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# Predict How Somatoform Disorder Patients Can Expand Their Coping Strategies for Dealing with Difficult Challenges in Life

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#### INTRODUCTION

Coping strategy is a specific behavioral and psychological pattern through that people can be able to tolerate, reduce, or minimize stressful events and can make decision. It is an emotional, cognitive and behavioral response of a patient to an illness. Coping process is concerned about at least two stages: Is this something to bother about? What can I do about it? Emotional, cognitive and behavioral response can vary from man to man even can occasionally be quite unpredictable in the same patient due to every patient is a unique person.

Conceptually stress and coping is as dynamic interaction between a person and his/her environment. The perception or appraisal of the stressful event is more important to them rather than the event itself, predominately determines coping behavior [1, 2]. In the field of stressful and threatening internal as well as external demands, coping has been defined as the synthesized emotional, cognitive and behavioral pattern which one uses to manage or escape from the stressful the capacity to adopt stress and adversity [4]. The development of anticipatory, proactive strategies is an equally important coping pattern which is facilitated to prevent or minimize detected potential stressor [5]. Stress and coping both is dynamic as well as interactional model with that also they are theoretically and clinically important because stress occurrence and parallels coping responses affect psychologically as well as physiologically that affect psychological adjustment, [6]. Medical outcomes and health-related quality of life in both clinical [7, 8] and non-clinical adults [9]. In other words, it can be said that identifying distinct coping strategies that are associated with positive outcomes. Specifically, for chronic illnesses that addresses the disease-specific imperative to focus on translational therapeutic actions that promote meaningful clinical change in quality of life [10]. Thus, the identification and application of unique coping strategies are both difficult in the development of effective interventions for specific chronic illness such diabetes mellitus, cardio-vascular disease, and as

event [3] Resilience is a desirable coping pattern (i.e.

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chronic pain, rheumatoid arthritis and somatoform disorders [11, 12]. In this interactional model, coping flexibility has been functionally defined as variability in coping style, depending on the different aspects of situations. A person's ability to cope with stressful situations depends on the perception of the situation and good fit between available coping strategies and a particular situation, as well as the prediction of their effectiveness in attaining the desired goal [13, 14]. In order to manage specific external and internal stressful events coping strategies are continuously changing cognitive, behavioral, and emotional efforts that are taxing or exceed the individual's resources [15, 16]. Coping skills can influence both illness-related behaviors psychological or physical symptoms, such as somatoform disorder [17] panic disorder [18] and chronic fatigue syndrome [19]. Coping is positive behavioral pattern which has a relationship with mental health and quality of life. General stress coping strategies focused might be useful in reducing the impact of psychological problems [20]. Proper ways of coping strategies protect the individuals from obtaining mental health problems [21]. While task-based coping strategies are found to enhance mental health and evoke psychological well-being, emotion-focused coping strategies are thought to cause psychological problems [22]. Through the coping strategy questionnaire find out the kinds of the situations that trouble people in their day to day life and how people deal with them. The present study endeavored to investigate coping strategies in the patients with somatoform disorder.

The present study was to predict which type of coping strategy somatoform disorder patients preferred to adopt: problem focused or emotional focused. Along with, signify whether sociodemographic factors play an important role in adaptation of various coping strategy or not. To determine validity of important outcomes such as functional impairment and use of health care service.

# MATERIALS AND METHODS Study Design

The present cross-sectional and observational study was designed using validated tools and structured face to face interview.

# **Patient Selection**

The study was conducted in a Government medical college and hospital, West Bengal India in purely psychiatric setup and those patients with clinically somatoform disorder considering exclusion and inclusion criteria were selected between 15.3.2016 to 1.12.2016. Diagnosis was made through detail psychiatric evaluation using Mini International Neuropsychiatry Interview (MINI) and DSM-5.

In the experimental group total 72 patients attending the psychiatry OPD, India and already

diagnosed with somatoform disorder were included considering inclusion and exclusion criteria. On the basis of number of somatic symptoms, as determined by the *Diagnostic Interview Schedule*: Patients were divided in to two groups: somatic syndrome group (at least four or six medically unexplained symptoms, respectively, and minimum symptom duration of six months) and somatic sub syndrome group (only one to three medically unexplained symptoms for six-month duration) [23].

# Inclusion criteria

- Should be 30-60 years of age
- Should be diagnosed somatoform disorder according to the criteria of DSM-5.
- Treatment duration of illness should be maximum 1 year.

# **Exclusion criteria**

- No history of physiological complain
- No history of major metabolic disorder like diabetes and hypothyroidism.
- Intellectually disable person and substance users.

#### DATA COLLECTION

#### **Coping Strategy Inventory**

Coping strategy of the patients were measured by Coping Strategy Inventory [24]. This scale is measured eight categories of coping strategy i.e. problem solving, cognitive restructuring, social support, self-criticism, wishful thinking, social withdrawal, expressed emotion, problem avoidance. Coping strategy Inventory rated five-point Likert scale. Reliabilities of the scale for present study were found to be 0.85. Moreover, the alpha reliabilities of the subscales were calculated and they were found to be 0.77, for activepractical coping, 0.55 for active-distracting coping, 0.71 for avoidance-focused coping and 0.81 for religionfocused coping subscales.

# Procedure

Those who met inclusion and exclusion criteria of each group had given a written consent to participate in the study. Study protocol was approved by Ethics Committee. Data were collected via interview and assessment of coping strategy. In the questionnaire the items included were sociodemographic characteristics: age, relationship status, level of education, occupation and family income.

# STATISTICAL ANALYSIS

Percentages of frequencies of demographic factors of each sub-group were presented. Means and standard error of the corresponding CSI scores were calculated. Also, we calculated Rank Difference correlation coefficient sociodemographic factors and CSI scores were initially investigated using Univariate analysis. Multivariate Logistic Regression followed after adjustment included in Univariate analysis. The independent variables in analysis were demographic factors and dependent variable was CSI scores.

# RESULTS

While mentioning the demographic distribution of the studied patients the male-female distribution was 74% and 26% respectively and 50% among them were urban people while 50.3% were from rural areas. Age ranges were between below <30 to 60 yrs. Percentage of Patients were lowest (7%) among

below 30 yrs. and highest (53%) among 50-60 years of age group. Among studied patients 93.1% were homemaker and 6.9% were involved in different types of work. The income status of patients ranges from <500 per family household to >3000 per family member. Highest percentage of people (37.6%) was seen in <500 income group while lowest percentages (9.3%) were seen among 2000-3000 income groups and >3000 income group patients (Table 1).

Table-1: Compariso	n of partici	pants in the	somatic sy	yndrome ar	nd somatic sub-s	yndrome groups

Demographic Factor	Number of	Somatic Syndrome	Somatic Sub-	p-value			
	participants	Group (n=49)	syndrome Group (n=23)				
Gender							
Male	74%	9±0.21	11.1±1.2	0.66			
Female	26%	22.1+0.3	29.1±0.2	0.51			
Age							
<30	(7%)	21±.00	23.66±.33	.053			
30-50	(40%)	$16.05 \pm .76$	17.57±.70	0.71			
50-60	(53%)	16.58±1.28	19.25±1.28	0.65			
Education							
Below high school	40.3%	15.48±.82	17.31±.74	0.88			
High school	55.6%	16.21±1.36	18.39±1.32	0.7			
Graduate							
Democracy	50.3%	18.73±1.31	20.73±1.34	0.14			
Rural	50%	16.5±1.06	19.16±.98	0.51			
urban		16.62±.89	18.2±.88	0.6			
<b>Relationship Status</b>							
Married	63%	15.91±.70	17.53±.64	0.44			
Unmarried	7%	15.50±1.6	17.75±1.81	0.52			
Widow	30%	18.15±1.75	21±1.69	0.49			
Occupation							
employed	6.9%	16.39±.78	18.37±.73	0.66			
Housewife	93.1 16.84±.78		18.83±.75	0.21			
Family Structure							
Joint Family	9.7%	$16.05 \pm .88$	18±.91	0.33			
Nuclear Family	4.2%	$16.8 \pm .88$	18.8±.83	0.42			
Income							
<500	37.6%	12.3±1.34	19±1.22	0.54			
500-1000	30.5%	21.34±2.1	8.23±1.3	0.61			
1000-2000	21%	19.5±1.56	12.1±2.1	0.31			
2000-3000	9.5%	10±0.45	17±1.1	0.24			
>3000	1.7%	9.2±0.1	12.12±-0.2	0.39			

There was no statistically significant differences between the somatic syndrome and somatic sub-syndrome groups with regard to demographic characteristics (Table-1). The coping strategy style of patients with an abridged summarizing pattern, as measured by the CSI, is reported in table 2. There was no statistical difference between both groups with perspective of domains of coping strategy.

Table-2: Evaluation of coping strategy according to diagnosis						
Coping strategy inventory	Somatic syndrome	Somatic sub-syndrome	p-value			
Problem Solving	17.27±0.46	11.1±0.023	0.8			
Cognitive Restructuring	15.41±0.5	6.0±0.01	0.77			
Express Emotion	17.29±0.47	10.4±0.31	0.65			
Social Support	16.71±0.51	9.0±0.06	0.9			
Problem Avoidance	16.08±0.5	17.2±0.51	0.54			
Wishful Thinking	16.18±0.49	10.2±0.2	0.29			
Self-Criticism	17±0.53	8.2±0.31	0.6			
Social Withdrawal	16.78±0.53	7.6±0.4	0.21			

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Table 3 distributed effect of variation of coping strategy with respect of sociodemographic variables. The results indicated that age variation significantly affected over-express of emotion (p=0.00). Variation of relationship status plays an important role

in adaptation of problem solving (p=0.00) and cognitive restructuring (p=0.00). in case of education, there have a positive correlation with problem solving(p=0.00), social support (p=0.00) and problem avoidance (p=0.00).

Table 3	: Distribution	of Demogram	ohic Details and	<b>Coping Strategy</b>
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Demographic variable	PS	CR	EE	SS	PA	WT	SC	SW
Age	0.95	.12	.00*	.96	.10	.22	.21	.24
Gender	.21	.46	.41	.16	.45	.19	.44	.20
Residence	.08	.36	.16	.45	.20	.25	.35	.39
Relationship status	.00*	.00*	.21	.17	.32	.21	.25	.41
Education	.06*	.42	.09	.06*	.03*	.49	.35	.09*
Occupation	.12	.18	.09	.27	.35	.19	.36	.15
Family income	0.22	0.41	0.3	0.55	0.6	0.54	0.71	0.8

P=>0.050\*

PS- Problem Solving, CR- Cognitive Restructuring, EE- Express Emotion, SS- Social Support, PA-Problem Avoidance, WT- Wishful Thinking, SC- Self Criticism, SW- Social Withdrawal

#### DISCUSSION

Toshiyuki Tominaga1 2013 had worked over somatoform patients to elicit type of coping strategy needed for the effective treatment of somatoform disorder[25]. In the present study, it was investigated whether patients suffering from somatoform disorder were able to follow coping strategy, type of coping strategy used and also the association between coping strategy used and sociodemographic factors.

This study investigated coping style of patients with somatoform disorder presenting to psychiatric OPD of a Govt. medical college and hospital, Kolkata. The participated patients with an abridged somatic syndrome were similar to patients with the researchvalidated multi somatoform disorder [26, 27 & 28] which is defined as having three or more medically unexplained symptoms and a history of somatization lasting two or more years. The somatic sub-syndrome group appears similar to and representative of patients with the American Psychiatric Association's description of undifferentiated somatoform disorder [29] a diagnosis designed for use in primary care during the early stages of determining whether a patient's symptoms are somatoform. The essential diagnostic criterion for undifferentiated somatoform disorder is one or more medically unexplained symptoms of at least a six-month duration that are not better explained by another somatoform disorder. The patients in our somatic sub-syndrome group reasonably could be viewed as having the mildest form of somatization, but they are still clinically relevant because their functional impairment and healthcare service use are similar to those of patients with a greater number of somatoform symptoms [30].

Relative to managing stress, participated patients with a summarizing syndrome preferred or tended to overuse emotion-focused coping strategies (e.g. distancing, seeking social support and escapeavoidance). This finding is consistent with research on women regarding resilience in response to stress. It also was compatible with the conclusion drawn by Coyne and Racioppo, in which they stated that the positive relationship between emotion-focused coping and psychological distress was the most consistent finding in the coping literature. Comparatively those patients with diagnosed somatic sub-syndrome, they preferably followed cognitive restructuring etc.

Demographically it could be seen that a patient's demographic factors closely related with diagnosis as well as way of coping strategy. Frequency of somatoform disorder in female patients was higher than males and the difference was statistically significant. This finding is consisted with Kroenke K [31]. In their findings elicited women have consistently been shown to report greater numbers of physical symptoms. Our aim in this study was to assess gender differences for specific symptoms and to assess how much of these differences were attributable to psychiatric comorbidity [31]. In the study, women reported more intense, more numerous, and more frequent bodily symptoms than men. This difference appears in samples of medical patients and in community. This sex difference was also significantly associated with one of the coping strategy factor that was expressed emotion. Although previous studies of emotional responding have found that women are more emotionally expressive than men, it remains unclear whether men and women differ in other domains of emotional response [32].58% of somatoform diagnosed patients were higher frequencies coming from rural area rather than urban area. Yet there was not any significant difference between residential difference and diagnosis. It might be cause of their lack of concept regarding somatoform disorder. They do not have proper knowledge regarding link between body and mind. To them psychiatric department is suitable for those who have become mad. In case of relationship status there were found that number of married patients were highest rather than other types of status and this relationship status significantly associated with somatoform disorder. This finding is supported with RG Maharaj et al. [33]. In their study, presented in total, 37.2% were married and 25.9% were single. With that somatoform disorder significantly associated with relationship status. Although coping strategy factors were not associated with relationship status. From this point of view, it can be said a person's coping strategy do not depend upon their relationship status depend upon their knowledge and motivation to cope with it. Among the all age group 20-30 years patients' frequency were higher rather than other age group and this age difference significantly associated with somatoform disorder. This finding is supported with RG Maharaj et al. Their ages ranged from 18 to 93 years, and 54.5% were over 50 years of age and significantly associated with age differences. Age difference is not significantly associated with coping strategy factors. Among somatoform diagnosed patients most of the patients primarily educated. This educational difference was significantly associated with somatoform disorder. In Eastern country most of the people, irrespective of their educational level, do not understand somatoform disorder. They have to come to this department just because Medicine department had referred them. Educational difference was significantly associated with coping strategy. From that point it can be said if the educated patients make them understand the meaning of the stressful transection as it is less threatening, is examined for positive aspects and is viewed a new perspective. In occupational part there was found that most of the patients were housewives. This occupational variation closely associated with somatoform disorder. This finding is consisted with Roy Abraham Kallivayalil et al. [34]. According to their information Somatization is a clinical and public health problem as it can lead to occupational difficulties. Occupational variation significantly associated with two coping strategy factors- one problem solving and another one social withdrawal. That means they had high tendency blaming oneself for the situation as well as try to eliminate the source of stress by changing stressful situation.

# CONCLUSION

In Eastern Country, somatoform disorder patients do not follow any type of coping strategy due to they think this type of disorder is just because of medical reason not for stress. For a healthy society we have to present this result in a large scale among psychiatric patients as well as general population and it should be better to arrange a counselling program to make them understand that sometimes stress manifests through physical symptoms. Patients should be taught different patterns of coping strategies so that they can lead a better quality of life.

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