

## Somatization Disorder Among Primary Health Care Centers Patients.

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### الخلاصة

تمت الدراسة في مراكز الرعاية الصحية الأولية في محافظ الديوانية لدراسة اضطراب الجسدنة . تم اختيار مجموعة عشوائية ل678 مريض من مركزين مختلفين لدراسة مدى انتشار هذا الاضطراب و قد بينت الدراسة:

- 1- إن نسبة انتشار اضطراب الجسدنة هو 14,6% بين مرضى مراكز الرعاية الصحية الأولية.
- 2- اضطراب الجسدنة أكثر انتشارا في الفئة العمرية بين (46-55) سنة بحوالي 19,1%.
- 3- إن هذا الاضطراب أكثر حدوثا لدى النساء، المطلقين، الأميين، ذوي الدخل المحدود و كذلك عند العاطلين عن العمل.
- 4- أظهرت الدراسة إن آلام المفاصل والأطراف هي أكثر الأعراض انتشارا بين المرضى.

### Abstract

**Background:** Somatization disorder is multiple medically unexplained symptoms of long duration & involve multiple organ systems.

**Objectives:** To study the prevalence of somatization disorder among patients of PHC. Centers and the role of the various socio-demographic factors also demonstrate the presentation & clinical pattern of somatization disorder.

**Methods:** Out of 678 patients who were selected randomly from two of primary health care centers in Diwaniya city over a period from the first of October 2009 to 31<sup>th</sup> December 2009. These patients were interviewed using the International Diagnostic checklist for ICD-10 somatization disorder.

**Results:** The study reveals that 14.6% of the patients have Somatization Disorder. and it is most common among (46-55) years age group (19.1%), females (19.7%), divorced (27.8%), illiterate (24.3%), low family income (21.2%) & unemployed (17.0%) patients.

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Somatization Disorder was least common among age group(15-25) years(4.5%), male(8.1%), married(12%), highly educated (7.3%), high family income(6.7%) & employed(11.8%) patients.

The most common presentation of somatization disorder. was pain in limbs, extremities or joints( 81.8%) .

**Conclusions** : Somatization Disorder. is relatively common in PHC. visitors & this represent a big burden on health institutions if remain undiagnosed for long period.

**Key words** : somatization disorder (SD), primary health care centre (PHC) .

## **Introduction**

Somatization disorder is multiple medically unexplained somatic complaints of long duration beginning before the age of 30 & involve multiple organ systems (1).

An early name of somatization disorder was hysteria, a condition incorrectly thought to affect only women. The term hysteria was introduced by Hippocrates as form of mental illness in fifth century BC. The word hysteria is derived from Greek word of uterus, hysteria (2). At that time the disorder was thought to result from abnormalities of position or function of uterus, a view that persisted until the 17<sup>th</sup> century. Gradually, the idea became accepted that hysteria is a disorder of the brain & by the 19<sup>th</sup> century, the importance of predisposing constitutional & organic causes of this brain disorder was recognized. It was accepted also that the usual provoking cause was strong emotion. Hysteria also was studied by Freud & Josef Breuer & they published studies on hysteria in 1869 (3).

In 1859, Paul Briquet, a French physician, observed the multiplicity of symptoms& affected organ systems. Because of these clinical observations, the disorder was called "Briquet's syndrome" (2).

The term somatization was introduced at the beginning of the 20<sup>th</sup> century by Stekl, a German psychoanalyst, to describe the expression of emotional distress as bodily symptoms. More recently, the term has been used to describe the disorder& the process producing it (4).

The criteria for diagnosis of somatization disorder change with time, e.g. the original criteria set forth by Washington University

group required the presence of 25 symptoms from a list of 59 possible symptoms (5), DSM-III set the threshold of diagnosis at 12 symptoms out of 37 possible symptoms for males & 14 of 37 possible symptoms for female (6), DSM-III-R further decrease the symptoms count to 13 but the same threshold was set for both sexes (7), while the DSM-IV decrease the overall number of symptoms to 8 come from 4 designated organ systems (8).

Somatization disorder did not appear in DSM-I or DSM-II, it appear first in DSM-III & later in DSM-III-R & DSM-IV (9).

In ICD-9 somatization disorder was included in somatoform disorders group and the latter was part of neurotic disorders groups, while in ICD-10 the main group is called neurotic, stress related and somatoform disorders. Somatization disorder is part of somatoform Disorders group (10).

According to DSM-IV-TR, we diagnose somatization disorder when there is a history of many physical complaints (4 pain, 2 gastrointestinal, 1 sexual & 1 pseudoneurological symptoms) beginning before 30 years of age that occur over a period of several years & result in treatment being sought or significant impairment in social, occupational, or other important area of functioning.

The symptoms are not intentionally produced (11).

In ICD-10 there must be history of at least 2 years' complaints of multiple & variable physical symptoms [here there is a list of 14 possible symptoms in 4 groups: gastrointestinal, cardiovascular, genitourinary & skin & pain symptoms, the threshold for diagnosis is 6 out of these 14 symptoms at least from 2 groups] (10).

So the differences between 2 systems are there is no pseudoneurological symptoms in ICD-10, DSM-IV has different gynecological & sexual symptoms from those found in ICD-10. Moreover, ICD-10 requires at least 6 symptoms from 4 groups whereas DSM-IV requires 8 symptoms from its 4 groups. Finally ICD-10 is specific about duration of the disorder-2 years-whereas DSM-IV requires that some of the physical complaints have their beginnings before age 30 (9).

The reported prevalence of somatization disorder depend on assessment methods used, however most studies mention that the disorder is more common in medical setting (12), in women (4) & among people who have little education & low family income (9).

Somatization disorder commonly coexists with other mental disorders, about 2\3 of all patients with somatization disorder have identifiable psychiatric symptoms & up to 1\2 of them have other mental disorders, but 2 disorders not seen more commonly in

patients with somatization disorder are bipolar-1 disorder & substance abuse (2).

The prevalence of somatization disorder as reported by different studies are as following:

-Grabe et al(2003) found that somatization disorder in general population <1%, in primary care setting 5-10%, male\female ratio 1:5 to 1:6 (13).

-Orenstein (1989) noticed that somatization disorder in general population <1%, in primary care setting 10% (14).

-In general population 1-4%, in medical settings 10- 20% (15).

In somatization disorder there is misinterpretation of the significance of normal body sensations e.g. sinus tachycardia, benign minor arrhythmias, effect of fatigue or over eating ...etc this lead to over concern about them & focus attention on them this result in apprehension & anxiety & lead to exacerbation & maintainance of the symptoms (16).

Different sources mention to other causes of somatization disorder such as adverse experiences especially in childhood (4), poor social circumstances (17), personality as they found there is association between somatization disorder & certain personality traits & disorders such as those characterized by avoidant, paranoid, self-defeating, & obsessive-compulsive features (18).

Somatization disorder tends to run in families & occurs in 10-20% of the first degree female relatives of probands of patient with somatization disorder while first degree male relatives are susceptible to substance abuse & antisocial personality disorder (2).

Other factors that maintain somatization disorder are repeated seeking information about illnesses, emotional factors especially chronic anxiety & depression & lastly reaction of others such as doctors & family (19).

Somatization disorder is best treated when the patient has a single identified physician as primary caretaker who should see patient during regularly scheduled visits (2).

Additional laboratory & diagnostic procedures should be avoided (20).

CBT is moderately effective in treatment of somatization disorder (21), & help the patient to cope with their symptoms, to express underlying emotions & to develop alternative strategies for expressing their feelings (22).

Antidepressant drugs have been shown to have a role in reducing many unexplained complaints, especially pain & these agents are effective whether or not the patient is depressed (23)

## **Patients and Methods**

Through out a period from the first of October 2009 to the 31th of December 2009, 678 patients of two PHC. centers in Diwaniya city is studied to find out the prevalence of Somatization disorder among them. To perform this study we use the systematic sampling technique, in this technique we choose the 20<sup>th</sup> individual as Kth rank order (i.e we select number 1-20-40-60...etc.) .

Considering the age, the sample have been chosen over 15 years. In the rank 20<sup>th</sup> if the individual is under 15 the next will be taken.

The International Diagnostic Checklist (IDCL) for international classification of disease 10<sup>th</sup> edition (ICD-10) for diagnosis of somatization disorder is used.

Permission obtained from Ministry of Health & Health Directorate in Diwaniya city were taken.

In this study verbal consents were taken from the patients. The data were analyzed using degree of freedom (dof), chi-square test & probability (P. value) were computed for the differences between groups & estimating the strength of association of the risk factor & the occurrence of the disorder.

P-value recorded lesser than 0.05 was considered to have statistical significance.

## **Results**

This study shows that the prevalence of Somatization disorder in the primary health care centers is (14.6%).

As far as the age is concerned, somatization disorder is most common in group of (46-55) years (19.1%) & least common in group of (15-25) years (4.5%), & it is most common among females (19.7%) than males (8.1%) with a sex ratio of female\male (2.4:1).

According to marital status it is found that somatization disorder is most common in divorced patients (27.8%) in comparable with married patients (12%). In addition, it is most common in illiterate (24.3%) & low family income (21.2%) patients but least common in highly educated (7.3%) & high family income (6.7%) patients. Moreover it is concluded that somatization disorder is most common among unemployed (17%) patients & less common among employed (11.8%) ones. In our study the most common presentation of somatization disorder is the pain in limbs, extremities or joints (81.8%), followed by nausea (78.8%).

The results are shown in the following tables:

**Table(1)Prevalence of Somatizatin Disorder. (somatization disorder) among primary health care (PHC) patients.**

ALL patients	SD.	%
678	99	14.6%

**Table(2)Prevalence of Somatization Disorder among primary health care (PHC) patients according to age.**

Age groups	All patients	SD. patients	%
15 – 25 year	66	3	4.5%
26 – 35 year	96	9	9.4%
36 – 45 year	105	18	17.1%
46 – 55 year	141	27	19.1%
56 – 65 year	183	33	18.0%
>65 year	87	9	10.3%
All	678	99	14.6%

Chi square=13.125

Dof=5

P. value=0.02

**Table(3)Prevalence of somatization disorder among PHC. patients according to sex.**

Sex	All patients	SD. patients	%
Female	381	75	19.7%
Male	297	24	(8.1%)
All	678	99	14.6%

Chi square=4.840

Dof=1

p. value=0.02

**Table(4)Prevalence of somatization disorder among PHC. patient according to marital status.**

marital status	All patients	SD. patients	%
Married	399	48	12.0%
Unmarried	156	24	15.4%
Divorced	54	15	27.8 %
Widow	69	12	17.4%
All	678	99	14.6%

Chi square=7.544

Dof=3

p. value=0.05

**Table(5)Prevalence of Somatization Disorder among PHC patients according to educational levels.**

educational levels	All patients	SD. Patients	%
Illiterate	111	27	24.3%
Primary school	246	45	18.3%
Secondary school	198	18	9.1%
> Secondary school	123	9	7.3%
All	678	99	14.6%

Chi square=12.965

Dof=3

p. value=0.005

**Table(6)Prevalence of Somatization Disorder among primary health care patients according to family income.**

family income*	All patients	SD. Patients	%
Low income	297	63	21.2%
Moderate income	291	30	10.3%
High income	90	6	6.7%
All	678	99	14.6%

Chi square=8.955

Dof=2

P. value=0.01

\*Low income: the income of the patient and his or her family is not sufficient for his or her daily requirement.

\*Moderate income: the income of the patient and his or her family is sufficient for his or her daily requirement.

\*High income: the income of the patient and his or her family is sufficient for his or her daily requirement and for extra needs.

**Table(7)Prevalence of Somatization Disorder among PHC. patients according to Job status.**

Job status	All patients	SD. patients	%
Employed	306	36	11. 8%
Un- employed	318	54	17.0%
Retired	54	9	16.7%
All	678	99	14.6%

Chi square=1.124

Dof=2

P. value=0.57

**Table(8)Presentation of Somatization Disorder among primary health care visitors.**

Physical symptoms	SD. patients	%
1-Abdominal pain.	72	72. 7%
2- Nausea	78	78. 8%
3-Feeling bloated or full of gas.	77	77. 6%
4-Bad taste in mouth, or excessively coated tongue.	24	24. 2%
5-Complaints of vomiting or regurgitation of food.	57	57. 6%
6-Complaints of frequent& loose bowl motions or discharge of fluids from anus.	39	39. 4%
7-Breathlessness without exertion.	77	77. 8%
8-Chest pain.	45	45. 5%
9-Dysuria or complaints of frequency of micturation.	54	54. 5%
10-Unpleasant sensations in or around the genitalia.	18	18. 2%
11-Complaints of unusual or copious vaginal discharge.	2	%2.2
12-Complaints blotchiness or discoloration of the skin.	12	12. 1
13-Pain in limbs extremities or joints.	81	81. 8%
14-Unpleasant numbness or tingling sensations.	42	42. 4%



## **Discussion**

The aim of this study is to explore the prevalence, socio-demographic background & clinical presentations of somatization disorder.

This study shows that the prevalence of somatization disorder in PHC. visitors was 14.6% as shown in(table-1) this result goes with what( Sharpe M, et al 2001) have noticed(24).

Other studies have mentioned lower percentages: (Orenstein H. 1989), (Fink P, et al 1998), (Simon G, et al 1996):10%, 2%, 1% respectively (14, 17, 25).This relatively big differences may be due to different assessment methods used (4).

Most of our patients were in age group (46-55) years as shown in (table-2). (Purtell, J. J. et al 1951) declares that the age onset of somatization disorder is from early childhood to 35 years (26). It is most active in early adulthood but full remission is rare (27). As far as our study is concerned, in early adulthood people have fewer tendencies to present their complaints in PHC.centers.

In this study we notice that Somatization Disorder is more common among females, female/male ratio was (2.4:1) as shown in (table-3), this result is coincident with what (Kroenke, K. et al 1998) have concluded (28). This is due to the fact that female has more tendency to convert their emotional distress to physical complaint (2).

Also the study revealed that somatization disorder is most common in divorced patients as shown in (table-4). This finding is inconsistent with what (Ustun, T.B. et al 1995) have concluded .They found that somatization disorder .is most common among single patients (29). This inconsistency may be due to the psychological trauma of divorce is more in our society than in western societies.

(Table-5) shows significant association between somatization disorder & educational level, it was most common among illiterate patients, this finding goes with what (Gureje, O., et al 1997) have noticed (30). This may be due to the fact that uneducated people have less ability to manage their emotions in correct ways & they express them physically not verbally (31).

Also we found that somatization disorder is more common in patients with low family income, as shown in (table-6). This result coincident with what (Kirmayer, L.J et al 1991) have concluded (32), this can be referred to the fact that low family income represent a continuous psychological stress on the patient.

Our study revealed that unemployment factor statistically not significant as shown in (table-7); since high percentage of our sample

is consist of housewives whom they may be satisfied in their duties. This contradicts to what (Escobar JI et al 1989) have found (12).

The most common presentation of somatization disorder was pain in limbs, extremities or joints followed by breathlessness without exertion & nausea, as shown in (table-9). Knowing such information may help the general practitioners in PHC.centers to diagnose somatization disorder correctly.

### **Conclusions:**

- 1- Somatization disorder is relatively common in PHC.visitors & this represent a big burden on health institutions if remain undiagnosed for long period
- .2- Somatization disorder was significantly higher among age group 46-55 years old, female, divorced, uneducated & low family income patients.
- 3-The most common presentation of somatization disorder in this study was pain in limbs, extremities or joints

### **Recommendations**

- 1-PHC.professionals should be aware about characters, management & natural history of somatization disorder.by training courses & booklets.
- 2-Proper referral to psychiatric unit of suspected cases of somatization disorder to avoid unnecessary investigations & treatment.
- 3-Public education about somatization disorder

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