

Psychiatric referrals

In primary care and general hospitals in Qassim Region, Saudi Arabia

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ABSTRACT

Objective: From different perspectives, psychiatric symptoms have special significance in psychiatry. This study comparatively describes the psychopathological symptoms as noted in primary care (402) and general hospital (138) referrals.

Methods: Five hundred and forty psychiatric referrals, retrieved randomly, were reviewed extensively for collecting relevant data.

Results: Both hospital and primary care referrals were observed to have a variety of psychological and somatic symptoms of variable frequencies, which were suggestive of several psychopathological domains. Functional psychotic (19.5% versus 10%), mood (27.5% versus 23%) and psychosomatic (7% versus 2%) symptoms were significantly noted in hospital referrals as compared to

primary care referrals while the later were observed to have significantly more somatic (34.5% versus 22.5%) and neurological (8% versus 4%) symptoms. Only a small proportion of primary care referrals (33/402, 8%) have symptoms of childhood psychiatric disorders.

Conclusion: Psychiatric symptomatology differs in primary care and general hospital referrals. Both the general practitioners and clinicians are expected to record psychiatric symptoms in a comprehensive manner. Hence, they need condensed training courses on psychiatric symptomatology.

Keywords: Psychiatric referrals, psychopathological symptoms, psychiatry training.

Saudi Med J 2001; Vol. 22 (7): 619-624

Although unaided by confirmatory laboratory tests, psychiatric symptomatology essentially provides a variety of insightful windows, primarily on the functions of the human brain. Moreover, a systematic evaluation and examination of symptoms and signs as revealed by the psychiatric patients, guides clinicians in the formulation of epidemiological, etiological, phenomenological, diagnostic, therapeutic, prognostic, outcome and research trajectories of mental disorders.¹⁻¹⁰ The psychiatric symptoms also subserve a variety of

other functions including determining onset and relapse of a disease, noncompliance by the patient,¹¹ differentiation between organic and functional psychopathologies^{12,13} and further helps in the construction of a natural history of the illness.¹⁴ Furthermore, the significance of clinical phenomenology is reflected in a variety of researches including quality of life,¹⁵ life-events¹⁶ and various drug trials. Notably, psychiatric symptomatology is the chief architect of almost all the rating scales used in psychiatry. Similarly, psychiatric symptoms and

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Received 6th November 2000. Accepted for publication in final form 18th February 2001.

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signs are the basic building blocks of international classifications of mental disorders. Besides highlighting seriousness and general distress,^{17,18} the psychiatric symptoms also influence health care utilization.¹⁹ The symptom pattern shown by patients may also reveal the social and cultural dynamics of a society²⁰⁻²² and guide the patients to seek medical and non-medical help.^{21,23} Often the symptoms and signs, extremely crippling to the patients,²⁴ are genuine but rarely, may be false.²⁵ The physical symptoms, though less superior than psychological symptoms in detecting common mental disorder,²⁶ may help in identifying certain mental illnesses.²⁷ From all these perspectives, mental health providers must have an in depth understanding of psychiatric symptomatology. Finally, psychiatric symptomatology also determines the referral process of mental patients to a higher health level.^{28,29} Moreover, the pattern and severity of psychiatric symptoms may vary in accordance with the level of health delivery systems³⁰ and medical comorbidity.^{31,32} For instance, the patients referred from primary care as compared to general hospitals may differ in severity of symptoms and their presentation. This research investigates comparatively the symptom pattern noted in psychiatric referrals from primary care centers and general hospitals.

Methods. We have described elsewhere³³ the method of random selection of the sample, which is comprised of 540 psychiatric referrals (primary health care = 402, general hospitals = 138). We reviewed these referrals extensively for collecting the relevant data including the symptoms/complaints as noted by general practitioners and hospital clinicians. Initially, from a symptom perspective we categorized psychiatric referrals into 2 categories, 1) referrals with less than 4 recorded symptoms, and 2) referrals with more than 4 recorded symptoms. Then, once again we reviewed extensively these referrals and entered in the computer all noted complaints/symptoms and signs in accordance with a symptom checklist. This checklist was prepared after reviewing several standardized scales including the Brief Psychiatric Rating Scale,³⁴ Hamilton Rating Scale for Depression,³⁵ Present State Examination,³⁶ and Mini-Mental State³⁷ and major classificatory systems that is Diagnostic and Statistical Manual of Mental Disorders, 4th version (DSM-IV) and International Classification of Diseases, 10th Version (ICD-10).^{38,39} The authors have used these scales in their previous research.⁴⁰⁻⁴³ While compiling the 48-symptom checklist, the chief symptoms and signs derived from these scales and also consistent with each preconceived psychopathological domain, the details of which are given below, were noted. The clinical experience of authors and extensive review of these psychiatric referrals further guided in the selection of psychopathological domains and their associated symptoms/signs. Notably, general practitioners and

physicians used the English language in completing almost all the psychiatric referrals. Therefore, translation from English to Arabic and vice-versa was not attempted at this juncture. As only the first author has assessed and rated all those psychiatric referrals in line with this checklist, so no attempt was made to assess the inter rater reliability. Although we have not ventured to assess the construct/predictive validity of the symptom checklist, we feel that it has reasonable utility in rating symptoms and signs noted by general practitioners and physicians in those psychiatric referrals. This 48-symptom checklist may require further advancement and expansion along with these psychometric evaluations in future studies on psychiatric symptomatology in which patients will be recruited for comprehensive assessment. The symptoms were categorized into several domains. In the organic domain, the symptoms were memory disturbance/forgetfulness, disorientation to time, place and person, seeing objects/visual hallucinations, and repeated irrelevant shouting. The functional psychotic domain symptoms were suspiciousness/delusions, hearing voices/auditory hallucinations, irrelevant/vague thinking, and negative features. The mood domain symptoms were sadness/depression, elation/mania, suicidal ideation, delusions of grandiosity, and hyperactivity/retardation. The anxiety domain symptoms were anxiety/panic, phobia, obsession/compulsion and acute stress. The somatic symptom domain included conversion, somatization, hypochondriacal and pains. The neurological domain constituted of altered consciousness/confusion, tonic/clonic convulsion, tongue bite/incontinence and fall/injury. This symptom domain was considered because our hospital was offering services to patients with seizures. The services were discontinued about one year ago. Additional symptom domains were related to grief/history of recent death, drug abuse, psychosomatic disorders, psychotropic adverse reactions, and adjustment problems. Under other symptom domains, we included a variety of symptoms/signs that are aggression/assaultiveness, minor psychological disturbance/abnormality, restlessness/irritability/crying spells, impotence, insomnia, hypersomnia, catatonic retardation, social isolation, sleep-walking, mental retardation, nailbiting, school phobia, enuresis, encopresis, stuttering, stammering, attention-deficit hyperactivity symptoms, and finally hair pulling. The first author reviewed all these referrals in order to collect noted signs and symptoms from present and past histories, physical and systemic examinations and mental status findings, which were matched with the diagnoses made by the general practitioners, clinicians, and psychiatrists. We used the SPSS 7.5 Windows program for analyzing the data. We used frequency distribution and Chi square test and p value of 0.05 or less was considered significant.

Results. Sixty-eight general hospital referrals (68/138, 49%) as compared to 298 primary care referrals (298/402, 74%) have less than 4 recorded symptoms. Hence, about twice the number of general hospital referrals as compared to primary care referrals had more than 4 recorded symptoms which was statistically significant [$\chi^2=29.058$, degree of freedom (d.f) =1, $p<0.001$]. It has been reported that 2 key symptoms (panic and depressed mood) supplemented by 5 other symptoms facilitated the identification of majority anxiety and depressive disorders in the medical population.³ Notably, patients scoring high in psychiatric symptomatology tend to utilize more general health services and prescribed drugs than those with low levels of psychiatric symptoms and dysfunctions.¹⁹ In a related development, patients with sub-threshold psychiatric symptoms, symptoms not meeting the full criteria for a DSM-IV Axis 1 disorder, need further broad psychiatric assessment.²⁴ The pattern of symptoms in primary care and hospitals are shown in Table 1. The functional psychotic, mood and psychosomatic symptoms were significantly observed in hospital referrals as compared to primary care referrals. Similarly, the diagnosis noted as symptom was significant in hospital referrals. While somatic and neurological symptoms were comparatively significantly reported among primary care referrals. Organic and anxiety symptoms were equally distributed between the 2 sources of referrals. Less frequently noted symptoms between primary care and hospital referrals are shown in Table 2. When these symptoms were pooled, a significant proportion of hospital referrals was observed to have them. Table 3 shows frequency distribution of other "general" symptoms as noted in primary care and hospital referrals. Aggressive spells, agitation and sleep disturbances were significantly noted in hospital

Table 1 - Frequency distribution of different symptom domains in primary care and hospital referrals.

Symptoms	Primary Care n (%)	Hospitals n (%)
Organic	24 (6)	8 (6)
Psychotic	39 (10)	27 (19.5)
Mood	93 (23)	38 (27.5)
Anxiety	121 (30)	42 (30)
Somatic	139 (34.5)	31 (22.5)
Psychosomatic	9 (2)	10 (7)
Neurological	31 (8)	6 (4)
Diagnosis as symptom	33 (8)	17 (12)
$\chi^2 = 23.419$ degree of freedom (d.f) = 7 $p = <0.001$		

Table 2 - Less frequently observed symptoms domain in primary care and hospital referrals.

Symptoms	Primary Care n (%)	Hospitals n (%)
Drug-abuse	4 (1.0)	5 (3.5)
Grief	4 (1.0)	1 (1.0)
Adjustment	1 (0.2)	2 (1.0)
Drug reaction	1 (0.2)	7 (5.0)
$\chi^2 = 5.982$, d.f = 3, $p = <0.112$, n.s. (unpooled data) $\chi^2 = 16.347$, d.f = 1, $p = <0.001$, significant (pooled data)		

Table 3 - Other general symptoms observed in primary care and hospitals.

Symptoms	Primary Care n (%)	Hospitals n (%)
Aggression/assaultiveness	2 (2.5)	21 (15)
Psychological disturbance	33 (8)	6 (4)
Restlessness/irritability	21 (5)	19 (14)
Insomnia/hypersomnia	131 (33)	72 (52)
Retardation/catatonia	2 (0.5)	1 (1)
Social isolation	9 (2)	2 (1)
Sleep walking	3 (1)	1 (1)
$\chi^2 = 40.526$ degree of freedom (d.f) = 6 $p = <0.001$		

Table 4 - Other symptom domains observed only in either primary care or hospital referrals.

Symptoms	Primary Care n %	Hospitals n %
Mental subnormality	14 (3.5)	-- (--)
Enuresis	13 (3)	-- (--)
Speech	2 (0.5)	-- (--)
Nail-biting	1 (0.2)	-- (--)
School phobia	2 (0.5)	-- (--)
ADHD	1 (0.2)	-- (--)
Trichotillomania	-- (--)	1 (1)
ADHD - attention deficit hyperactivity disorder		

referrals while minor psychological disturbances and lack of social relationships were more common among primary care referrals. Table 4 shows distribution of psychiatric symptoms noted either in primary care or hospital referrals. The psychological problems most commonly encountered among children were noted only among primary care referrals.

Discussion. This study comparatively explored psychiatric symptomatology in primary care and hospital referrals and found a pattern of psychiatric symptoms that could be grouped into most frequent and less frequent symptoms compatible with major predefined domains. Furthermore, in addition to general symptom pattern, this study also found symptoms that were present only in either of the primary care or hospital referrals. The symptoms of different psychoses, depressions and psychosomatic disorders were significantly found to be noted among hospital referrals when compared with primary care referrals, which is partially consistent with other researchers¹ who reported pain (47%) and depression (40%) to be the most common diagnoses. Like hospital referrals, the severity of psychiatric symptoms is reported to be higher in psychiatric outpatient clients than the general practice patients.³⁰ This finding suggests that major psychiatric disorders and psychosomatic disorders are usually mushroomed in general hospitals. This could be attributed to the comorbid physical disorders associated with severe psychiatric symptomatology³¹ and patients with such complex comorbid disorders usually seek medical rather than psychological help. Likewise, one study found a high current symptom rating that was related to medical help-seeking.²³ Moreover, the severity of psychopathology during hospitalization also indicates poor outcome.¹⁰ Reportedly psychiatric intervention addressing common psychiatric conditions like disabling depression⁵ and panic⁹ improves the quality of patients with or without changing their medical status.¹⁵ We suggest that all the general hospitals and primary care centers with no psychiatric facilities should refer immediately those patients with severe psychopathologies to the psychiatric hospitals in order to begin early psychiatric intervention. On the other hand, in addition to neurological/epileptic symptoms, somatic symptoms suggestive of general psychic distress^{8,17,18} in a variety of minor/major psychological disorders such as conversion, somatization, hypochondriacal and pain disorders were revealed significantly more among primary care referrals when compared with hospital referrals. This finding, similar to some studies^{13,26} but incongruous with other researchers,⁴⁴ is suggestive that the patients with neurotic psychopathologies usually first consult their general practitioners and family physicians that might be attributed to social stigma

attached to mental disorders. Moreover, sociocultural background contributes to the neurotic symptom manifestations that have a different focus for clients in different sociocultural settings.²² According to some researchers²⁰ neurotic symptom constellations are culture-bound. At the sociodemographic level, the reporting of physical/somatic symptoms whether or not associated with psychiatric co-morbidity is influenced by gender, for example women report 50% more physical symptoms than men, followed by education.⁷ Beside hospital clinics and primary care centers, patients with mood (37.5%), psychotic (11%) and anxiety (20%) disorders also present with somatic symptoms in emergency services.⁴ Like psychological symptoms, somatic symptoms (84%) are reported to interfere with patients' routine activities and led them to take medications or visit a physician,²⁷ often with poor compliance.¹¹ Therefore, physicians should alert themselves while assessing patients with somatic symptoms in particular unexplained somatic symptoms that most likely indicate hidden psychiatric syndromes. The pooled symptoms related to drug abuse, grief, adjustment and adverse-drug reactions were significantly noted in hospital referrals, which possibly suggest the differential diagnostic skills of physicians and general practitioners. Or the patients with these disorders are usually coupled with either severe psychological or physical complications that guide the patients as well as their relatives to seek emergency medical help including hospitalization often offered by the general hospitals rather than the primary care centers. Consistent with our study, researchers have reported depression, adjustment reactions with depressive and anxious mood, panic disorder and generalized anxiety disorder in the patients admitted to general medical wards.¹⁴

The general symptoms/signs including excitement, agitation, and sleep disturbances most commonly associated with psychotic disorders were significantly noted in hospital referrals as compared to primary care referrals. This finding further lends support to our aforesaid observation that psychotic disorders or more serious psychological problems, or both, are usually encountered in hospitals. Conversely, minor psychological disturbances and restricted social behavior mainly associated with marital disharmonies, family and occupational problems and social phobias were significantly noted in primary care referrals. Overall, all these revelations support robustly the notion that most severe psychiatric disorders are often referred from general hospitals as compared to primary care. It is further reported that only 5% of patients consulting general practitioners have psychotic mental illnesses which require referral to a higher health level.

Finally, symptoms suggestive of mental sub-normality, enuresis and encopresis, speech disorders, nail-biting, school phobia and attention deficit

hyperactivity disorders were exclusively noted in primary care referrals. In a study of the pediatric population, certain symptoms like school refusal, enuresis, mental subnormality and others were significantly more in low socioeconomic groups, while nail-biting and food related symptoms were more common in high socioeconomic groups.² The finding of our research raised some relevant questions. Are these childhood disorders mostly referred to pediatricians within the general hospital itself? Are these childhood disorders only managed by pediatricians without being referred to psychiatric hospitals? Are general practitioners enforced by way of non-availability of drugs or lack of management skills to refer such patients to the psychiatrists? Do the prevalence of these disorders differ across these 2 sources of referrals? By and large, there is no epidemiological data on child psychiatric disorders in Saudi Arabia. Similarly, there are no provisions of child psychiatric services in psychiatric hospitals as well as in general hospitals. Therefore, we suggest that child psychiatric clinics should be opened in psychiatric and general hospitals. By all means, child psychiatry warrants proper planning, development and research in rapidly developing Arabian Gulf countries as a whole.⁴⁵

In conclusion, despite some limitations of this research, the psychiatric symptomatology differs in certain aspects between primary care and general hospitals. The resident doctors and general practitioners need continuing training courses on psychiatric symptomatology in order to enhance their understanding of psychiatric symptoms and signs so that they can note them down properly and comprehensively while referring a psychiatric patient to a higher health level.

Acknowledgment. The authors express sincere thanks to Prof. Henk T Van Der Molen PhD, President, The Psychological Association of The Netherlands, for his expert comments during revision of this paper.

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