

PSYCHOLOGICAL PROFILE OF FEMALES WITH CHRONIC PELVIC PAIN

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ABSTRACT

The study sample consisted of 90 females with nonorganic pelvic pain, selected from Gynaecology OPDs of Smt. S.K. Hospital and Swami Dayanand Hospital. Majority of patients were young, married, Hindu, illiterate, housewives, belonging to low socioeconomic group and living in nuclear families. Majority of the patients had pain that had lasted between 1 and 5 years. Pain was of dull, mild type. These patients scored significantly higher than controls in the free floating anxiety, somatisation, depression and hysteria subscales of Middlesex Hospital Questionnaire. 54.4% of the patients in the study group scored between 8 to 15 on the Hamilton Rating Scale for depression.

Key words : Pelvic pain, Gynaecology O.P.D., Depression, Anxiety.

INTRODUCTION

Pain is a universal human experience. It is also a communicative process and is developmentally linked with solace, punishment, aggression, loss and sexuality (Blackwell, 1989). Pain is one of the most common complaints in medical practice and pelvic pain is one of the commonest complaints among young and middle aged women treated as gynaecological out-patients (Byrne, 1984, Agarwal et al, 1990). Women with pelvic pain and no demonstrable organic cause are, as a group, psychologically different from women without pelvic pain. They tend to be more neurotic and to have abnormal attitudes toward their own and their partner's sexuality and form less rewarding relationships (Beard et al 1977). Chronic pelvic pain is defined as pain, (excluding dysmenorrhoea) in the lower abdomen for at least 6 months. (Pearce & Beard 1990). About half of all elective diagnostic laproscopies for CPP (chronic pelvic pain) yield negative findings, i.e. no visible pathology to explain the pain (Semchyshyn and Stricker 1976).

The psychological profile of patients with idiopathic pelvic pain has been studied earlier by various psychiatrists. Calsyn et al (1976), Leavitt

(1985) and Franz et al (1986), reported significantly higher scores on hypochondriasis, hysteria and depression scales of Minnesota Multiphasic Personality Inventory (M.M.P.I.) in non-organic pelvic pain patients, some studies (Molinsky, 1979; Kramlinger et al, 1983, and Magni et al 1984) reported masked depression in patients with idiopathic low backache and chronic pelvic pain.

Henker (1979) reported pelvic pain to be a prominent complaint in 1/3rd of gynaecology clinic patients. In 1.1%, no causative physical disorder could be found and these patients failed to respond to routine therapy. Most of these patients revealed some psychological disorder including hysteria, passive-aggressive behaviour, sociopathy, depression and alcoholism.

Hodgkiss and Watson (1994) screened gynaecology inpatients for psychiatric disorder and illness behaviour on the eve of elective laproscopy. Patients with chronic pelvic pain reported significantly more depressed mood and illness behaviour than those without pain. They also compared CPP patients with relevant structural pathology at laproscopy to those with negative laproscopy findings and reported that the two groups did not differ on measures of psychiatric

morbidity or illness behaviour.

AIMS & OBJECTIVES

The present study was planned to study the psychological profile of patients with pelvic pain having no obvious organic cause to account for their pain, and to compare them with a control group.

MATERIAL AND METHODS

The study was undertaken in the departments of Gynaecology and Obstetrics of the Lady Hardinge Medical College, Smt. Sucheta Kriplani Hospital, and Swami Dayanand Hospital, Delhi. The study group consisted of 90 patients who came to the out patient department of Gynaecology and Obstetrics with the presenting complaints of pelvic pain for a duration of at least 6 months. These patients were first interviewed and examined by a gynaecologist. The interview consisted of sociodemographic details (age, marital status, literacy, occupation and socioeconomic class) medical history, gynaecological history and a detailed history about the pain (type, onset, duration, radiation, severity, aggravating and relieving factor). The patients were then clinically examined to rule out any possible organic cause resulting in pain. If required, opinion was taken from a surgeon, physician or orthopaedician to rule out any other disease causing the pain. Also, when needed, certain relevant investigations (X-ray pelvis, Papanicolou's smear, ultrasound) were done to exclude any disease causing the pain.

The patients having past history of mental illness were not taken up for the study. The patients were given two questionnaires - Middlesex Hospital Questionnaire (M.H.Q) (standardised in Indian population by Bhat and Srivastava 1974) and widely used in Indian population to assess neuroticism and the Hamilton Rating scale for assessing depression and its severity. M.H.Q. scale was used to study the different subgroups of neurotics out of the patients with non-organic pelvic pain. The control group of 90 females for comparison purposes were chosen from the at-

tendants accompanying the patients. These were matched with the study group in terms of age, education, occupation, social class etc. The women in the control group with a gynaecological or other chronic physical illness were excluded from the study. The control group was also subjected to the same psychological assessment as the study group.

The observations were analysed using the students's test.

RESULTS

The mean age of the patients in the study and control groups were 31.4 years (SD±8.2). Majority of the females in the study group and control group (41.1% and 45.5% respectively) were in the age group of 26 to 35 years. Most of the females in both the study and the control groups were married (85.5% and 92.2% respectively), Hindus (73.3% in both), illiterate (57.8% and 67.8% respectively) and housewives (94.4% and 95.6% respectively). More women were from the low socio economic group (class IV) - 58.9% of the study group and 60% of the control group.

Within the study group 70% of patients lived in a nuclear family and 30% in a joint family, while in the control group the respective percentages were 64.4% and 35.6% (The term nuclear family refers to a married couple and their children, as long as they are dependent ; while the joint family refers to one where a number of married couples and children live together, all are blood - relatives and share a common kitchen).

Majority (65.6%) of patients with pelvic pain had pain that had lasted 1-5 years, 18.8% had pain for more than 5 years and 15.6% had pain for less than 1 year. Most patients (57.8%) reported mild pain, 35.6% had moderate pain and only 6.6% of patients reported severe pain. (Mild pain is defined as an irritating type of pain present continuously, but not interfering with the patient's biological and social functioning. Moderate pain is that which is present continuously at times interfering with patient's biological and so-

cial functioning ; severe pain is that which interferes with all the activities of the patient while it is present). 'Dull' type of pain was described by the majority of patients (53.3%).

M.H.Q. has subscales for Free Floating Anxiety (FFA), Phobic Anxiety (PHO), Somatisation (SOM), Depression (DEP) and Hysteria (HYS). The patients with chronic pelvic pain had significantly higher scores on all the subscales of MHQ as compared to the control group (Table I).

Table-1
Middlesex Hospital Questionnaire (M.H.Q)
subscale scores

M.H.Q. Subscales	Study Mean + S.D.	Group Control Mean + S.D.	T Value	P Value
Free Floating Anxiety	8.16 + 2.62	5.90 + 2.37	4.52	P<0.001
Phobic Anxiety	5.64 + 2.75	4.82 + 2.49	1.56	P<0.05
Somatisation	8.06 + 2.43	5.62 + 2.22	5.24	P<0.001
Depression	7.66 + 2.47	5.70 + 2.22	3.69	P<0.001
Hysteria	6.18 + 2.58	4.86 + 2.50	2.59	P<0.02

Score obtained from H.R.D.S showed that 20.0% of the patients in the study group had scores in the range of 0 to 7, whereas 77.8% of the normal subjects scored in this range. 54.4% of the study group had a score between 8 to 15, compared to 13.3% of the subjects in the control group; 25.6% of the patients in the study group and 8.9% of the subjects in control group scored more than 15 on H.R.D.S (Table 2).

Table-2
Scores obtained by the study and the Control Group in H.R.S.D.

H.R.S.D. Score	Study Number of cases	Group (%)	Control Number of subjects	Group (%)
0-7	18	(20.0)	70	(77.8)
8-15	49	(54.4)	12	(13.3)
>.15	23	(25.6)	8	(8.9)
Total	90	100	90	100

DISCUSSION

In the present study, a majority of the patients with pelvic pain with no associated organicity belonged to younger age groups (73.3% were below 36 years with an average age of 31.4 years). This was similar to studies by Nagi et al (1973), Magni et al (1986) and Agarwal et al (1990).

In the present study, 65.6% of the women with nonorganic pelvic pain had pain which had lasted between 1 year to 5 years. 57.8% had reported a mild pain and 53.3% had a dull type of pain. This finding is consistent with the study conducted by Beard et al (1977), who also reported that a majority of their patients had mild, dull type of pain. In the present study it was found that females with pelvic pain had significantly higher scores of FFA ($p < 0.001$) than controls on M.H.Q. This is similar to findings reported by Beard et al (1977), Ragner et al (1979) and Magni et al (1986).

The patients with nonorganic pelvic pain in the present study had a higher PHO scores than controls, but the difference was not statistically significant. This was consistent with studies by Magni et al (1984 and 1986).

In the present study chronic pelvic pain patients scored significantly higher than the controls on the SOM subscale of M.H.Q. ($p < 0.001$). This is consistent with the studies by Magni et al (1984 and 1986), who reported that their patients had higher somatization scores on scales and complained of more somatic symptoms than normals. Using M.M.P.I. (Minnesota Multiphasic Personality Inventory) Calsyn et al (1976), Caldwell and Chase (1977), Raener et al (1979), Henker (1979), Leavitt (1985) and Franz et al (1986) who reported that nonorganic pelvic pain patients had more of hysterical symptoms than normals.

There were statistically significant higher scores for depression in patients with chronic pelvic pain than normals ($p < 0.001$). In a survey of gynaecology outpatients by Agarwal et al

(1900) and Byrne (1984), pelvic pain was the commonest complaint with which patients attended gynaecology O.P.D., and it was associated with highest psychiatric illness. Most of the patients in the study group (80.0%) had scores more than 7 in H.R.S.D. Caldwell and Chase (1977), Raener et al (1979), Magni et al (1984 and 1986) and Leavitt (1985) reported in their studies that pelvic pain patients have more depressive symptoms, have masked depression or score more than normals on depression scales.

It is evident from the study that patients having non organic pelvic pain have higher scores on M.H.Q., (on anxiety, somatization, depression and hysteria subscales) and on H.R.S.D. There is a definite role for psychotropic drugs (antidepressants and anxiolytics), psychotherapy or behaviour therapy depending on the predominant psychopathology. This group of patients can be helped considerably if psychiatric care is provided to them. There should be close liaison between the departments of psychiatry and gynaecology. This study clearly emphasises the need for careful screening of those patients in the gynaecology out patient department who complain of pelvic pain. By indentifying such patients and providing them with proper psychiatric care, we will be avoiding unnecessary investigations, medication and suffering by the patient as these patients do not respond to the usual treatment. This will also help in reducing the unnecessary work load of the doctors in the gynaecology outpatient department.

REFERENCES

- Agarwal, P., Malik, S.C., and Padubidri, V. (1990) A study of psychiatric morbidity in gynaecology out patient clinic. *Indian Journal of Psychiatry*, 32, 57-63.
- Beard R.W., Belsey E.M, Liberman B.A, and Wilkinson J.C.H. (1977) Pelvic pain in women. *American Journal of Obstetrics & Gynaecology*, 128, 566-570.
- Bhat, V.K. and Srivastava, O.N. (1974). The Middlesex Hospital Questionnaire (M.H.Q.) standardisation on a Hindi version. *Indian Journal of Psychiatry*, 16, 283-286.
- Blackwell, B, Galbraith, J.R., Dahl, D.S. (1984). Chronic pain management. *Hospital and Community Psychiatry* 35, 999 - 1008.
- Byrne, P. (1984). Psychiatric Morbidity in gynaecology clinic, an epidemiological survey. *British Journal of Psychiatry*, 144, 28-34.
- Caldwell, A.B. and Chase, C (1977). Diagnosis and treatment of personality factors in chronic low back pain. *Clinical Orthopaedics*, 129, 141-149.
- Calsyn, D., Freeman, C. and Lowks, J. (1976). The use of M.M.P.I. in low back pain patients. *Journal of Clinical Psychology*, 32, 294-298.
- Franz, C., Paul, R., Bautz, M., Choroba, B. and Hildebrandt J. (1986). Psychosomatic aspects of chronic pain - a new way of description based on M.M.P.I. item analysis. *Pain*, 26, 33-43.
- Frymoyer, J.W., Rosen, J.c., Clements, J. and Pope, M.H. (1985). Psychological factors in low back pain disability. *Clinical Orthopaedics*, 195, 179-184.
- Gilchrist, I.C. (1976). Psychiatric and social factors related to low back pain in general practice. *Rheumatologic Rehabilitation*, 15, 101-107.
- Gross, R.J., Doerr, N, Caldirola, D, Guzinski, G and Ripley, H.S. (1981). Borderline syndrome and incest in chronic pain patients. *International Journal of Psychiatry in Medicine* 10, 79-86.
- Henker, F.O. (1979). Diagnosis and treatment of non organic pelvic pain. *Southern Medical Journal*, 72, 1132-1134.
- Hodgkiss, A.D., Watson, J.P. (1994). Psychiatric morbidity and illness behaviour in women with chronic pelvic pain. *Journal of Psychosomatic Research*, 38, 3-9.
- Kr mlinger, K.G., Swanson, D.W. and Maruta, T. (1983). Are the patients with chronic pain depressed ? *American Journal of Psychiatry*, 140, 747-749.

Leavitt, F. and Garron, D.C. (1979). The detection of psychological disturbances in patients with low back pain. *Journal of Psychosomatic Research*, 23, 149-154.

Leavitt, F. (1985). The value of MMPI conversion 'V' in the assessment of psychogenic pain. *Journal of Psychosomatic Research*, 29, 125-131.

Magni, G. (1984). Chronic back pain. *Acta Psychiatrica Scandinavica* 70, 614-617.

Magni, G., Salmi, A., de LEO, D. and Ceola, A. (1984). Chronic pelvic pain and depression. *Psychopathology*, 17, 132-136.

Magni, G., Andreoli, C., de LEO, D., Martinotti, G. and Rosi, C. (1986). Psychological profile of women with chronic pelvic pain. *Archives of Gynaecology*, 237, 165-168.

Molinski, H. (1979). Masked depression in obstetrics and gynaecology. *Psychotherapy Psychosomatics*, 31, 283-287.

Nagi, S.Z., Riley, L.E. and Newby, L.E. (1973). A social epidemiology of low back pain in general population. *Journal of Chronic Diseases*, 26, 769-779.

Pearce, S., Beard, R.W. (1990). Chronic pelvic pain in women in *Somatization. Physical Symptomatology and Psychological Illness* (ed., Bass, C.) Oxford, Blackwell Scientific publication.

Raener, M., Vertemmen, H., Nijs, P., Wagemans, L. and Van Hamelrijck, T. (1979). Psychological aspects of chronic pelvic pain. *American Journal of Obstetrics and Gynaecology*, 134, 75-80.

Semchyshyn, S., Strickler, R.C. (1976). Laproscopy : Is it replacing clinical acumen ? *Obstetrics and Gynaecology*, 48, 615-618.

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