# Life Events and Depression in a Kenyan Setting

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Summary: Thirty Kenyan patients of black African origin undergoing treatment for clinical depression in Nairobi, and 40 matched non-psychiatrically disturbed controls in the community were studied for life events using the Brown-Harris model. It was found that the depressed group had significantly more life events (P <0.001 with Yates correction for continuity) in the twelve months preceding the onset of their depression than the controls in the same period. These results are similar to those obtained by several workers in Western settings. Their implication for the practice of psychiatry in an African context is examined, and some myths about psychiatry in Africa re-examined.

To date studies on depression in African countries have dwelled mainly on the epidemiology and clinical phenomenology (Binitie, 1975; Ndetei and Muhangi, 1979; Rwegellera and Mambwe, 1977). They suggest that depression is no less common in African than in western countries, as was suggested by earlier workers such as Carothers (1947). They also suggest that it tends to present with non-specific physical symptoms (Buchan, 1969; Ndetei and Muhangi, 1979)—hence the terms masked depression and depressive equivalents (Lopez-Ibor, 1972). However, it also presents in the more conventional way commonly seen in western settings (Binitie, 1975).

There is little work reported on the causes of depression in African countries. There is not a definitive cause of depression and several models, which are probably complementary, have been proposed and have been critically reviewed by Akiskal and McKinney (1975). All these models have been tested in western settings. The social model has been widely studied. Several workers who subscribe to this school of thought have shown that depressed subjects tend to have significantly more life events in the months preceding their depression than the nondepressed controls do in the same period (Paykel et al, 1969; Brown et al, 1977; Brown and Harris, 1978a) while others have described depression simply as an understandable reaction to loss (Hill, 1968). Working on the same model Brown and Harris (1978a) have proposed the concepts of vulnerability and of protective factors in an attempt to explain why some individuals respond with depression to life events (which they refer to as provoking agents) while others do not. Studying depressed female patients in Camberwell in London they found that those women who had low intimacy with their husbands and who had lost their mothers before the age of 11 were more vulnerable to the provoking agents than those females who had not experienced these undesirables. Brown et al (1973) have proposed the concept of independent life events i.e. events which did not come about as a result of the illness itself, and argue that only these should be considered in the cause-effect relationship of life events and mental illness.

This study was an attempt to find out whether depressed patients in a Kenyan setting had significantly more independent life events in the twelve months before they were seen for their presenting depression. All the subjects lived in and around Nairobi, which is the capital city of Kenya. The geopolitical background of Kenya has been described by Ndetei (1980a).

### Method

Fifteen consecutive first ever admissions with depression uncomplicated by physical or other psychotic illness, admitted to one of the professorial units at Mathari hospital, and a similar fifteen consecutive first referrals to the psychiatric out-patient clinic at Kenyatta National Hospital, seen by the same team treating the in-patient group were included in the study. (Mathari hospital is the National referral and teaching psychiatric hospital with about 1,000 beds, and is situated in a suburb of Nairobi. Kenyatta National Hospital, prestigious and modern, is the National referral and teaching general hospital for the country—and the professorial psychiatric out-patient clinic is based there).

For each patient informed consent to participate in

the research was obtained. Then demographic information was obtained using a standard structured interview administered by one of us (A.V.). A trained fourth year medical student interpreter was used where the subject could not speak English. For each patient the approximate date on which they started to feel unwell with the presenting depression was noted. Then a semi-structured life events interview was undertaken and recorded on tape.

The control group, matched for age, sex and race (only black Kenyans) was selected from the community living in several suburbs of Nairobi or just outside Nairobi. One of us (A.V.) went out with a social worker and the medical student interpreter and approached people in a random way. The social worker explained the purpose of the exercise and obtained informed consent from the subjects. A modified version of the Present State Examination (PSE) (Wing et al, 1974) was administered (cultural variation in depressive phenomenology was taken into account) and only those who did not score for depression were included in the control group. Sixteen women in the community had to be excluded because fourteen of them could be classified as cases using the PSE and two were considered as borderline cases. For those included in the control group demographic information was obtained and the life events interview was administered in the same way as for the in-patient and out-patient groups, with the exception that the life events interview was not taped (for practical reasons), but extensive notes were made. The whole exercise, both for the control and the patient groups, lasted between two to three hours with each subject. This included the time required to establish rapport with the subject before the actual collection of the data. All the patients approached readily and willingly co-operated, except one in the community who refused to take part.

All the material from the taped interviews, and the notes taken in the community, were later transferred to the Events Rating Schedule developed by Brown and Harris (1978a). The events were independently rated by Professor G. Brown and T. Harris at the Social Research Unit at Bedford College, University of London. Using their own standardized methodology they rated each event on a 5-point continuum scale in which those with a marked or moderate long-term threat were regarded as suffering a severe life event capable of precipitating depression, given the circumstances of the individual subject. Only events that were rated as severe are considered in this paper. (Details of all the events will be reported in another paper in preparation).

Results
These are summarized in Tables I and II below.

TABLE I
Severe life events, sex, age in two groups

Age (years)	Patient group (n = 30)	Community (n = 40)	Total (n = 70)	
18-24	12	14	26	
25-34	11	17	28	
35-44	4	5	9	
45-54	2	4	6	
55–64	1	-	1	
Males	9	12	21	
Females	21	28	49	
Number with severe events	20	3	23	

 $<sup>\</sup>chi^2$  test for subjects with severe life events—with Yates correction for continuity:  $\chi^2 = 28.06$ ; df = 2; P < 0.001.

TABLE II

Types of severe events in each group

Туре	Patients $(n = 30)$	Community $(n = 40)$	Total (n = 70)	
Separation/threat (including death)	11 (46%)	4 (66%)	15 (50%)	
2. Extramarital affairs	3	0	3	
3. Life-threatening physical illness to someone else	4	1	5	
4. Material loss	3	0	3	
5. Non-loss events to subjects	2	1	3	
6. Non-loss events to others	1	0	1	
Total	24	6	. 30	
All losses (1+2+3+4)	21	5	26	
All non-losses (5+6)	3	1	4	

 $<sup>\</sup>chi^{2}$  test for loss and non-loss events—with Yates correction for continuity:  $\chi^{2} = 25.79$ ; df = 2; P < 0.001.

Seventy-seven per cent of the patient group and 78 per cent of the non-patient group were aged between 18 and 34 years. Females in each group were the majority (70 per cent in each group). Sixty-seven per cent of the patient group but only 8 per cent of the non-patient and community subjects group had experienced at least one severe event. The Chi-squared test is highly significant (P < 0.001) for this difference. Separation or threatened separation (see discussion) scored most highly (Table II): loss events in general were the most common and the difference between the loss and non-loss events was highly significant (P < 0.001).

#### Discussion

The age distribution observed in this study is not surprising since Kenya, like most third world countries, has a young population with a pyramid-shaped demogram and with more than 50 per cent of the population under 20 years of age (Ndetei, 1975). The female preponderance in the patient group is likely to reflect a true sex pattern in severe depression since these patients were depressed enough to require active treatment. The sex ratio among the controls could have been influenced by various factors. This sample was interviewed near their homes in the suburbs during the daytime and mostly on weekdays when men were likely to be away (working, looking for jobs or otherwise). But an attempt was made to match the control sample to obtain a ratio like that already observed in those undergoing treatment. It is, however, highly significant that the 18 subjects in the community who were excluded from the control group because they were rated as depressed using the PSE were all females.

Depressive illness was here associated with severe life events in the 12 months preceding the illness. Events involving loss were predominant and about half of them were related to separation or perceived or threatened separation. Most of the separation was undesirable emotional separation in family members, friends and love relationships, and in some cases family members leaving home for prolonged periods of time to look for jobs.

It is not the intention of the authors to evaluate the work of Brown and Harris (1978a) and the subsequent controversy about it (Tennant and Bebbington, 1978; Brown and Harris, 1978b; Shapiro, 1979; Brown and Harris, 1979; Harré et al, 1980; Bebbington, 1980). But the results of this study, though handicapped by small numbers, lend support to that growing school of thought that believes that life events have a causal relation to depression as expounded by Brown and Harris (1978a) and other workers (Paykel et al, 1969; Dohrenwend, 1975). The observation that 67 per cent of the patient group had had at least one severe life

event in the preceding twelve months is strikingly identical to the 68 per cent figure observed by Brown and Harris in their study of depressed females in London (Brown and Harris, 1978a). This support comes from a third world country, with different cultural values from those of western countries where nearly all the work on life events has been done. The fact that the life events schedule used in this study was developed and perfected in a totally foreign culture and independently rated by a foreign researcher with perhaps nil exposure to the culture in which the study was done is less relevant than the fact there were significant differences in the depressed and non-depressed groups.

There are several implications from this study relevant to the Kenyan situation and that of Africa in general. There is a need for local research to delineate more precisely the social factors likely to have a causal relationship with depression and psychiatric illness in general. If psychosocial factors such as family and interpersonal relationships have important roles in the causation of depression, as this study strongly suggests then the psychotherapeutic approach to their management, which unfortunately requires more time devoted to each patient, is required. This presents a major challenge in a situation where the number of psychiatrists, psychologists and social workers are far less than the minimum required (Ndetei, 1980a, 1980b) and where no less than 20 per cent of those seeking medical attention do in fact primarily need psychiatric care (Ndetei and Muhangi, 1979). The need for local training of mental health workers, which is less expensive and likely to turn out greater numbers of professionals cannot be over-emphasized (Ndetei, 1980b). Several observers have expressed concern at the relevance of training given in western countries to trainee psychiatrists who intend to practice in developing countries (Leff, 1980; Ndetei, 1980b), and training in the various forms of psychotherapy should now be regarded as relevant.

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## References

AKISKAL, H. S. & McKinney, W. T. (1975) Overview of recent research in depression: an integration of ten conceptual models into a comprehensive clinical frame. *Archives of General Psychiatry*, 32, 285-305.

- Bebbington, P. (1980) Causal models and logical inference in epidemiological psychiatry. *British Journal of Psychiatry*, 136, 317-25.
- BINITIE, A. (1975) A factor analytical study of depression across cultures (African and European). *British Journal of Psychiatry*, 127, 559-63.
- Brown, G. & Harris, T. (1978a) Social Origins of Depression. A Study of Psychiatric Disorder in Women. London: Tavistock.

- —— & COPELAND, J. R. (1977) Depression and loss. British Journal of Psychiatry, 130, 1-18.
- —— SKLAIR, F., HARRIS, T. O. & BIRLEY, J. L. T. (1973) Life events and psychiatric disorders. Part 1: Some methodological issues. *Psychological Medicine*, 33, 73-87.
- Buchan, T. (1969) Depression in African patients. South African Medical Journal, 43, 1055-8.
- CAROTHERS, J. C. (1947) A study of mental derangement in Africans, and an attempt to explain its peculiarities, more especially in relation to the African attitude to life. *Journal of Mental Science*, 93, 548-96.
- Dohrenwend, B. P. (1975) Sociocultural and socialpsychological factors in the genesis of mental disorder. *Journal of Health and Social Behaviour*, 16, 365-92.
- HARRÉ, R., TENNANT, N., THOMPSON, I., COOKE, D., BROWN, G. & HARRIS, T. (1980) Discussion: causes and logic in epidemiological psychiatry. *British Journal of Psychiatry*, 137, 578–85.
- HILL, D. (1968) Depression: Disease, reaction, or posture? American Journal of Psychiatry, 125, 445-57.
- Leff, J. (1980) Overseas trainees in psychiatry. British Journal of Psychiatry, 137, 288-9.

- LOPEZ-IBOR, J. J. (1972) Masked depression and depressive equivalents. In *Depressive Illness, Diagnosis, Assessment and Treatment* (ed. P. Kielholz). Basle: S. Karger.
- NDETEI, D. M. (1975) Medical services and family planning. In *Some Thoughts on Population* (ed. P. N. Omboga). Nairobi: Afropress Ltd.
- (1980a) Psychiatry in Kenya: Yesterday, today and tomorrow. An overview. Acta Psychiatrica Scandinavica, 60, 201-11.
- (1980b) The training needs of psychiatrists intending to work in developing countries. Proceedings of the World Psychiatric Association (European section): Symposium on Training and Education in Psychiatry, Madrid, Spain.
- & MUHANGI, J. (1979) The prevalence and clinical presentation of psychiatric illness in a rural setting in Kenya. British Journal of Psychiatry, 135, 269-72.
- PAYKEL, E. S., MYERS, J. K., DIENDELT, M. N., KLERMAN, G. L., LINDENTHAL, J. J. & PEPPER, M. P. (1969) Life events and depression: a controlled study. *Archives of General Psychiatry*, 21, 753-60.
- RWEGELLERA, G. G. & MAMBWE, C. C. (1977) Diagnostic classification of first-ever admissions to Chainama Hills Hospital. British Journal of Psychiatry, 130, 573-80.
- SHAPIRO, M. B. (1979) The social origins of depression by George W. Brown and Tirril Harris: its methodological philosophy. *Behaviour Research and Therapy*, 17, 597-603.
- Tennant, C. & Bebbington, P. (1978) The social causation of depression: a critique of the work of Brown and his colleagues. *Psychological Medicine*, 8, 565-75.
- WING, J. K., COOPER, J. E. & SARTORIUS, N. (1974) The Description and Classification of Psychiatric Symptoms:

  An Instruction Manual for the PSE and CATEGO System. London: Cambridge University Press.

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