REACTIONS TO STRESS IN EXECUTIVES IN RURAL INDUSTRIES IN THE TROPICS

D.M. MACKAY
Rose Institute of Tropical Hygiene, London, United Kingdom

ABSTRACT

Over a period of nearly twenty years, observations have been recorded on reactions to stress in executives in rural industries in the tropics. Specifically, these observations have been compiled in a gold mine in Ghana and tea estates in Bangladesh. Both indigenous and expatriate executives have been studied. The reactions to stress, in those who failed to adapt successfully, are classified as frank psychosis, psychosomatic manifestations, e.g. anxiety neurosis and behavioural disorders. The category is further subdivided into the alcoholic, the "awkward customer", the hermit and the transgressor of cultural barriers.

Frank psychosis was observed only once, in a newly arrived executive on a gold mine, who became frankly psychotic within days of arrival and recovered as rapidly on the voyage back to England. Psychosomatic complaints are common and follow the usual range of such complaints e.g. gastric hyperacidity, dyspepsia palpitations, pro-cordial pain. Indigenous executives who fail to adapt to stress almost invariably develop this type of maladaptation.

Excessive consumption of alcohol is common, not because of alcoholism per se but as an attempt to compensate for unacceptable degrees of stress. Alcohol excess may exist in isolation or may be combined with other behavioural disturbances.

The "awkward customer" is the man who fails to establish or maintain good relations with his peers and has very poor rapport with his subordinates. He is quarrelsome and suspicious, bad-tempered and potentially cruel.

The "hermit" syndrome is interesting. Some men, inadequate in the face of stress, withdraw from the outside world, and proceed to lead detached and solitary lives. This is of course withdrawal from criticism and from social and other situations which the subject is no longer able to handle.

The transgressor of cultural barriers often reveals himself in inappropriate friendships or marriages. The expatriate executive of good family background who married an illiterate woman of the lowest social grouping on his estate is such a case. The executive who deliberately elects to consume raw local spirit instead of orthodox makes of alcohol is another.

Since the numbers involved are statistically insignificant, no attempt has been made to quantify the extent of breakdown under stress. Undoubtedly it is common, in both indigenous executives and expatriate ones.

Often these breakdowns, which can be chronic, are not recognized as such but are categorized as oddities of personal behaviour without any understanding of the underlying origin. They lead to much personal unhappiness and disharmony in small social groups.

The origin in many cases appears to lie in the promotion of men to posts beyond their level of competence. It has been traditionally assumed that the good artisan can become a good executive,
although the skills required are totally different. Hence, the miner becomes a mine manager and the planter the general manager of a plantation. It should be recognised that this is an unsatisfactory state of affairs, putting people into posts with which they are unable to cope and hence precipitating breakdown under stress.

Rural industries in the tropics have traditionally been agriculture and mining. This paper is a personal record and summing-up of nearly twenty years spent in such industry, with reference to stress in executives and their reaction to it. There is no attempt to be statistical, for the numbers involved have been far too small for that. Nevertheless, even in a highly statistical age, there is probably still a place for the occasional contribution that is clinically descriptive and even taxonomic, which is all that this paper may claim. Specifically, these observations are derived from gold mining in Ghana and tea planting in Bangladesh. In the agricultural sector, both indigenous and expatriate executives have been studied.

The concept of stress can be made very complex but, very simply, it may be regarded as environmental challenge requiring change or adaptation. Thus it is a constant, and probably very necessary, feature of life. Successful adaptation leads to well-being and progress and, in many ways, health. Unsuccessful adaptation, i.e., inability to respond successfully to new challenge, leads very often to states of disease, of psychosomatic illness and of social maladjustment. It is not always easy to know how the stress adaptation relationship is going. Success may be only apparent and very intense internal mental maladaptations may be long hid from an unsuspecting world.

It is clear that there are upper limits of stress beyond which no adaptation is possible. This is demonstrably true of physical stress e.g., thermal stress, and is surely no less true of mental stress. The use of torture in its more subtle and sophisticated forms rests on this premise. There is a breaking point, and where that point is is very much an individual characteristic. Ability to cope with stress situations may well be genetically determined but is profoundly influenced by education and culture. The Englishman's "stiff upper lip" is less genetic than cultural.

CLASSIFICATION

Reactions to stress, individuals and situations where adaptation is inadequate, can be classified as:
1. Frank psychosis
2. Psychosomatic manifestations
3. Behavioural manifestations

Category 3, the behavioural manifestations, can be further subdivided into groups, not at all mutually exclusive. These are:
a. The alcoholic
b. The aggressive - the "awkward customer"
c. The hermit
d. The transgressor of cultural barriers
Frank psychosis

This is a rare manifestation, or consequence, of stress. Only once has it been observed in our experience. This was a mining executive in what might be called the middle grade who arrived from a British mining background for the first time overseas. He paid one preliminary visit underground, was observed to appear depressed thereafter, and was frankly maniacal within forty-eight hours. It would appear in this case that the stress of unfamiliarity and maybe the stress of an internal doubt as to his ability to cope with the situation, brought to light a latent manic depressive state. His depressive phase was very short, succeeded by a most convincing mania. He was repatriated immediately under escort, by sea, under sedation. His recovery en route was rapid, as rapid indeed as the onset. It seemed that, once the stress and the threat of stress were removed, his psychosis resumed its latency. Regrettably, this case could not be followed up over a long period. It would be extremely interesting to have a long-term record of his subsequent performance.

Psychosomatic manifestations

Of all untoward reactions to stress, these are probably the most common. The patterns they assume tend to be stereotype and are usually of the anxiety neurosis type. Cardiovascular and digestive system complaints are common; the system unrelated neurosis is more rare. Precordial pain is a very common complaint, with no significant findings on physical examination and electrocardiography. This complaint tends to be very persistent and to resist sedation therapy. The history given seldom resembles that of a true angina and careful history taking usually reveals the relationship of the complaint to peaks of stress rather than peaks of exercise. Tachycardia is frequent, sometimes paroxysmal. Palpitations are a common complaint.

In respect of the digestive system, the commonest picture is that of gastric hyperacidity with dyspeptic pain, acid regurgitation, water-brash etc. Mucous colitis is another fairly common manifestation, and sometimes a curiously persistent and recurrent pain round the splenic flexure. Panic reactions, the classical anxiety states, with sweating palms and nameless fears were excessively rare in the group under consideration. Almost invariably the condition presents itself through an organ or organ-system as a pseudo-organic symptom complex.

Indigenous executives who fail to respond adequately to stress almost always react by developing a psychosomatic syndrome. The author remembers well a period in Bangladesh Tea Estates when out of four senior estates executives, three were under care at the same time, all suffering from psychosomatic symptoms. One, an expatriate, had a cancer phobia then directed at the throat, and later developed paroxysmal tachycardia. Another had precordial pain, associated with acid eructations. The third had pain round the splenic flexure. The last two cases were indigenous.

It is always well to stress that neurosis with psychosomatic manifestation is, like malingered, a most dangerous diagnosis, and certainly one that should not be made without exhaustive investigation.
Behavioural manifestations

The behavioural syndromes that result from inadequate reaction to stress are subtle, often difficult to recognize and more difficult to deal with than the psychosomatic manifestations. They are also more destructive, both of the individual and of his society. Though they may be very diverse in appearance they do have a common factor, which is that they are all essentially withdrawals from an environment which is too demanding. They are all syndromes in which some kind of barrier is erected to shield the individual from the demands being made on him from without. The classification here suggested is essentially a clinical one and covers those stress syndromes that have been encountered in executives in rural industry by the author. Many other classifications could no doubt be made and in other spheres probably other clinical syndromes appear.

The alcoholic

One of the commonest reactions to excessive stress is to seek refuge in drug taking. Which drugs are used is often an accident of place, opportunity and culture. In this description alcohol has been cited because this is the only drug used in the population here considered. No member of the executive group in either mining or planting was ever discovered to be using any other drug. This may well change and perhaps has already changed. Only research could tell. Of the fairly widespread use of alcohol, there is no doubt. It is not always easy to distinguish between alcoholism i.e., a compulsive addiction to alcohol, and the use of alcohol as a mental and intellectual analgesic. Yet the two conditions are essentially different, however similar they may appear. The stress reactor can readily reduce his dependence on alcohol when his stress is removed; the victim of true alcoholism cannot. In every rural executive community, there is a small number who will predictably become drunk at any social gathering. Few of these are true alcoholics. Most use alcohol as a mode of escape from stress. Not all, of course, who so use alcohol do so in public. The secret drinker or the solitary drinker is a well-known phenomenon and probably the great majority of these are under stress with which they cannot cope.

The "awkward customer"

This well-known and easily recognized type is disguising his inadequate reaction to stress by the aggressive front which he presents. The essential component of this variety of behavioural disorder is aggression. This man fails to establish or maintain good relations with his peers and has very poor rapport with his subordinates. He is quarrelsome and suspicious, bad tempered and potentially cruel. Of all the behavioural disorder subjects, this man is the most socially disruptive. As stress increases, and his inadequacy to deal with it becomes more apparent, he becomes more aggressive, sometimes with a degree of self-aggrandizement bordering on megalomania. He creates fantasies of past achievement and may even spin round himself a legend of present achievement
what is grotesquely at variance with the truth. Ultimately he is the archetypal animal at bay, cornered by the stresses with which he cannot deal, and he lays wildly about him, in temper fits, injustices and cruelties. Of all, this is the man who should be diagnosed early and then rapidly removed, for his capacity for both social and personal damages is enormous.

The hermit

This is the syndrome of withdrawal in the face of stress, the erection of a barrier between the individual and society. In many ways this is the reverse of the "awkward customer" syndrome. The aggressive man must relate in some way to his society, which is the object of his aggression. The hermit neither needs nor seeks society. He shuns it, and turning inwards upon himself, lives with his inadequacy. By shunning society, he insulates himself from criticism and removes at least the stresses inherent in the social environment with which he may be unable to deal. Unlike the "awkward customer", the hermit is typically a gentle man, shrinking from a world with which he cannot cope. Because he retires from society and is little seen, this kind of behavioural syndrome can go on for years, almost unobserved. When however a major crisis comes and stress is maximal, these men break down totally. They are bewildered and usually inactive when rapid and decisive action is demanded. What may till then have seemed a harmless personal idiosyncracy revealed for what it really is, an inadequacy to respond to stress either small or great in magnitude.

The transgressor of cultural barriers

This is the least obvious of the stress reactions. A common phenomenon of contemporary life, especially of the young, is the protest reaction, the flouting of authority, the attack on the establishment. This can be a form of stress reaction, in which the barrier erected is one of protest or rejection of normal values. Not all protest reactions originate perhaps in stress situations. There are no doubt other causes. Yet there is little doubt that in situations of continued stress, some will react by a confrontation of their society, thus enabling themselves to retreat from it. Most protest reactions are protests against prevailing sexual mores, and the stress reaction is no different. The executive of "good" family background who marries an illiterate girl from the lowest social and cultural group among his employees is an example. The transgression and confrontation rest not in having sexual relations: society will often condone that. It rests on undergoing a form of marriage. This has little or nothing to do with colour but everything to do with culture. The cultural gap is sometimes almost grotesque. By such behaviour, the man concerned ensures that his society withdraws from him and so his isolation, which he seeks, is obtained. There are other forms of this syndrome. The young executive who insists on drinking local, illicit forms of alcohol instead of orthodox preparations is an example of another protest type of reaction.
DISCUSSION

Most of these reactions to stress can be, and have often been, unrecognized. Psychosomatic syndromes have been sympathetically regarded as chronic ill health or tropical neurasthenia or some undiagnosed mysterious tropical disease. Those with behavioural reactions have been regarded as eccentrics or people with personal peculiarities of character. The fact that they originate from stress and are essentially inadequacy reactions is not recognized. Thus the conditions become chronic and slowly progressive. They lead to much personal unhappiness and to considerable disharmony in small social groups. Many problems would be solved and severe difficulties averted by the recognition of the true nature of these various reactions and the taking of appropriate action.

The origin of these stress problems very often lies in the promotion of men in tropical rural industry to posts beyond their level of competence. Tropical rural industry, and other industry besides, has grown up with the unquestioned belief that the good artisan or the good technician, automatically must become with seniority the good executive. It is however, patently obvious that the skills required are quite different. Thus the efficient planter finds himself no longer planting but administering a plantation, which is a very different thing. He understands planting. He does not understand administration. So he is expected to fill a role, and he himself expects to fill the role, for which he is untrained, in what he is totally untried and for which he is very often tragically unsuited. The technician very often has highly developed manual and practical skills, but as often lacks the intellectual resources for administration of the cultural background needed to handle personnel adequately. This is a major source of the stress reactions. All too often men are striving to fulfil a role for which they are inadequate. They are forced into these roles because that is the only channel of reward for long and good service what is open to them. In other words, the structure of these industries is wrong.

Rural industry in the tropics, and probably other industries in other places as well, must learn the lesson that the good practical artisan is not automatically a good executive in the making. The good miner may be entirely unsuitable to be general manager of a mine. The good planter may be totally unsuitable to be general manager of a plantation or a plantation group. It is the ignoring of these facts which has led so often to stress situations, with breakdowns or chronic inadequacies, and much unhappiness and disharmony. There have been, and are now, some signs that the lesson is being learned in some quarters. One very large plantation group some years ago had as their general manager an ex-scientific officer, followed by a man with a legal training. Another quite recently has appointed as general manager a research chemist. The executive must have the intellectual qualities for the post. Most who have, and are appointed to these posts, have little difficulty in mastering the technical details of the industry. If these industries can rid themselves of the mental attitudes of the past and can accept that executive posts require men capable of holding them, much benefit will ensue. A corollary of this is that for the technician there must be an avenue of reward and promotion which will utilize his technical skills. Some technicians
make good executives and for them that avenue should remain. For the rest, and probably they are in the majority, senior posts should be available within their competence and within their specialty which make full use of their capabilities but entail neither administration nor personnel handling. It is the old exercise of putting square pegs into square holes. The tragedy has been so often the automatic fitting of them into round holes and the refusal to see the resulting incongruity.