MASKED DEPRESSION IN GENERAL PRACTICE IN HONG KONG

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SYNOPSIS

A study was made in a busy urban general practice over a period of six months and a total of 213 depressive cases were seen by the general practitioner and then assessed by the psychiatrist. It was observed that depression, contrary to common belief, is a very common clinical syndrome met with in general practice. This illness is invariably presented with, and/or masquerades as somatic symptoms and only a minority of them actually complain of being depressed to their general practitioners. Doctors should be alert for this possibility, as the depressive states may appear in numerous disguises. Depression is a preventable as well as treatable illness and the general practitioner should be able to serve as primary care physician.

INTRODUCTION

Depression is a serious condition with significant socio-economical and occupational handicap and, through suicide, medical morbidity and mortality as well; its importance is further borne out by its high prevalence rate. Thus Watts (1) suggested that a general practitioner had an annual depressive case-load of approximately 13.5 to 22.5 patients per thousand persons in the total population; he also estimated that about one in ten patients in his practice had a depressive illness. Porter (2) also reported an incidence of 19 per 1000 patients per year and contended that about one in every thirteen women attended his clinic at least once over a period of 32 months for depressive illness.

It is well known that depression can be manifested exclusively or predominantly at a somatic level (e.g. Jacobowsky (3), Lopez-Ibor (4)). This type of presentation as masked depression may be the form most commonly seen by practitioners in nonpsychiatric practice (e.g. Rome (5), Cuculic (6)) and in general practice (e.g. Mendels (7), Hordern (8)).

Tseng (9) and Cheung et al (10) noted that somatization is a common mode of manifestation of psychiatric disorders in Chinese: they tend to report somatic complaints in place of psychological symptoms. Various mechanisms have been put forward to explain this observation.

1. Social taboo over psychiatric illness makes patients hesitant to report symptoms other than physical ones.
2. Chinese are reserved in expressing their emotions frankly. This has been noted by Hsu (11), Tseng (9) and Kleinman (12).
3. Chinese language tends to conceptualize emotions on a somatic rather than psychic level; this mechanism was utilized by Tseng & Hsu (13) to explain the presentation with headache, weakness and fatigue as opposed to psychological symptoms in Chinese patients with mental illness.

The purpose of this study was to examine the extent to which the underlying psychological disturbance was masked and the pattern of somatic or affective symptoms reported. Identification of depressive cases was essentially based on clinical judgement of typical depressive symptoms such as dysphoric mood, psychomotor retardation, sleep disturbance, loss of interests and libido, diurnal rhythm in mood, drive disturbance and suicidal behaviour. These features were consistent with the core of depressive symptomatology reported by cross-cultural studies and served as the operational diagnostic criteria for depression in local psychiatric practice.

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MATERIALS AND METHODS

The subjects for the present study were drawn from a general practice population in a densely populated urban area of Hong Kong. About 200 consecutive depressive cases were included in the study which spanned a period of six months. They were all clinically identified by the presence of depressive core symptoms with or without overt mood disturbance. After identification by one of us (J.T.C.C.) the patient was interviewed by the other authors when a full psychiatric examination was undertaken and recorded. A 22-item symptom-checklist depicting various psychological and somatic symptoms of depression was used to study the number and types of complaints made by the patient; the presenting complaint leading to the consultation was also recorded.

To ensure the reliability and validity of the study, every fifth patient attending the practice were interviewed over a period of three weeks by the three authors irrespective of their chief complaint and the presence or absence of depression noted; good diagnostic agreement for depression was found amongst the three authors (r=0.78). An estimate of the prevalence of the depressive illness in a total of ten sessions at different times of three weeks was also made.

RESULTS

A total of 213 depressed patients were interviewed and they comprised both new and old cases on the register. In the ten sessions participated by the psychiatrists the proportion of depressed patients ranged from 4% to 22% of the total attendance at the clinic. Compared to 2093 patients attending the clinic during the period under review, these 213 patients constituted 10.23% of the total patient population.

The depressive cases included 142 females (66.7%) and 71 males (33.3%) with a female preponderance of 2:1. About a quarter of them were single; other demographic data were shown in Table 1 and Table 2.

The presenting symptoms, as shown in Table 3, were multifarious and protean. The bias towards somatic disturbances (96%) was very striking and only 1.9% presented with a depressed mood.

Percentages of checklist items admitted by the patients to the psychiatrists were presented in Table 4. Positive responses were given to most of the 22 items on the checklist (mean = 15.89; S.D. = 3.47 items). With the exception of 3 items (worry over incurable illness, wishing to die and severe pains and aches interfering with work) high percentages of positive responses (mostly over 80%) were obtained for the individual items, thus indicating their usefulness as an adjunctive diagnostic tool. It is worthwhile noting that not all patients were aware of their mood disturbance and some 16% denied the feeling of sadness despite other overwhelming evidence of depressive features. It is even more impressive that practically no depressed patients gave emotional distress as their initial chief complaint. Despite their bodily discomfort only 19.2% of patients worried about having an incurable illness like cancer; thus unexplainable excessive vague bodily discomfort which the patient does not ascribe to serious physical illnesses carries a high index of suspicion of the presence of depression.

Table 2
Distribution of social classes

	II	III	IV	V
Frequency	60	82	46	25
Percentage	28.2	38.5	21.6	11.7

In general, female patients gave positive responses to a greater number of items than male counterparts (13 versus 9 items). Table 5 shows the relationship between sex and positive responses to checklist items; significant sex differences were obtained for 4 items: ideation of death and complaints of palpitation, sweating or trembling and headache.

Significantly more single patients reported the presence of panic attacks, otherwise there was no difference in the marital status in relation to positive responses to checklist items (Table 6).

Among the various age groups, differences reaching statistical significance appeared in the items pertaining to

Table 3
Percentage of presenting symptoms in depressed patients

Presenting symptom	Frequency	Percentage
Epigastric discomfort	40	18.7%
Dizziness	26	12.2%
Headache	21	9.8%
Insomnia	18	8.4%
General malaise	16	7.5%
Feverishness	10	4.7%
Cough	10	4.7%
Menstrual disturbances	7	3.3%
Low back pain	7	3.3%
Diarrhoea	7	3.3%
Chest pain	5	2.3%
Depressive feeling	4	1.9%
Neck pain	4	1.9%
Vaginal discharge	4	1.9%
Sore throat	4	1.9%
Pruritus	4	1.9%
Acne	3	1.4%
Dyspnoea	3	1.4%
Constipation	2	0.9%
Dysphagia	2	0.9%
Vomiting	2	0.9%
Dysuria	2	0.9%
Tremors	2	0.9%
Palpitation	1	0.5%
Facial pain	1	0.5%
Frozen shoulder	1	0.5%
Anorexia	1	0.5%
Tinnitus	1	0.5%
Ear pain	1	0.5%
Sore eye	1	0.5%
Muscular weakness	1	0.5%
Haemorrhoid	1	0.5%
Wound infection	1	0.5%

Table 1
Distribution of age in years

	10—19	20—29	30—39	40—49	50—59	60—69	70—79	90 and over
Frequency	25	59	46	32	29	14	7	1
Percentage	11.7	27.7	21.6	15.0	13.6	6.6	3.3	0.5

nervousness and incurability (Table 7). As expected the older age groups were more ready to suspect that their illness was malignant and beyond cure. There was also some tendency for the depressed patients to feel less nervous and strung-up as they got older.

DISCUSSION

The period prevalence of depressive illness in the general practice concerned is estimated to be around 10%; this is comparable to the findings of Lau (14) in another heavily populated locality in Hong Kong and of Watts (1) in United Kingdom.

The female preponderance of depression in this study also agrees well with the observation of other workers, e.g., Weissman and Klerman (15) and Wing and Haley (16). It is possible that this sex difference is more apparent than real and arises from differences in help-seeking behaviour.

It is a significant finding that depression or other types of mood alteration is hardly mentioned in the initial complaints of our patients at the visits to the general practitioner and they always present with somatic symptoms instead of and in place of psychological and emotional symptoms. Their physical symptomatology is vague and diffuse and always conceals or overshadows the underlying psychopathological condition. This form of manifestation is consistent with that of masked depression in adults as described by Pichot and Hassan (17) and has close resemblance to the non-psychotic endogenous form of depressive illness.

The present study reveals that depressed patients may not consider emotional symptoms as an essential feature of his illness (Table 3 and Table 4). There is some evidence that symptom presentation at the medical setting may be affected by the expectations patients hold from the doctor prior to consultation. Patients would seek help for what they perceive as somatic problems as they expect that it is in this regard that doctors would help them most. Cheung et al (10) demonstrated that the mode of somatic manifestation as the form of initial help-seeking behaviour is independent of the admitted absence or presence of psychological symptoms. It is thus important to distinguish the expression mode and the recognition mode of somatization. Notwithstanding this, a considerable proportion of depressed patients are never aware of their emotional disturbance and consciously or unconsciously deny the presence of these feelings. Even when they present with an emotional symptom there is a tendency to report feelings such as confusion of the mind other than depression.

Bradley (18) and Von Knorring (19) reported the common occurrence of pain in depressed patients as a coexisting or sole complaint. In the present series, pain and aches were present in over 85% of cases. Headache was present in 85.4% and served as the presenting complaint in 9.8% of the depressed subjects. Epigastric discomfort prompted around one-fifth of our depressed subjects to seek medical advice and chest or retrosternal pain as well as musculoskeletal pain were complained of in another one-eighth. In other words over a third of depressed subjects experienced pain of some degree of severity warranting medical consultation in its own right and in three

Table 4
Percentage of positive responses to items in the symptom checklist

Checklist item	Positive responses
Feeling extremely tired all the time	97.2%
Assuming his body always in bad condition	96.2%
Worrying about his health	93.4%
Losing interest in work or activities	88.7%
Having frightening or unpleasant dreams	86.4%
Having ulcer pain or indigestion	85.9%
Suffering from severe headache	85.4%
Losing his temper or getting into arguments easily	84.0%
Feeling blue and miserable always	83.6%
Feeling nervous and strung-up all the time	82.6%
Blaming himself or feeling guilty for trivial matter	82.2%
Having difficulty in falling asleep or staying asleep	81.7%
Having palpitation	75.6%
Losing appetite	71.8%
Suffering from irregular bowel motions	71.8%
Sweating or trembling in anticipation	71.4%
Becoming suddenly scared or panicky for no good reason	69.0%
Feeling pessimistic or discouraged about the future	66.2%
Wakening unusually early in the morning	65.7%
Worrying about getting some incurable illness	19.2%
Wishing to die	16.4%
Suffering from severe pains and aches which interfere with work	12.7%

quarters of the subjects a symptom of pain was elicited in the interview. Another explanation for this high prevalence of painful symptoms could be a capacity for depression to alter one's perception of pain or a low threshold to pain in subjects prone to depression.

Sleep disturbance is probably one of the most common and most consistent somatic manifestation of depressive illness. Patients coming into the physician's office with sleep loss which has existed for some time and for which no apparent cause is found will often turn out, on careful history-taking and systematic examination, to have a depressive illness. Ayd (20) gave an occurrence rate of 97% for insomnia in depressed patients, while Tally (21) reported that about two-thirds of patients with clinical depression will experience early morning wakening. Our findings are similar though the figures are somewhat lower, with early morning wakening in 65.7% of subjects and with sleeplessness as the presenting symptom in 18%.

16.4% of these subjects with covert or obvious depressed mood had suicidal thoughts. In the presence of other negative thoughts over the future and themselves these suicidal ruminations will be translated into action unless prompt appropriate management is instituted. Chinese are particularly inhibited in expressing frankly their melancholy and their idea of ending their lives. Unless questioned directly, they scarcely regard it as a complaint worthy of presenting. However, it would be deemed expedient to detect the distress as soon as possible, since the vast majority of depression fatalities is due to suicide.

In short, our study shows that a significant proportion (10%) of general practice population is suffering from depression and that the great majority presents in a disguised form with somatic presentation. It rests on the shoulders of the general practitioner to be on the alert of this illness and to maintain a high index of suspicion. Early diagnosis and timely treatment should obviate a lot of morbidity and mortality in such patients.

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Table 5
Percentage of positive responses on the symptom checklist by male and female depressive

Checklist Item	Sex		
	Female (N = 142) %	Male (N = 71) %	Level of significance (χ^2 test)
Dysphoric mood	85.2	80.3	
Pessimistic outlook	69.7	59.2	
Nervousness	84.5	78.9	
Agitation or irritability	87.3	77.5	
Panic attacks	73.2	60.6	
Guilt feeling/self-reproach	81.7	83.1	
Early morning wakening	64.8	67.6	
Nightmares	84.5	90.1	
Early insomnia	80.3	84.5	
Loss of interests	89.4	87.3	
Idea of death	21.1	7.0	<.05
Malaise	98.6	94.4	
Bad body image	97.9	93.0	
Hypochondriasis	93.0	94.4	
Idea of incurability	20.4	16.9	
Anorexia	71.1	73.2	
Stomach troubles	84.5	88.7	
Bowel disturbances	71.1	73.2	
Palpitation	81.7	63.4	<.05
Sweating or trembling	76.8	60.6	<.05
Headache	89.4	77.5	<.05
Severe pains and aches	12.0	14.1	

Table 6
Percentage of positive responses on the symptom checklist against the marital status of the depressives

Symptom checklist	Marital status		Level of significance (χ^2 test)
	Single (N = 52) %	Married (N = 161) %	
Dysphoric mood	82.7	83.9	
Pessimistic outlook	61.5	67.7	
Nervousness	88.5	80.7	
Agitation or irritability	88.5	82.6	
Panic attacks	82.7	64.6	<.05
Guilt feeling/self-reproach	88.5	80.1	
Early morning wakening	63.5	66.5	
Nightmares	80.8	88.2	
Early insomnia	80.8	82.0	
Loss of interests	86.5	89.4	
Idea of death	11.5	18.0	
Malaise	98.1	96.9	
Bad body image	98.1	95.7	
Hypochondriasis	94.2	93.2	
Idea of incurability	17.3	19.9	
Anorexia	76.9	70.2	
Stomach troubles	92.3	83.9	
Bowel disturbances	76.9	70.2	
Palpitation	82.7	73.3	
Sweating or trembling	80.8	68.3	
Headache	84.6	85.7	
Severe pains and aches	11.5	13.0	

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Table 7
Percentage of positive responses on the symptom checklist by depressives of different age groups

Checklist item	Age Groups in years							Level of significance (χ^2 test)
	10-19 %	20-29 %	30-39 %	40-49 %	50-59 %	60-69 %	70-79 %	
Dysphoric mood	84.0	83.1	78.3	87.5	82.8	92.9	8.7	
Pessimistic outlook	56.0	67.8	60.9	65.6	79.3	71.4	71.4	
Nervousness	84.0	91.5	76.1	90.6	72.4	71.4	85.7	<.05
Agitation or irritability	92.0	89.8	71.7	93.8	79.3	78.6	71.4	
Panic attacks	76.0	78.0	60.9	68.8	62.1	64.3	71.4	
Guilt feeling/self-reproach	88.0	84.7	80.4	81.3	82.8	85.7	57.1	
Early morning wakening	56.0	67.8	52.2	78.1	69.0	71.4	85.7	
Nightmares	76.0	84.7	84.8	96.9	82.8	92.9	100.0	
Early insomnia	88.0	74.6	80.4	87.5	75.9	92.9	100.0	
Loss of interests	76.0	91.5	91.3	90.6	82.8	92.9	100.0	
Idea of death	12.0	16.9	6.5	15.6	17.2	28.6	57.1	
Malaise	100.0	98.3	95.7	93.8	96.6	100.0	100.0	
Bad body image	96.0	98.3	93.5	93.8	96.6	100.0	100.0	
Hypochondriasis	96.0	96.6	84.8	96.9	93.1	92.9	100.0	
Idea of incurability	8.0	25.4	10.9	12.5	27.6	21.4	42.9	<0.05
Anorexia	84.0	69.5	73.9	65.6	72.4	64.3	85.7	
Stomach troubles	88.0	88.1	82.6	90.6	79.3	85.7	100.0	
Bowel disturbances	84.0	71.2	65.2	75.0	55.2	85.7	100.0	
Palpitation	76.0	83.1	71.7	65.6	69.0	85.7	85.7	
Sweating or trembling	80.0	76.3	65.2	68.8	72.4	64.3	71.4	
Headache	84.0	88.1	78.3	90.6	86.2	85.7	100.0	
Severe pains and aches	8.0	13.6	8.7	12.5	24.1	14.3	0.0	