. An over-sensitive abnormal personality whose behaviour at all ordinary times was within normal limits but who, during times of excitement or emotional stress, showed highly abnormal mental reaction. Evidence of constitutional immaturity.

The clinical picture manifested clear-cut neurosis of a man fleeing or struggling in terror or fighting in fierce anger. Chronic anxiety states with defiant excitement. On occasions he had tremor of the hands. He showed good innate intelligence and rather superficial amiable manners

O.K.C., aged 43, male, married and peasant farmer was first seen in H.M. Prison a few days after committing his second murder. He was excited, shaking, trembling, tense and generally so "abnormal" that a medical report was required on his mental state before the trial, mainly to determine whether he was fit to plead. Patient had left his rural home three years before he was seen. He obtained a labourer's job on a new building estate in a big town. Two months before he committed this crime he had lost his job and also lost his room which he rented. His local wife whom he "picked up" in the city had also deserted him.

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Family History. There was no history of nervous or mental illness in the family. His father was a clan chief, "dominant and cruel". His father's many cruel acts to commoners of the lower status in his village had provoked a great deal of anxiety in him when he was young.

Father died when patient was still young. Mother died fifteen years later—"a passive and warm person". Mother was the second in line of the co-wives. The siblings are alive (6 male and 3 female children). Two brothers "suffered from similar diseases" as the patient. He would not disclose their whereabouts but one was later identified (Case 4).

Personal History. An illiterate man with superior physique. He was born in a very rural and backward part of Nigeria. Apart from the frank fear of his father's cruelty and rather inhuman nature he was happy in his village. As far as he could remember he had always been sensitive to any form of cruelty and had for many years suffered from vague but intense fears. As a child he suffered for a year or two from very bad nightmares, headaches and restlessness which came "in waves" and at regular intervals. For the first time when he was 15 years of age he suffered severely from nocturnal agitation, excitement and morbid fear necessitating "native treatment". Since then he has never been free from these symptoms, even though their severity varied from time to time.

As he grew older he became morbidly sensitive to environmental changes and "because of certain social changes" he was not content to stay in his village for long and, as a result of this, moved twice in one year into neighbouring villages, each time looking for a "different type of job". He poured out a coherent and circumstantial account of his life-history.

Present Illness. As far as he could remember he has never been free from symptoms and "difficulties". The present crisis was reached when he went to live in the city. He found the city strange and unfriendly and a reversal of "existing values". He remembered that he was full of various subjective symptoms, chiefly headaches, buzzing sensations in the head, nocturnal psycho-motor agitation, disordered sleep, feeling of tension, and a marked tendency to emotionalism. He was jumpy and tense for weeks. He attributed this to witchcraft.

In the course of time his symptoms became even more sinister. He started to have the ominous feeling that his physical structure was altering and that his surroundings were undergoing changes. He returned to his village "to be cured" and for the first time he found that there were significant material and social changes also in the village. He felt he had no history, no past, no aspirations and no future. He had to surrender unconditionally to the passage of events. He lost "every sense of timing". He became more restless and before he returned that evening he had intense headache, dizziness, palpitation, irritability and a sense of sudden catastrophe. He murdered the child of the Area Officer in charge of development and left at dawn for the city.

When first seen in the prison he lay on the floor with his head under the sheets. When one uncovered his head, his gaze became fixed, and he had the appearance of witnessing some terrifying spectacle. This lasted for a few minutes, and then he broke into loud weeping. Twenty-four hours later he became less tense and less hysterical and could converse intelligently.

On Examination. The general appearance was one of acute anxiety state. There was fine tremor of the hands, over-action of facial expression, a state of general sweating, rapid pulse (100 to 120), exaggerated tendon reflexes, cutaneous hyperaesthesia, and an irritable reaction of the pupils to light. All these findings returned to normal within a few days.

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Routine laboratory investigations of urine, blood and C.S.F. including Kahn test, trypanosomes, were negative. X-ray of the skull was normal. EEG did not show electrocortical abnormality.

The patient had another episode of malignant anxiety attack but did not assault anybody. No psychotic manifestations.

He was tried, found guilty and "sane" and was condemned to death. Patient was later reprieved and is now in the asylum for criminal patients where his "behaviour has been exemplary" since his admission, except for "occasional fury attacks".

Case 4

Summary. Malignant Anxiety with criminal behaviour. Patient who went to England in 1950 was first seen in 1954. Early in 1954 he showed inhibited emotional reaction to frustration which almost brought him into conflict with the law. In 1957 he finally broke down with neurotic manifestations and was admitted into St. John's Hospital, London, for observation and was later transferred to St. Ebba's Hospital.

Clinical notes of St. John's Hospital, London, reads: "Admitted 13.3.1957. B.O., aet. 36; a coloured man from Nigeria living alone in digs. Has a wife and children in Nigeria. Did painting and factory work but for nearly a year has not had a job. For a year previously was continually being sacked. Has always had a very bad temper and latterly has been unable to get on with anyone. A solitary type who has become suspicious and hostile and thinks every-one is against him. Barricaded himself in his room and was chanting and dancing. Armed with knives and iron bar, patient wounded a policeman and a dog and held 30 police at bay for 7 hours. Firemen and soldiers also called."

Family History. See Case 3. Patient and Case 3 were brothers.

Present Illness. "Brother says patient has not worked for nearly a year and for a year previously he was continually being sacked from his jobs. He would get annoyed when spoken to and could not get on with anyone, 'not even me'

'Lately he has been dancing and shouting at night. Patient has been at his present address

nearly a year but lately has had a lot of argument with the other tenants.

"During the night of the 13th patient was chanting and dancing in his room and had barricaded himself in (see above).

"Informant thinks patient became violent on seeing the police because he thought he was

being tricked.

Mental State on Admission. St. Ebba's clinical notes read: "Dull, slow, monosyllabic. Quiet, co-operative, suspicious and appears slightly confused."

"23.3.57: Seen today and he gives, within the limits of his indifferent English, a rational account of himself and is quite co-operative. He shows no thought block and so far there have been no signs of hallucinosis. From his history he would seem to be either a psychopath or a defective but again his lack of English makes this difficult to assess. The only other possible sign was a mild suspicion of his amytal last night.

8.4.57: Apart from a somewhat childish manner and a history of violence there is but little that is positive psychiatrically about him. It would seem the only possible diagnosis is

an M.D. with violence or a psychopath."

General Behaviour. "He is generally co-operative and pleasant but needs tactful handling at times as he easily becomes irritable and aggressive in speech and behaviour. Eats and sleeps well. No (?) manneristic behaviour. No evidence of response to false percepts."

Thought Content. No thought disorder elicited.

Diagnosis. "Evidence of social immaturity—no realization of his responsibilities or interest in the consequences of his actions.

General Comments on this Patient (Case 4) by Present Author

This patient left his rural home (Kwale, Nigeria) at the age of 17 to go to Lagos, the capital city. A detailed study of his activities in Nigeria showed that he was far from being a defective. According to his wife, who was interviewed in Nigeria in 1958, he found the life of industrial urban environment "too much for him" and by early 1950 he had his first attack of malignant anxiety extreme irritability, fear of bewitchment, anxiety with restlessness—which only lasted three days. He had several charges of assault and battery against him before he left Nigeria.

In 1950 in England he seemed to have made a fairly good adjustment at the outset but as conditions became difficult he had his second attack of malignant anxiety—this time characterized by nocturnal excitement, disturbed sleep, morbid fear of bewitchment and widespread psychoneurotic disturbances—in 1953 during which he was "tempted once or twice to have a go at somebody".

Like most of the patients in this group he had always had only a tenuous relationship to the wider community. His true age was 42 years in 1957.

Differential Diagnosis of Malignant Anxiety with Criminal Behaviour

In malignant anxiety, the most constant findings are the complex disturbances of feeling of reality in relation either to their bodies or their environment, extreme irritability, intense anxiety with restlessness, intense fear of bewitchment, nocturnal agitation, temporal constriction, and criminal behaviour—features which may be suggestive of schizophrenia and manic-depressive disorders. However, in the African, catatonic excitement can be recognized by its bizarre nature. Usually after the catatonic excitement has subsided more recognizable features—disorder of conceptual thinking, manneristic behaviour—may come to the surface. Perceptive disorder, autistic thinking, and fatuous rather inappropriate affect are very common at one stage or another in most African schizophrenics, even in the presence of pathoplastic features.

In contrast to manic-depressive disorders, malignant anxiety is not phasic and excitement is not a *sine qua non* of malignant anxiety. Anxiety is the essential feature and is usually chronic with exacerbation. There is no flight of ideas in the psychomotor restlessness associated with malignant anxiety.

In malignant anxiety criminal behaviour, in comparison, seems to be much more "motivated" and is less bizarre than in schizophrenia. Our follow-up studies have confirmed the initial finding that this disorder does not progress towards or terminate in any of the major psychoses. There was no history of seizures in any of our patients. The chances of an epileptic seizure immediately preceding the crime were ruled out in most cases. Also, the absence of amnesic periods in relation to criminal behaviour is characteristic.

We have also considered the question of the development of criminal tendencies in the course of a hysterical "twilight state", or actual fugue. This latter category of patients (7 of our series of 98 capital cases between 1956–60 belonged to this group) has been excluded from the present study. In all our cases of hysterical fugue amnesia was recovered by various "diagnostic" measures.

In view of the accompanying visceral disturbances and the abnormal behaviour, the question of temporal lobe epilepsy or limbic system dysfunction has also received our attention. Clinically, the epigastric crises and other manifestations of temporal lobe lesions in Africans are quite distinct in character from the visceral manifestations of malignant anxiety. However, electroencephalograms were taken, and the blood sugar, and the white blood picture, were examined. Also, these tests were made together with physiological variables, e.g. fatigue, starvation, hydration, etc. Of 29 patients 9 (31 per cent.) had definite, though uncharacteristic, electrocortical abnormality. Two of the remaining twenty had a dominant alpha rhythm. Eighteen were apparently normal. It should, however, be stressed that the significance of these abnormal and uncharacteristic EEGs is difficult to assess in relation to the criminal conduct. Another but relevant finding is that the percentage of electroencephalographic abnormality is much higher (45 per cent.) among members of four traditional secret societies in Southern Nigeria than in a survey of four random Yoruba village groups (Lambo, 1960c).

Clinically, as well as with the aid of electro-encephalography (EEG), the possibility of "endogenous hypoglycaemia" (Conn and Seltzer, 1955) was excluded. The absence of amnesia and of any disturbance or impairment of consciousness in malignant anxiety is of diagnostic importance. In endogenous hypoglycaemic attacks, the main features are confused excitement, violent and bizarre behaviour for which the patient invariably has complete amnesia.

The pre-morbid personality of our group of patients suffering from malignant anxiety with criminal tendencies is fairly typical—morbid, tense, asocial, resentful with defective power of adaptation to social conditions. In addition, most of our patients were subject to uncontrollable and frequent emotional

storms around puberty. They belong to a higher age group than most schizophrenics. The condition is predominant among men. There is ample evidence that the malignant anxiety attacks and the criminal behaviour are directly associated in time.

SUMMARY

New medico-social problems in Africa have given rise to various abnormal reactions of individuals in relation to a changing society. Twenty-nine patients with such reactions have been studied and four described in detail. The majority of them were found not to be certifiably insane or mentally deficient though they were mentally abnormal or disturbed. In most of these patients criminal behaviour of an aggressive type was preceded by, or associated with, manifest anxiety of a severe degree.

The clinical and socio-cultural aspects of this condition have been examined, and their relationship to other mental disorders has been discussed. Malignant anxiety has been found to be due to a general failure of personality integration. It developed under the impact of social and emotional difficulties encountered by personalities psychologically ill-equipped to meet them.

It is essential that the inter-relationship between different hypothesized aetiological factors in this and similar conditions be investigated by a team of sociologists, anthropologists, psychologists and psychiatrists as has already been advocated (Lambo, 1959).

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