A STUDY OF PSYCHIATRIC MORBIDITY IN GYNAECOLOGY OUT PATIENT CLINIC

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SUMMARY

One hundred and ten female patients in the age group of 16 to 65 years, attending gynaecology out-patient clinic were screened for psychiatric disorders. The psychiatric morbidity among patients attending gynaecology clinic was found to be 49 percent, as compared to 26 percent in a sample of general population (control group). This study supports the view, that there is a higher psychiatric morbidity among patients attending gynaecology clinic, and it is associated with lower socio-economic status, education and gynaecological conditions especially menstrual irregularities and pelvic pain.

Soma and psyche are interlinked in a highly complex manner. It has long been appreciated both by the gynaecologists and psychiatrists that there are many gynaecological conditions in which psychological factors play an important part (De Sousa et al., 1974; Smith, 1979; Molinski, 1979; Dally, 1980). There have been numerous studies in the Out Patient Departments of various specialities for assessing psychiatric morbidity, such as: Skin OPD (Srivastava et al., 1975), General Practice (Krishanamurthy, et al., 1981), Medical OPD (Bagadia et al., 1986; Sri Ram et al., 1986; Bhatia et al., 1988), Dental OPD (Shukla and Srivastava, 1983), Asthmatics (Ramachandran et al., 1974). All these studies have shown the importance of assessing psychiatric morbidity among patients attending OPD. Association of psychological maladjustments and neuroticism with menstrual irregularities has been studied by various authors in the past (Shah et al., 1961; Bhat et al., 1977; Coppen and Kessel, 1963; Coppen, 1965; Hain et al., 1970; Mc Cornick, 1975). Pelvic pain is one of the most common complaint among young and middle aged females which is very difficult to treat as generally no organic

cause is traceable. It's associated psychological factors have been investigated by many authors (Duncanl and Taylor, 1952; Beard et al., 1977; Reading, 1982; Rapkin, 1986). However, there have been very few studies on the whole range of patients attending gynaecology out-patient clinic. Sainsbury (1960) demonstrated high level of neuroticism on Maudsley Personality Inventory, among, gynaecology out patients. Munro (1969) found a large number of psychiatrically ill patients in an unselected sample of gynaecology out patients.

Ballinger (1977) in a survey of menopausal age group females attending gynaecology clinic, found a higher psychiatric case rate (52 percent), than in general population (29 percent). This higher psychiatric morbidity was associated with socio-demographic factors such as marital status and number of children at home, but was not linked to any specific gynaecological complaint. Socioeconomic status was not taken into account in Ballinger's study.

In Australia, Worsley and Walters (1977) reported a high psychiatric morbidity in an uncontrolled survey of women patients attending gynaecology clinic, using General Health

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Questionnaire (Goldberg, 1972) and Role Problem Checklist.

Byrne (1984) conducted a controlled epidemiological survey on women patients attending gynaecology clinic, using General Health Questionnaire (Goldberg, 1972), Present State Examination (Wing et al., 1974) and Brown and Harris Life events and Difficulty Schedule (Brown and Harros, 1978). Byrne reported high psychiatric morbidity in clinic sample (46 percent) and indicated its significant association with demographic factors such as socio-economic status, marital status and recent experience of life stress, especially marital difficulties.

The present study was planned with the aim of detecting prevalence of psychiatric morbidity among women attending gynae-cology out-patient clinics using standardized techniques to identify cases and find its correlation with socio-demographic variables and gynaecological compiaints.

MATERIAL AND METHODS

The study was undertaken in the Gynae-cology outpatient clinic of Obstetrics and Gynae-cology Department of Lady Hardinge Medical College, New Delhi. The study group consisted of 120 patients selected randomly, in the age group of 16 to 65 years, who were attending the Gynae-cology Clinic for the first time and were residents of Delhi. The patients having any past history of psychiatric illness or any complaints related to obstetrics or any other speciality other than gynae-cology were excluded from the study.

A control group of 55 females for comparison purposes was chosen from the attendents accompanying the patients. These were chosen as controls because they matched the study group in terms of social class, age and education. The females in the control group who were having any gynaecological complaints or suffering from any other illness were excluded from the study. These females were asked in detail about any sign and symptom of physical illness. In case of any doubt detailed investigations were done to exclude them from the study. The control group was also subjected to same procedure as the study group.

A schedule was prepared for the collection of socio-demographic variables. The socioeconomic status of the subjects was assessed by using a scale developed by Indian Council of Medical Research (1981). The social classification was done by taking into account the level of education, caste, profession and income. Each item was given a value and each individual score was added to assess the social class. During the first phase of the study, all subjects completed P. G. I. Health Questionnaire N-2 (Verma and Wig, 1975). The questionnaire was read out to the illiterate subjects. This questionnaire is a simple screening health questionnaire in English and Hindi for detecting psychiatric morbidity. It consists of 60 items which had been widely used and standardized throughout India and also in our department. A cut-off score of 9 was taken for detection of cases. Those patients who scored less than 9 were taken as probable normals, while those scoring 9 and above were taken as probable psychiatric cases. These cases were examined in detail in phase two.

In the second phase of our study, the females who were screened as positive were further examined by using Standardized Psychiatric Interview Schedule (Goldberg et al., 1970). Patients who had atleast one of the following two features at the psychiatric interview were regarded as psychiatric cases:
(a) a total weighted symptom score of ≥ 20 derived from S. P. I. (sum of 10 reported symptom scores plus twice the sum of the '12 menifest abnormality' scores); (b) a S. P. I. overall severity score of ≥ 2 on a five point scale representing functional impairment. The psychiatric diagnosis was made following the S. P. I. findings, using International Classi-

fication of Diseases (I. C. D.—9), 9th edition W. H. O (1978).

The patients were then, examined by a senior gynaecologist. The primary gynaecological symptoms, gynaecologist's findings, clinical diagnosis and outcome of the consultations were recorded. All statistical analysis has been done by using Chi-squire test with Yates correction, wherever applicable.

RESULTS

In the Gynaecology Clinic sample (study group), six patients refused to complete the questionnaire, while four spoiled these questionnaires. These ten were eliminated which left 110 females in the study group. Among control group, three females refused to complete the questionnaire, while two spoiled the questionnaire. By eliminating five a control group of 50 females was left.

Majority of the females in the study group and the control group (59% and 64% respectively) were in the age group 26 to 45 years. Lower socio-economic status (59% and 56% respectively) predominated the study group and the control group. Majority of the females in the study group were married (95%) and housewives (86%). Similarly in the control group, majority were married (90%), and housewives (84%). Majority of the females both in the study and the control group, had low educational level (72.7% and 60% respectively). In the study group, females living in nuclear family were 49% and in the joint family were 50%, while in the control group respective percentage was 48 and 51. The term nuclear family has been usedwhere family consists of married couple and their children, till they are dependents, while a joint family has been taken where a number of married couples and children live together; all men are related by blood, all members sharing common kitchen and all the property is held in common.

The overall psychiatric case rate (Table 1) among Gynaecology Clinic (study group)

TABLE 1. Prevalence of psychiatric morbidity

Diagnosis	Study Group	Control Group
Psychiatric	54*	13
cases	(49.09%)	(26.0%)
Normal	46	37
	(41.8%)	(74.0%)
Total	110	50

^{*}p<.01

patients was 49.09% (54/110, p<.05) and among the control group it was 26% (13/50). The patients in the study group belonging to lower socio-economic status (Table 3) had a higher psychiatric morbidity (p<.01). Illiterates or educated upto primary level (Table 4) had a significantly higher psychiatric morbidity (p<.05).

According to the gynaecological symptoms (Table 2) patients complaining of menstrual problems predominated the group (40.9%) while complaints of pelvic pain and backache constituted the next major group (22.8%). The psychiatric case rate (Table 2) was highest among patients complaining of pelvic pain and backache (72%) which is statistically significant (p<.01). The psychiatric

TABLE 2. Gynaecology symptoms & Pschiatric case rate

•	maecology nptom group	No. of	Percentage	Percentage case rate by P. G. I. N-2.
ι.	Pelvie pain & backache	£ 25	22.8	72*
2.	Menstrual problems	45	40.9	57**
3.	Urinary problems	14	12.8	28
4.	Infertility problems	12	10.9	13
5.	Infections	9	8.1	25
6.	Prolapse	5	4.5	30
_	Total	110	100	Mean-49.09

^{*}p<.01, **p<.05

TABLE 3. Psychiatric case rate and social class in study group

Diagnosis	High social ctass	Low social class
Psychiatric	15	39*
cases	(29.5%)	(66.2%)
Normal	36	20
	(70.5%)	(33.8%)
Total	51	59

[•]p < .02

TABLE 4. Psychiatric case and educational truel in the study group

Diagnosis	High Education (Matriculation and above)	Low Education (Illiterate to primary level)
Paychiatric	7	47*
cases	(23.3%)	(58.7%)
Normal	23	33
	(76,7%)	(41.3%)
Total	30	80

^{*}p < .05

case rate among patients of menstrual problems was also found to be high (59%, p < .05). The patients with urinary problems, infertility, infections and prolapse of uterus, tended to score high on PGI scale, but we could not find any statistical significant relationship between these problems and the psychiatric morbidity.

Ten percent of the patients seen in gynaecology clinic required urgentor emergency treatment (11/110) but their scores on P. G.L., N-2 did not differ significantly from other patients, despite great difference in level of distress due to physical conditions.

The psychiatric diagnosis of patients, on the basis of the finding of S, P. I. was made according to I. C. D.-9. Neurotic depression predominated the study group (57.4%) and control group (61.5%), while anxiety neurosis was seen in 29.6% in the study group and in 30.7% in the control group (Table 5).

TABLE 5. Psychiatric diagnosis

Diagnosis		Study group N(%)	Control group N(%)
j.	Neurotic depression	31(57.4)	8(61.5)
2.	Anxiety neurosis	16(29.6)	4(30.7)
3.	Hysteria	4(7.4)	1(7.8)
4.	Phobic states	2(3.8)	0
5.	Obsessive compul- sive neurosis	1(1.8)	0
	Fotal	54	13

DISCUSSION

The prevalence of psychiatric morbidity among patients attending gynaecology clinic was found to be 49.09% as compared to 26% in the general population, which is statistically significant. This high psychiatric morbidity rate is similar to the rates found in other gynaecology out-patient clinic surveys, such as Ballinger (1977)-52.5%, Worsely and Walters (1977)-49.5% and Byrne (1984)-46%. The prevalence of high psychiatric morbidity in women has been shown by many authors such as Goldberg et al. (1976), Hesbacher et al. (1975), Weissman and Myers (1978), Orley and Wing (1979), Nandi et al. (1980) and Sri Ram et al. (1986). The psychiatric morbidity in the control group (26%) is similar to the findings of Ballinger (1977) and Orley and Wing (1979).

The age factor did not have any influence over psychiatric case rate in the study group, although majority of the psychiatric cases belonged to the younger age group. Similar findings that age factor has no influence over psychiatric case rate has been shown by Byrne (1984). The rate of psychiatric disorder was found to be high in patients with low education level among the study group. The association of low psychiatric morbidity with higher educational level has also been shown by Myers et al. (1975), Brown and Harris (1978) and Nandi et al. (1980).

The number of divorced, unmarried or separated females was very low among the study group. So we were not able to establish any relationship between marital status and psychiatric morbidity. Barker (1968) showed that most of the patients referred to a psychiatrist after hysterectomy had history of marital disruption. Surtees et al. (1983) and Sri Ram et al. (1986) showed higher psychiatric case rates among women who were divorced, separated or widowed, while Bebbington et al. (1981) found no such association. Byrne (1984) found that risk of psychiatric disorder was highest among younger women without children or those with history of divorce, separation or widowhood.

In our study group most of the patients were housewives. Therefore, the influence of employment over psychiatric case rate could not be studied. It was found that the socio-economic status had a significant influence over the psychiatric morbidity. The patients belonging to lower socio-economic status had higher psychiatric case rate. Similar higher psychiatric case rate among women in lower socio-economic status has been shown in various community surveys (Brown and Harris, 1978; Surtee et al., 1983; Dohrenwend and Dohrenweden, 1969; Dube, 1970; Nandi et al., 1980.) Byrne (1984) reported higher psychiatric case rate among middle class women as compared to working class women. However, other studies of gynaecology out-patient clinic have not reported social class data (Ballinger, 1977, Worsely and Walters, 1977).

In the present study, affective disorders predominated psychiatric illness. Neurotic depression was most common, followed by anxiety neurosis. The predominance of affective disorders, especially depression has been shown in other psychiatric morbidity surveys in the gynaecology out-patient clinics (Ballinger, 1977; Worsley and Walters, 1977; Byrne 1984, Bhat et al., 1977; Indira and Murthy, 1980, 1981).

The patients attending gynaecology clinic had frequent complaints of menstrual disorder, which had significant relationship with psychiatric morbidity. Similar association of menstrual disturbances with psychiatric morbidity has been shown by various authors (Shah et al., 1961; De Sousa et al., 1974; Bhat et al., 1977; Abhyankar and Bagadia, 1979; Indira and Murthy, 1980, 1981; Munro, 1969; Rakoff, 1968; Munro, 1972; Worsely and Walters, 1977; Byrne, 1984). The group of patients having pelvic pain and backache had significantly higher psychiatric morbidity as compared to others. The association of pelvic pain with psychiatric morbidity has also been reported by Molinski (1979), Benson (1965), Beard et al. (1977), Worsely and Walters (1977), Reading (1972), Byrne (1984) and Khastgir et al. (1988). The group of patients having other gynaecological problems had no positive association with psychiatric morbidity.

The presence of physical lesion did not influence the scoring of PGI N-2 Scale and the S. P. I. schedule, thus higher rate of psychiatric morbidty among females attending gynaecology clinic can not be attributed to the presence of physical lesion. Significant association of psychiatric morbidity with gynaecological complaints indicates that if the gynaecologists are more careful the psychiatric problems can be detected in early stages and treated.

REFERENCES

Abhyankar, R. R. and Bagadia, V. N. (1979). A psychiatric study of Metropathia hemorrahagica. Indian Journal of Psychiatry, 21, 328-331.

Bagadia, V. N.; Ayyar, K. S. and Lakdawala. P. D. (1986). Psychiatric morbidity among patients attending medical out-patient department. Indian Journal of Psychiatry, 28, 139-44.

Ballinger, C. B. (1977). Psychiatric morbidity and the menopause. Survey of a gynaecology out-patient clinic. British Journal of Psychiatry, 131, 83-89.

Barker, M. C. (1968). Psychiatric illness after hysterectomy. British Medical Journal, 2, 91-95.

- Beard, R. W.; Belsey, E. M.; Lieberman, B. A. and Wilkinson, J. C. M. (1977). Pelvic pain in women. American Journal of Obstetrics and Gynaecology, 128, 566-570.
- Bebbington, P.; Hurry, J.; Tennant, C.: Sturt, E. and Wing, J. K. (1981). Epidemiology of mental disorders in Camberwell. Psychological Medicine, 11, 561-579.
- Benson, R. C. (1965). Psychogenic pelvic pain. Clinical Obstetrics and Gynaccology, 8, 161-173.
- Bhat, V. K.; Srivastava, O. N.; Gupta, S. and Prakash, A. (1977). Personality characteristics of patients attending gynaecological out-patient of a general bospital. Indian Journal of Psychiatry, 19, 77-81.
- Bhatia, M. S.; Balkrishnan; Dhar, N. K.; Bohra, N.; Gupta, H. L. and Malik, S. C. (1988). Psychiatric morbidity in patients attending medical outpatient department. Journal of Indian Medical Association, 2, 36-38.
- Brown, G. W. and Harris, T. O. (1978). Social Origin of Depression: A study of psychiatric disorder in women. London: Tavistock Publications.
- Byrne, P. (1981). Psychiatric morbidity in a gynaecology clinic. An epidemiological survey. British Journal of Psychiatry, 114, 28-31.
- Coppen, A. (1965). The prevalence of menstrual disorder in psychiatric patients. British Journal of Psychiatry, 111, 155-167.
- Coppen, A. and Kessel, N. (1963). Menstruation and personality. British Journal of Psychiatry, 109, 111-114.
- Dally, M. J. (1980). The emotional problems of patients encountered in the practice of obstetrics and gynaecology. Obstetrics and Gynaecology Annual, (Eds.) Raiph, M. W., 339-356.
- De Sousa, A.; Choudhry, P. C. and Calvankar, H. (1974). Monstrual disorders among women attending gynaecology OPD. Journal of J. J. Group of Hospital and Grant Medical College, 49, 20-23.
- Dohrenwend, B. P. and Dohrenwend, B. S. (1969), Social status and psychological disorder. A causal enquiry, New York: Wiley.
- Dube, K. C. (1970). A study of prevalence and biosocial variable in mental illness in rural and urban community in U. P., India. Acta Psychiatrica Scandinavia. 46, 329-335.
- Duncan, C. H. and Taylor, H. C. (1952). A psychosomatic study of polyic congestion. American Journal of Obstetrics and Gynaecology, 64, 4-6.
- Goldberg, D. P.; Eastwood, M. R. and Shepherd, M. (1970). A standardized psychiatric interview for use in community surveys. British Journal of Preventive and Social Medicine, 24, 18-23.
- Goldberg, D. P. (1972). Detection of psychiatric illness by questionnaire. London: Oxford University Press.

- Goldberg, D. P.; Kay, C. and Thompson, L. (1976).
 Psychiatric morbidity in general practice and the community. Psychological Medicine. 6, 365-569.
- Hain, J. D.; Linton, P. H.; Eber, H. W. and Chapman, M. M. (1970). Menstrual irregularity, symptom and personality. Journal of Psychiatric Research, 14, 81-84.
- Hesbacher, P. T.; Rickels, K. and Goldberg, D. (1975). Social factors and neurotic symptoms in family practice. American Journal of Public Health, 65, 148-155.
- Indira, J. P. and Murthy, V. N. (1980). Nature of psychiatric disturbances in menopausal women. Indian Journal of Clinical Psychology, 7, 7-11.
- Indira, J. P. and Murthy, V. N. (1981). Psychiatric morbidity and the menopause. Indian Journal of Psychiatry, 23, 242-246.
- Khastgir, U.; Bohra, N. and Goyal, U. (1988). Psychological profile of females with chronic pelvic pain or low back pain. M. D., Thesis, Delhi University, Delhi.
- Krishnamurthy, S.; Shyama Sunder, C.; Prakash, O. and Prabhakar, N. (1981). Psychiatry morbidity in general practice—A preliminary report. Indian Journal of Psychiatry, 23, 40-43.
- Mc Cormick, W. O. (1975). Amenorrhia and other menstrual symptoms in student nurses. Journal of Psychosomatic Research, 19, 131-134.
- Molinski, H. (1979). Masked depressions in obstetrics and gynaecology. Psychotherapy and Psychosomatics, 31, 283-287.
- Munro, A. (1969). Psychiatric illness in gynaecological out-patients. A preliminary study. British Journal of Psychiatry, 115, 807-809.
- Munro, A. (1972). Psychosomatic Medicine-XI. Gynaecology, Practitioner, 209, 713-720.
- Myers, J. K.; Lindenthal, J. J. and Peper, M. P. (1975). Life events, social integration and psychiatric symptomatology. Journal of Health & Social Behaviour, 16, 421-429.
- Nandi, D. N.: Das, N. N. and Chowdhry, A. (1980). Mental morbdiity and urbal life. An epidemiological study. Indian Journal of Psychiatry, 22, 243-239.
- Orley, J. and Wingh, J. (1979). Psychiatric disorders in two African Villages. Archives of General Psychiatry, 36, 513-520.
- Rakoff, A. E. (1968). Endocrine mechanism in psychogenic amenorrhea. In: Endocrinology and human behaviour, (Ed.) Michael, R. P., Oxford University Press, London, p. 139.
- Ramachandran, V.; Thiruvengadam, K. V.; Zakaria, M. G. and Kathiresan, A. (1974). Psychiatric symptoms and personality traits in Asthma patients. Indian Journal of Psychiatry, 16, 170-71.
- Rapkin, J. A. (1986). Adhesions and pelvic pain, a retrospective study. Obstetrics and Gynaecology,

- 68, 13-15.
- Reading, A. E. (1982). A critical analysis of psychological factors in the management and treatment of chronic pelvic pain. International Journal of Psychiatry Medicine, 12, 129-139.
- Sainsbury, P. (1960). Psychosomatic disorders and neurosis among out-patients. Journal of Psychosomatic Research, 4, 261-265.
- Shah, P. N.; Naik, S. N. and Dave, M. J. (1961). Some observations on the etiology of primary amenorrhea—analysis of 44 cases. Journal of Obstetrics and Gynaecology of India, 12, 258-65.
- Shukla, G. D.; Mishra, D. N., and Agarwal, A. K. (1982). Non organic dyspepsia—A controlled psychosomatic study. Indian Journal of Psychiatry, 24, 280-283.
- Shukla, G. D. and Srivastava, R. P. (1983). A psychiatric study of cases attending dental OPD of a teaching general hospital. Indian Journal of Psychiatry, 25, 198-202.
- Smith, D. H. (1979). Psychological aspects of gynaecology and obstetrics. Obstetrics and Gynaecology Annual, 457-473.
- Socio-economic Status Scale (1981). Developed by Indian Council of Medical Research, In: Project on the problems of aged seeking psychiatric help.
- Sri Ram, T. G.; Shama Sunder, C.; Mohan, K. S. and Shanmugham, V. (1986). Psychiatric morbidity in

- medical out-patient of a general hospital. Indian Journal of Psychiatry, 28, 325-28.
- Srivastava, O. N.; Bhat, V. K. and Singh, G. (1975). A study of neuroticism in skin patients. Indian Journal of Psychiatry, 17, 37-44.
- Surtees, P. G.; Dean, C.; Ingham, J. G.; Kreitman, N. B.; Mc Miller, P. and Sashidhram, S.P. (1983). Psychiatric disorders in women from an Edinburgh community sample. British Journal of Psychiatry, 142, 238-246.
- Verma, S. K. and Wig, N. N. (1976). Standardization of a neuroticism questionnaire in Hindi. Indian Journal of Psychiatry, 19, 57-72.
- Weissman, M. M. and Myers, J. K. (1978). Rates and risks of depressive disorders in a U. S. Suburban community. Acta Psychiatrica Scandinavica, 57, 219-231.
- Wing, J. K.; Cooper, J. E. and Sartorius, N. (1974).
 The measurement and classification of psychiatric symptoms. Cambridge: Cambridge University Press.
- World Health Organization (1978). Mental disorders. Glossary and guide to their classification in accordance with the ninth revision of the International Classification of Diseases, Geneva: W. H. O.
- Worsiey, A. and Walters, W. A. W. (1977). Screening for psychological disturbances amongst gynaecology patients. Australia and New Zealand Journal of Obsetetrics and Gynaecology, 17, 214-219.