

# Levels of abuse in mentally ill women and its relationship with health care behavior - An exploratory study

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## Summary

### Objective

Abuse is linked to mental illness, and associated morbidity & mortality in women. Self-management of health is unexplored in women with mental disorders, and this may have therapeutic and preventive implications. This study was conducted to know the level of abuse in women with mental disorder in remission and its relationship with self-management of health.

### Materials and Methods

In this cross sectional hospital based, single centered study, one hundred women were recruited as per selection criteria and assessed with sociodemographic proforma, Composite Abuse Scale (CAS) and Effective Consumer Scale (ECS).

### Results

Eighty six percent had experienced abuse, and 68% percent had experienced severe level of abuse. CAS score was statistically significantly more with employed status ( $p = .000$ ), poor housing condition ( $p = .000$ ), substance use in the family ( $p = .005$ ), low socioeconomic status ( $p = .003$ ) and sympathetic attitude of others ( $p = .000$ ). On multiple linear regression analysis, the level of abuse was negatively associated with 'negotiation of roles and taking control' domain ( $\beta = -2.540$ ,  $t = -2.036$ ,  $p = .045$ ), and positively associated with 'taking decision and action' ( $\beta = 2.898$ ,  $t = 2.329$ ,  $p = .022$ ) domain of ECS.

### Conclusions

Abuse is very common among mentally ill women and negatively associated with health seeking skills in India. This finding underscores the urgent need for intervention to reduce abuse among mentally ill.

### Key words

Women abuse • Self-management of health • Women mental health

## Introduction

Women abuse is defined as "Any act of gender-based violence that results in or is likely to result into, physical, sexual, or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life" <sup>1</sup>. In India, prevalence of women abuse is up to 50% in the general population, and 67% among women attending health care centers <sup>1,2</sup>. It is highly prevalent in the South-East Asian region, and World Health Organization (WHO) has expressed its concern about the same <sup>3</sup>. Women abuse has a cause/effect relationship with mental disorder <sup>4,5</sup>. Abuse is a major cause of mental ill health globally, and a leading cause of morbidity and mortality for women of childbearing age <sup>6,7</sup>. Research has shown that, the rate of reported abuse in childhood and/or adulthood among women living with mental disorder is 80%. Most of them have been physically or sexually abused <sup>4,5,8</sup>. The disorders commonly associated with women abuse are

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post-traumatic stress disorder, depression, anxiety, eating disorders, insomnia, and substance abuse<sup>9-10</sup>. On the other hand, women with mental disorder experience more abuse than the general population, which may be responsible for non-remission or poor outcome<sup>11-12</sup>.

There is indirect evidence that women who experience abuse may have difficulty in self-health management. Self management of health refers to how effective people are at dealing with their mental disorder and making decisions about their mental health care.

Women with abuse try to address their health issues with informal care, and seek help only in case of increased severity. Common barriers for health seeking are fear, shame, embarrassment, stigma, perceived support for help seeking, lack of financial resources and limited awareness of available services, and the cost of mental health services<sup>13</sup>. Even with availing treatment, they may be inadequately adherent to medication<sup>14</sup>. There is evidence that outcome of mental disorder is worse among women with a history of abuse<sup>15-17</sup>. Women abuse has attracted the attention of a wide spectrum of agencies, from healthcare providers to law enforcement authorities. The WHO considers it as a priority public health issue; it emphasises to tackle this issue effectively at the earliest, and has suggested conducting more research in this area<sup>3</sup>. There is a gap of knowledge regarding the self-management of health in women with abuse and mental disorder, and there is a need for further study as abuse and mental disorder themselves may result in increased morbidity and mortality<sup>7-10</sup>. Understanding the self-management of health may be helpful in treatment and prevention of health issues in women with mental disorders in remission. We have conducted this study to find out the levels of abuse in women with mental disorder who are in remission and its relationship with self-management of health. We hypothesised that levels of abuse are inversely related with self-management of health.

## Materials and Methods

This was a cross sectional hospital based study conducted over a period of six months (November 2014 – April 2015) at a tertiary care centre in South India, after approval from institutional ethics committee. One hundred females (out of 118 screened) who were living with relatives in the community after an episode of a mental disorder and coming for follow-up, were consecutively recruited after obtaining informed consent. We have included participants aged 18-65 years with history of mental disorder currently in remission for at least two months as per treating psychiatrist, currently living with family members. A two-month remission criterion has been adopted since a two-month remission period is considered sufficient to consider end of an episode of mental disorder. Living with family members

was another consideration because most women in India live with family members, who can provide required information about patients. It also indicates that patients have started living in the community after improving from an episode of mental disorder.

Patients were not included if they had a diagnosis of mental retardation or dementia due to issues related to reliability. For this study, presence of any psychiatric diagnosis as per ICD 10 (10<sup>th</sup> revision of the International Statistical Classification of Diseases and Related Health Problems) was considered as "Mental disorder". WHO defined mental disorders as a broad range of problems, with different symptoms characterized by some combination of abnormal thoughts, emotions, behavior and relationships with others.

Diagnosis and remission state were ascertained by a qualified psychiatrist using MINI Plus, case record files, discussion with the treating psychiatrist, and interview with patients and key informant. All participants who met selection criteria were further assessed with assessment tools in following order:

1. Sociodemographic proforma: marital status, socio-economic-status, education, occupation, family type, domicile, diagnosis, housing status, living with people who help in trouble, treatment received before, knowledge of cause of disorder, knowledge of treatment, family history of mental disorder, history of abuse in childhood, substance use in family, attitude of others etc.
2. Composite Abuse Scale (CAS): the CAS was used to assess the frequency and severity of different types of abuse<sup>18</sup>. This is a 30 item measure whereby participants answer using a five-point likert scale. The CAS is scored by summing the frequency scores of each of the items. Higher scores indicate more severe and frequent violence. Scores on the CAS can also be examined by focusing on the four subscales of the measure: severe combined abuse, physical abuse, emotional abuse, and harassment. Validation studies have found that CAS has a high internal consistency, and Cronbach's alpha value of > 0.85. These subscales are useful when trying to assess how different forms of abuse affect the physical and mental health of women. This scale has been previously used in Indian population<sup>19</sup>.
3. Effective Consumer Scale (ECS): the Effective Consumer Scale (EC-17) was developed to assess patient's perception of their skills and behaviours that are important for effectively managing, participating in, or leading their healthcare<sup>20</sup>. The scale covers 5 sub-domains: (a) use of health information; (b) clarifying personal priorities; (c) communication with others; (d) negotiating own roles and taking control; and (e) deciding and taking action. The scale had a

score of 0.95 for Cronbach's Alpha test-retest intra-class correlation coefficient of 0.90. This scale has been used in Indian population previously<sup>21</sup>. Statistical analysis was done using SPSS v 16. To express the demographic characteristics, descriptive statistics (Percentage, Mean, Standard deviation etc.) were used. Data examination revealed significant skewedness in demographic variables, thus Kruskal Wallis Test was done to compare more than three groups while Mann Whitney U test was done to compare two groups. Multiple linear regression analysis was done to obtain the relationship between scores on measure of abuse and self-management of health after examining data distribution. Outcome measure was scored on ECS. The threshold of statistically significant level was kept at  $p < 0.05$  for all the tests.

## Results

### Sociodemographic and clinical characteristics

Most participants were married, employed, of lower socioeconomic status, hailing from the rural area, and belonged to nuclear family. Majority had a diagnosis of mood disorder and did not receive any previous treatment except ongoing (Table IA).

### Level of abuse

Eighty six percent of participant experienced some form of abuse with mean score being 20.33 (SD  $\pm$  20.55) – commonest being emotional abuse (83%) followed by severe combined abuse (68%), physical abuse (62%) and harassment (60%) (Table IB).

### Sociodemographic relationship of abuse

Level of abuse varied with employment status (Un-employed vs. employed; MU = 378.50, Z = -5.496,  $p = .000$ ), patient domicile (Rural vs urban; MU = 756.50, Z = -2.454,  $p = .014$ ), socioeconomic status (middle vs low; MU = 767.50, Z = -2.921,  $p = .003$ ), status of housing (kachcha vs pakka house; MU = 297.50, Z = -3.714,  $p = .000$ ), substance use in the family members (presence or absence; MU = 499.00, Z = -2.802,  $p = .005$ ), attitude of others (sympathetic or non-sympathetic; MU = 544.50, Z = -4.567,  $p = .000$ ) and knowledge of treatment option (medication vs other;  $\chi^2 = 17.521$ ,  $df = 1$ ,  $p = .000$ ) (Tables II and III).

### Relationship of abuse and self-management of health

On multiple linear regression analysis ( $R^2 = .127$ ,  $df = 5$ ,  $F = 2.745$ ,  $p = .023$ ) the value of score on CAS was statistically significantly negatively predicted by scores on 'negotiation of own roles and taking control' (beta = -2.540,  $t = -2.036$ ,  $p = .045$ ) and positively predicted by 'taking decision and action' (beta = 2.898,  $t = 2.329$ ,  $p = .022$ ) domains of ECS (Table IV).

**TABLE IA. Sociodemographic and clinical characteristics.**

Variables		N = %
Education	Primary	41
	Middle	23
	High School	30
	Higher Secondary	6
Occupation	Un-employed	35
	Employed	65
Family history of mental illness	Yes	10
	No	90
Housing	Kachcha house	17
	Pakka house	82
Childhood abuse	Yes	5
	No	95
Substance use in family	Yes	21
	No	79
Family type	Nuclear	85
	Joint	15
Domicile	Rural	68
	Urban	32
Marital status	Single	10
	Married	90
Socio-economic-status	Low	62
	Middle	38
Attitude of others	Sympathetic	61
	Non-sympathetic	39
Diagnosis	F10	3
	F20	4
	F30	82
	F40	11
Living with	Parent	19
	In-law	4
	With husband only	77
Person who helps in trouble	Parent or sibling	41
	Husband or relative	56
	Neighbour or other	3
Treatment received before	Nil	89
	Magico-religious	7
	Allopathic	4
Knowledge of cause of illness	Supernatural	2
	Physical	12
	Psychosocial	81
Knowledge of treatment	Bio-psycho-social	5
	Medication only	68
	Psychotherapy only	4
	Both	28

**TABLE IB.** *Experience of abuse.*

Composite abuse scale domains	N = 100, n = %	Minimum	Maximum	Mean ( $\pm$ SD)
Any form of abuse	86%	0.00	92.00	20.33 (20.55)
Harassment	60%	0.00	16.00	2.89 (3.39)
Physical abuse	62%	0.00	22.00	3.89 (4.86)
Emotional abuse	83%	0.00	40.00	9.30 (8.29)
Severe combine abuse	68%	0.00	21.00	4.25 (5.45)

**TABLE II.** *Relationship of abuse and socio-demographic variables (Kruskal Wallis Test).*

Variables	N	Mean Rank	Chi-Square	df	p	
Education* CAS Score	Primary	41	45.96	2.790	3	.425
	Middle	23	48.76			
	High school	30	56.58			
	Higher secondary	6	57.75			
Diagnosis* CAS Score	F10	3	36.00	3.518	3	.318
	F20	4	57.38			
	F30	82	48.92			
	F40	11	63.73			
Living with* CAS Score	Parent	19	56.89	1.609	2	.447
	In-law	4	39.38			
	With husband only	77	49.50			
Person who helps in trouble* CAS Score	Parent or sibling	41	56.05	2.552	2	.279
	Husband or relative	56	46.65			
	Neighbour or other	3	46.50			
Treatment received before* CAS Score	Nil	89	49.03	3.516	2	.172
	Magico-religious	7	70.29			
	Allopathic	4	48.50			
	Supernatural	2	36.00			
Knowledge of cause of illness* CAS Score	Physical	12	65.25	3.969	3	.265
	Psychosocial	81	48.95			
	Bio-psycho-social	5	46.00			
Knowledge of treatment* CAS Score	1 Medication only	68	38.03	6.546	1	.011*
	Psychotherapy only	4	10.50			
	2 Psychotherapy only	4	13.50	.495	1	.482
	Both	28	16.93			
	3 Medication only	68	56.12	17.521	1	.000*
	Both	28	29.98			

CAS: Composite abuse scale; \*: significant at  $p = 05$ ; \*\*: significant at  $p = 001$

## Discussion and Conclusions

### Level of abuse

We observed a high prevalence of abuse (particularly emotional abuse) among women with mental disorder.

This is consistent with the previous report that abuse among mentally ill is not uncommon, particularly in depression<sup>22-24</sup>. Relationship between abuse and mental disorder appears to be bi-directional, but evidence for abuse leading to illness is stronger<sup>11 12 25</sup>. In Indian

**TABLE III.** Relationship of abuse and socio-demographic variables (Man Whitney U test).

		N	Mean rank	Sum of ranks	Mann-Whitney U	Z	p
Occupation* CAS Score							
	Un-employed	35	28.81	1008.50	378.50	-5.496	.000**
	Employed	65	62.18	4041.50			
Family history of mental illness* CAS Score	Yes	10	56.65	566.50	388.50	-.708	.479
	No	90	49.82	4483.50			
Housing* CAS Score	Kachcha house	17	73.50	1249.50	297.50	-3.714	.000**
	Pakka house	82	45.13	3700.50			
Childhood abuse* CAS Score	Yes	5	64.30	321.50	168.50	-1.093	.274
	No	95	49.77	4728.50			
Substance use in family* CAS Score	Yes	21	66.24	1391.00	499.00	-2.802	.005*
	No	79	46.32	3659.00			
Family type* CAS Score	Nuclear	85	52.04	4423.00	507.00	-1.262	.207
	Joint	15	41.80	627.00			
Domicile* CAS Score	Rural	68	55.38	3765.50	756.50	-2.454	.014
	Urban	32	40.14	1284.50			
Marital status* CAS Score	Single	10	55.20	552.00	403.00	-.541	.588
	Married	90	49.98	4498.00			
Socio-economic-status* CAS Score	Low	62	57.12	3541.50	767.50	-2.921	.003*
	Middle	38	39.70	1508.50			
Attitude of others* CAS Score	Sympathetic	61	61.07	3725.50	544.50	-4.567	.000**
	Non-sympathetic	39	33.96	1324.50			

CAS: Composite abuse scale; \*: significant at  $p = 05$ ; \*\*: significant at  $p = 001$ .

cultural context, it is even more important as domestic violence is acceptable to a certain extent and can be attributed to mental disorder<sup>2,26</sup>.

#### Relationship of abuse and socio-demographic variables

Low socioeconomic status is a risk for violence<sup>27</sup> as observed in this study. Other reports from India found a positive association between violence and mental illness in women of low socioeconomic status<sup>28</sup>. Violence against women in families with lower socioeconomic status may be due to "male" stress arising out of inability to fulfil their culturally defined roles such as breadwinners, and to control behaviour of women<sup>29</sup>. Majority of Indian families are of patriarchal nature with the male being the head of the family. Valor of an ideal man resides in his ability to protect and honor the chaste behavior of women in his family. Counts et al. (1992) observed that where women have a higher economic status, they are

seen as having sufficient power to change traditional gender roles in those situations, and it is at this point that violence is at its highest<sup>30</sup>.

Our study found that employment is a risk for abuse in mentally ill women. Though there is paucity of literature revealing relationship of abuse and demographic features such as employment in mentally ill women, abuse may not be uncommon<sup>31</sup>. Helen et al. argue that household income can increase the violence, if the abuser's marginal utility of violence is increasing in the welfare of the victim<sup>32</sup>. Similar to other reports, our study revealed more abuse among rural participants<sup>33</sup>. This could be due to early marriage, lower educational level of husband, women with husbands having alcohol use disorder in the rural setup<sup>34</sup>.

Presence of substance use in the family members was associated with increased levels of abuse in this study. Substance use in caregivers who abuse the care recipi-

**TABLE IV.** Regression of abuse and self-management of health.

Model		Un-standardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.441	5.543		2.244	.027
	Health information	.779	1.345	.089	.579	.564
	Priority	2.077	1.483	.222	1.400	.165
	Communication	-1.457	1.419	-.191	-1.027	.307
	Negotiation and control	-2.540	1.247	-.400	-2.036	.045
	Decision and action	2.898	1.244	.443	2.329	.022

Dependent variable: composite abuse scale score.  $R^2 = .127$ ;  $df = 5$ ;  $F = 2.745$ ;  $Sig. = .023$ .

ents as a coping of primary disorder is not uncommon<sup>35</sup>. Alcohol abuse is specifically associated with physical abuse<sup>36</sup>. It is speculated that the overall level of functioning (dysfunctional internal and external boundaries) within the family of substance abusing caregivers leads to maltreatment<sup>37</sup>. In most Indian studies, alcohol use in husbands is the commonly associated factor with spouse abuse<sup>2 38 39</sup>. Direct effects such as intoxication and indirect effects such as economic difficulty, interpersonal dispute and other co-morbidities associated with substance use may also contribute to higher levels of abuse. The results of this study revealed that scores on the severity of abuse statistically significantly vary with the attitude of others (other than abuser). People may sympathise more when they witness severe abuse. However, studies have reported that there is a global change in attitude toward domestic violence<sup>40</sup>. An increase in the level of education in the general population appears to have played a role in such change<sup>41</sup>.

Most participants were only aware of medication as treatment option for mental disorder, and were significantly associated with higher level of abuse. In this study, nearly 60% were below middle level education and were less likely to have exposure to mental health related information.

#### Relationship of abuse and self-management of health

Consistent with our hypothesis, the CAS score was negatively predicted by scores in 'negotiation of own role and taking control' domain of ECS. This indicates that they have a lack of skills/attributes in the area of assertiveness, communication, listening and negotiating, empathy and self-motivation, willing to comply with treatment, patience, responsibility for control over illness etc<sup>42</sup>.

Effective communication is critical to healthy relationships<sup>43-45</sup>. It appears that the non-healthy conflict resolution in the form of abuse may be the result of poor communication skills particularly in high-conflict prob-

lems like criticism, contempt, defensiveness, stonewalling etc<sup>43 46</sup>. On the other hand, communication associated with control and power issues are the foundation of most conflicts.

The relationship observed between CAS score and scores in 'negotiation of own role and taking control' domain of ECS does not appear to be direct. Many factors appear to moderate the scope of practice or acquisition of communication or social skills. Home environmental factors appears to be the major determinant of having these skills. In India common causes of abuse in women are dowry, substance use, unemployment, poor communication skills, lower socioeconomic status, inability to carry out domestic responsibility and gender role violation<sup>47 48</sup>.

Maladaptive coping may accompany with experience of severe abuse and may have skill deficits in the area of self-care, psychological and physical health management<sup>49 50</sup>. A lack of access to resources and systems of support is also a risk for domestic violence<sup>7</sup>. It may also be due to economic dependence, high cost of health care, fear that disclosure of abuse may result in psychosocial consequences and imposed restriction of movements<sup>50</sup>.

Contrary to our hypothesis, the CAS score was positively predicted in 'taking decision and action' domain of ECS. In other words, they have some better health skills in the area of tailoring/adapting information to self, goals/priority setting, determining values, recognition of rights versus acting on rights and lifestyle changes<sup>42</sup>. They exercise these skills in case of higher severity of abuse or whenever they have the opportunity<sup>50</sup>.

In India, sociocultural factors and gender-role expectations drive Indian women into using predominantly passive coping modalities<sup>51</sup>. Common strategies used to cope with abuse are negotiating and independent behaviours, help-seeking, conciliatory, resistance, and leaving behaviours are commonly used coping strat-

egies. Women's coping strategies is dependent on their access to financial and familial resources and are weighed against the particular social context as social networks are not usually supportive. Compliance behaviours are more popular coping strategies<sup>52</sup>.

Moreover, all participants were in remission after treatment from a tertiary care centre (a multispecialty medical school). Visiting hospitals and interacting with health professionals may also increase the health literacy. Medical model of illness is highly prevalent in India, and majority of the people are aware that multispecialty care centre provides a comprehensive health service beneath a single roof.

With the findings of this study, we can conclude that abuse among women with mental disorder is highly prevalent, and varies with employment and socioeconomic status. The level of abuse is negatively associated with health seeking skills and positively associated with skills resolving the health issues. Like any other study, this study had limitations, and the findings should

be interpreted in the view of these limitations. Study data had a skewed distribution. Our study had a small sample size conducted in Indian culture. Multicultural and larger sample size of 200 or more could have increased the generalizability of the study findings. Our study did not have normal control to compare the findings and assessed the abuse and health care behavior only once. Observation over a period of time could have given the idea of any variation over time. Further study is needed in this area, with overcoming the limitations of this study.

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## Conflict of interest

None to declare.

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