

## A PSYCHIATRIC STUDY OF CASES ATTENDING DENTAL O. P. D. OF A TEACHING GENERAL HOSPITAL

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### SUMMARY

One hundred thirty cases were selected by systematic sampling from those attending the dental O. P. D. of a teaching general hospital, excluding those under 14 years and those unable to read and write Hindi well. They were administered a questionnaire carrying 50 questions covering dental and non-dental (mainly psychiatric) symptoms and the Hindi version of Middlesex Hospital Questionnaire. After this they were seen by a dental surgeon and a psychiatrist separately.

Nearly a quarter of the cases had no dental disease and only slightly less than half had a definite psychiatric illness. Dental O. P. D. cases scored significantly higher on the M. H. Q. as compared to normal controls. The younger patients had the maximum score of the OBS subscale while the older ones scored maximum on the DFP sub-scale. The number of symptoms complained of by the patients were directly related to their M. H. Q. scores.

Psychiatric aspects of dentistry have received scant attention particularly in our country. During the course of an earlier study (Shukla and Srivastava, 1981), it was felt that an appreciable proportion of cases attending the dental O. P. D. had no primary dental pathology. Further, many of even those with definite dental diseases had symptoms inexplicable on that account. It was therefore thought worthwhile to undertake a planned psychiatric study of a representative sample of dental O. P. D. cases.

### MATERIAL AND METHOD

The study was carried out in the Dental Clinic of the M. L. B. Medical College, Jhansi (U.P.). The cases were selected from among those attending the clinic on Mondays, Wednesdays and Fridays (O. P. D. days of R. P. S.), by the method of systematic sampling, over a period of six months. Out of these, patients unable to read and write Hindi well, were excluded as the workup involved filling up of two questionnaires in that language. Further, children (upto 14 years) were also excluded. Leaving aside

such cases, a total of 130 patients were included in the ultimate sample.

All the cases were asked to fill up a detailed questionnaire containing, besides identifying data, 50 questions encompassing dental and non-dental (mainly psychiatric) symptoms and oro-dental hygienic practices. This questionnaire was developed by listing the symptoms commonly complained of by dental patients. The exact wordings of individual questions were decided upon after discussion among the staff members of dentistry and psychiatry departments. However, the questionnaire was not standardized nor tested for its reliability or validity in statistical terms. In addition, the patients were administered the Hindi version of the Middlesex Hospital Questionnaire (Crown and Crisp, 1966 and Srivastava and Bhat, 1974). The latter is a "short", clinical diagnostic, self rating scale for psychoneurotic patients, aiming at a rapid quantification of common symptoms and traits relevant to the conventional diagnostic categories of neurotic illnesses (Srivastava and Bhat, 1974).

Every case was then examined sepa-

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rately by the dental surgeon (R. P. S.) and the psychiatrist (G. D. S.), so as to arrive at dental and psychiatric diagnoses, without the knowledge of the opinions of each other. The data were tabulated and the findings analysed statistically.

#### OBSERVATIONS

As can be seen from Table I, nearly a quarter (23%) of the cases had no dental disease. Slightly more than a quarter each had different grades/stages of dental caries (28%) and periodontitis (26%). Fifteen cases (12%) had gingivitis while the remaining 15 (12%) were constituted by miscellaneous conditions like dental cysts, abscesses and gingival recession.

Psychiatric diagnoses were based on the Ninth Revision of the International Classification of Diseases (W.H.O., 1978). As many as 57 cases (44%) had psychiatric abnormalities, 30 (23%) being exclusively psychiatric while 27 (21%) had psychiatric illnesses in addition to dental pathology. The commonest psychiatric condition was anxiety neurosis (25 cases, 19%), followed

by depression in form of either neurotic depression (13 cases, 10%) or involuntional melancholia (9 or 7%). The diagnoses of hypochondriasis, schizophrenic psychosis and obsessive compulsive neurosis were made in 5 (4%), 3 (2%) and 2 (2%) cases respectively.

Among the dental diagnostic groups, psychiatric illnesses were most frequently seen in the group of gingivitis (47%); over one fourth of the cases (27%) had anxiety neurosis and a fifth (20%) involuntional melancholia. Anxiety neurosis was the commonest psychiatric diagnosis in the other dental diagnostic groups as well though its frequency was much less (14%, 12% and 13% in cases of caries, periodontitis and miscellaneous dental conditions respectively). One third (33%) of the thirty patients without any dental pathology had anxiety neurosis, over a fifth (27%) had neurotic depression while 13% of such cases had involuntional melancholia. Three (10%) each were diagnosed to be having hysteria and schizophrenia, and 2 (7%) patients had repeated uncontrol-

TABLE 1. Relationship between dental and psychiatric diagnoses. (Figures in parentheses denote percentages in nearest complete numbers).

Psychiatric diagnoses	Dental diagnoses					Total
	Normal	Caries	Periodontitis	Gingivitis	Miscellaneous	
Normal	..	29(80)	27(76)	8(53)	10(67)	73(56)
Anxiety neurosis	10(33)	5(14)	4(12)	4(27)	2(13)	25(19)
Neurotic depression	8(27)	1(3)	2(6)	..	2(13)	13(10)
Involuntional melancholia	4(13)	..	2(6)	3(20)	..	9(7)
Hysteria	3(10)	1(3)	..	..	1(7)	5(4)
Schizophrenia	3(10)	..	..	..	..	3(2)
Obsessive-compulsive neurosis	2(7)	..	..	..	..	2(2)
Total	30(23)	36(28)	34(26)	15(12)	15(12)	130(100)

able urge to clean their teeth and were labelled as obsessive-compulsive neurotics (Table 1).

A substantial proportion of cases had several unfounded and rather esoteric complaints. Thus, nearly a third (42 or 32.3%) were dissatisfied with their teeth which were clinically quite normal. They felt that their teeth were "unduly large and protruding" or "unduly small"—so much so that they felt shy in public and could not laugh freely. Thirty six (27.7%) harboured intense inferiority on this account. Fifteen (11.5%) had a strong feeling-almost to the delusional proportion—that they were suffering from cancer. A further 21 (16.2%) cases felt that they had some serious illness. These persons frequented the dental clinic despite reported reassurances. On the other hand, several (18 or 13.8%) genuine patients had been avoiding the dentist because of the fear that he would remove their teeth. The problem was further confounded by the widely held albeit baseless notion (42 cases or 32.3%) that dental extraction would impair vision. Lastly, 11 (8.5%) patients insisted upon getting their teeth (healthy ones!) extracted under the impression that the latter were at the root of all their health problems. All these cases had depression of varying degrees and responded to tricyclic compounds.

Dental O. P. D. cases scored significantly higher as compared to the normal controls on the M. H. Q. ( $t=5.1$ ;  $p<0.001$ ). The former scored higher on all the sub-scales except on the HYS sub-scale. However, the differences were significant with respect to only three of the six sub-scales, viz., FFA, OBS and DEP ( $P<0.001$ ) (Table 2). There was a definite relation of the M. H. Q. scores with age, the older patients (beyond 40 years) having maximum scores on the DEP sub-scale (Table 3) as against the younger ones (upto 40 years) who scored highest on the OBS sub-scale (Table 4). A very

TABLE 2. *M. H. Q. scores in controls and dental O. P. D. cases.*

M. H. Q. sub-scales	Scores (Mean±S. D.)		t	p
	Controls	Dental cases		
FFA	4.3±2.2	6.5±2.4	7.8	<0.001
OBS	6.5±2.6	9.1±3.1	7.4	<0.001
PHO	4.1±1.9	4.2±2.1	0.5	>0.05
SOM	5.1±3.5	5.7±3.1	1.5	>0.05
DEP	4.6±2.4	6.8±2.6	7.1	>0.001
HYS	4.8±2.5	4.3±2.2	1.6	>0.05
Total	29.8±10.5	36.4±11.2	5.1	<0.001

FFA=Free floating anxiety; OBS=Obsessive anxiety  
PHO=Phobic anxiety SOM=Somatic anxiety  
DEP=Depressive anxiety; HYS=Hysterical anxiety

TABLE 3. *M. H. Q. scores in controls and dental OPD cases beyond 40 years in age.*

M. H. Q. sub-scales	Scores (Mean±S. D.)		t	p
	Controls (60)	Dental cases (60)		
FFA	4.1±1.9	6.3±2.2	5.9	<0.01
OBS	5.9±2.3	7.2±2.9	2.7	<0.05
PHO	4.3±2.1	4.4±2.4	..	..
SOM	5.3±3.2	5.4±3.2	..	..
DEP	6.2±3.3	11.3±3.8	7.8	<0.001
HYS	4.6±2.1	4.8±2.4	..	..
Total	30.2±10.3	37.3±11.6	3.6	<0.01

interesting finding was that the number of symptoms complained of by the patients was directly proportional to their M. H. Q. Scores (Table 5). Thus patients with upto 5 symptoms had a mean score of  $27.6±8.4$  as against  $31.4±9.1$  in those with 6-10 symptoms and  $36.8±9.8$  in those with 11-15 symptoms, while the patients with more

TABLE 4. *M. H. Q. scores in controls and dental OPD cases upto 40 years in age.*

M. H. Q. sub-scales	Scores (Mean±S.D.)		p
	Controls (70)	Dental cases (70)	
FFA	4.5±2.1	6.8±2.5	5.6 <0.01
OBS	6.2±2.8	12.4±4.1	9.7 <0.001
PHO	3.9±1.6	4.8±2.3	2.5 <0.02
SOM	5.8±3.2	5.6±2.9	.. ..
DEP	4.8±2.2	5.9±3.1	2.2 <0.05
HYS	5.1±2.6	5.5±2.4	.. ..
Total	26.3±9.8	34.1±10.1	4.6 <0.01

TABLE 5. *Relation of M. H. Q. scores with number of symptoms complained of by the dental O. P. D. cases.*

Number of symptoms	No. of cases	M. H. Q. scores (Mean±S. D.)
(a) 1—5	37	27.6± 8.4
(b) 6—10	42	31.4± 9.1
(c) 11—15	26	36.8± 9.8
(d) >15	25	38.4±10.2

Comparison	Statistical significance	
	t	p
a Vs. b	1.9	>0.05
b Vs. c	2.3	<0.01
c Vs. d	0.6	>0.1
b Vs. d	2.8	<0.01

than 15 symptoms had a mean score of 38.4±10.2.

#### DISCUSSION

Psychological significance of the oral cavity in general and the teeth and tongue

in particular was recognized by Sigmund Freud almost a century ago. In fact, a person's psycho-sexual development has been supposed to start with the oral stage, mouth being the first erogenous zone. It is therefore surprising that the literature dealing with the interface between psychiatry is so scarce. However, in the West, there has, in recent years been a growing realization of the importance of psychiatric and emotional problems associated with dental diseases (Jackson, 1980). Thus, while it was earlier believed that, dentistry being the most mechanical of the medical specialities, would be unrelated to the functions of the psyche (Weiss and English, 1949); only two decades later, Dworkin (1969) pointed out that psychiatry and dentistry were intimately related. The findings of the present study are in full conformity with these suggestions as nearly a fourth of cases attending the dental O. P. D. had no dental pathology and only slightly less than a half had clear-cut psychiatric symptomatology.

There are occasions when a psychiatric illness masquerades in the garb of dental symptoms. Thus, Redpath (1971) described cases suffering primarily from hypochondriasis, anxiety neurosis, depression and schizophrenia who presented with exclusively dental complaints but recovered with appropriate psychiatric treatment. An important feature of these cases was that they were all referred by a dentist to a psychiatrist. Similarly, Shukla (1981) reported a case of cranio-facial pain who had undergone complete dental extraction without any relief but recovered with antidepressants and E.C.T. Such cases are often misdiagnosed and wrongly treated because of the limited knowledge currently available and because of the limited degree of dentist-psychiatrist liaison in many areas. There is therefore a need for collaboration between the two specialists because neither professional is

likely, on his own, to be fully successful in managing these challenging patients (Jackson, 1980).

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