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**Original article**

# Obsessive-compulsive symptoms, social support and quality of life of Psychiatric Out-patients at King Chulalongkorn Memorial Hospital

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## Abstract

***Background:*** Obsessive-compulsive symptoms can be found in people who suffer from mental illnesses, which are not necessarily obsessive-compulsive disorder. Yet, these symptoms can affect the sufferer's quality of life (QOL).
***Objective:*** The study aimed to determine obsessive compulsive disorder (OCD) symptoms, social support and quality of life of Psychiatric Out-patients at King Chulalongkorn Memorial Hospital.
***Methods:*** One hundred and eight Psychiatric Out-patients of 18 years old or over were enrolled to complete four self-assessed questionnaires including the personal information questionnaires, the Florida Obsessive-Compulsive Inventory Thai Version, the social support questionnaires and the World Health Organization Quality of Life Brief version-Thai version (WHOQOL-BREF-THAI) Questionnaires.
***Results:*** There were 74 (68.5%) female patients, 32 (29.6%) male patients. The mean age was 33.5 ± 15.3 years old. The mean OCD symptom severity scores were 5.6, with 64.0% having a chance of developing OCD (scoring 5 or higher). Approximately 65.0% of the patients had medium social support while 17.6% had low social support. Most patients (73.1%) had medium QOL while 15.7% had poor QOL. Patients aging between 18 - 35 years tended to have poorer QOL as well as patients with depression, and those who had lower income. Patients who had a chance of developing OCD (scoring 5 or higher on the OCD symptom severity scales) and patients with low social support were more likely to have poorer QOL.
***Conclusion:*** Age, income, social support, presence of depression, number of OC symptoms, scores on OCD symptom severity scales were found to be significantly related to the patients' quality of life.

***Keywords:*** Mental illnesses, obsessive-compulsive symptoms, OCD, quality of life, social support.

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Obsessive Compulsive Disorder (OCD) is a common mental illness with a prevalence of 2.0% - 3.0% of the population.[1] According to the name of the disease, OCD consists of obsessions and compulsions. OCD has the forms of unwanted thoughts and fears. People suffering from OCD may fear contamination or dirt, doubt and have trouble withstanding uncertainty, want to keep things organized and symmetrical. They have aggression or frightening thoughts about losing control and hurting themselves or others or have unwanted thoughts including sexual or religious matters. With these disturbing thoughts, people with OCD tend to wash and clean, check, put things in order, count, follow a rigorous and reassuring routine. Many have probably experienced or done things similar to OCD at some point in their lives. This is why many OCD patients go untreated for years until finally could not stand it so that they would go seek help from a psychiatrist. This is so because patients think they can manage their obsessions and compulsions on their own. OCD has been found to be the 10th leading cause of all medical disabilities in the industrialized world. People with obsessive compulsive behavior have a worse quality of life than normal people especially in social functioning.[2] Quality of life (QOL), especially health-related QOL (HRQOL), in OCD is significantly impaired when compared to QOL in the general population and in patients with other psychiatric and medical disorders.[3] Most people with OCD do not seek treatment despite experiencing significant comorbidity and low quality of life. [4] It was found that the patients with obsessive compulsive behavior had the most relationship problems with those around them. It was found that patients with OCD have lower quality of life compared to those without OCD. Multiple factors were associated with poor quality of life in OCD patients, including comorbid depression, severe obsession symptoms, perceived low social support, etc. Obsessive Compulsive (OC) symptoms obviously cause negative effects to patients suffering from it. The findings of a study by Khosravani V, *et al*.[5] demonstrated that, after controlling for depression, anxiety, comorbidity, and prior suicide attempts, the OC symptom dimensions of responsibility for harm and unacceptable obsessional thoughts as well as general severity had indirect effects on suicidal ideation through the specific stress responses to the COVID-19, such as traumatic stress and compulsive checking. In addition, the findings of a research by Skapinakis P, *et al*.[6] demonstrated that even though the full-blown condition was more severe in terms of comorbidity and quality of life, subthreshold OC symptoms were also linked to significant comorbidity and declines in quality of life. Furthermore, services for mental health were not widely used. Nevertheless, studies evaluating social support and quality of life of psychiatric patients with obsessive-compulsive symptoms are scarce in the literature and has not yet been discussed in Thailand. This study, therefore, aimed to determine the OC symptoms, social support and quality of life of Psychiatric Out-patients attending at King Chulalongkorn Memorial Hospital, The Thai Red Cross Society. Understanding of issues related to social support and the quality of life of people with obsessive compulsive symptoms will be helpful to improve the quality of life of this group of patients.

## Materials and methods

A cross-sectional descriptive study was conducted at the King Chulalongkorn Memorial Hospital, The Thai Red Cross Society, Thailand from August to November 2022. This research has been approved by Institutional Review Board (IRB) of Chulalongkorn University (IRB no. 0262/65). We enrolled 108 eligible out-patients at the Department of Psychiatry who met the criteria and were willing to participate in this study by giving a consent. The inclusion criteria were patients aged 18 years or above who reported at least one item of obsessive-compulsive symptoms on the Symptom Checklist of the Florida Obsessive-Compulsive Inventory Thai Version.

All subjects were invited to provide information by self-reporting using the following questionnaires: 1) Personal information questionnaires; and 2) the Florida Obsessive-Compulsive Inventory Thai Version developed by the Department of Psychiatry, Faculty of Medicine, Ramathibodi Hospital [7] from the Florida Obsessive-Compulsive Inventory which had been developed by Storch EA, *et al.* from the University of Florida. the symptom checklist and the severity scale are the two scales that make up the FOCI. The patient would indicate the occurrence (= 1) or absence (= 0) of typical obsessions (10 items) and compulsions (10 items). Higher scores indicate more symptoms, and the overall score of the symptom checklist is determined by adding the scores of each item's presence (range = 0 - 20). The patient would rank the severity of the five items on the Severity Scale (from 0 to 4): time occupied, distress, degree of control,

avoidance, and life influence. Higher scores indicate more severe symptoms. The overall severity score is determined by adding the scores of the five severity items (range = 0 - 20). FOCI Severity scale is suggested to be used as a screening tool for OCD, with a cut-off score of 5, which has the best sensitivity and specificity. [7] In our research, the tool's Cronbach's alpha is 0.905. 3) Social Support Questionnaires developed by the Schaefer's concept of social support by Lueboonthavatchai P, Lueboonthavatchai O. It is composed of three subscales namely: 1) emotional support (7 items); 2) informational support (4 items); and 3) tangible or material support (5 items). Its Cronbach alpha in our research is 0.933. 4) (WHOQOL-BREF-THAI) developed by Mahatnirunkul S, *et al*. from WHO's WHOQOL-BREF. There are 26 items total in the WHOQOL-BREF, 24 of which are divided into four domains (physical, psychological, social, and environmental), one of which measures general quality of life, while the other one measures health-related quality of life. The physical domain contains seven components, the psychological domain six, the social domain three, and the environmental domain eight. The WHOQOL-BREF's 26 original items are included in the Thai translation. Its Cronbach's alpha in this research is 0.934.

***Statistical analysis***

The analyses were conducted using the SPSS program version 26. Statistical analyses of collected data included descriptive statistics using for describing the characteristics of the sample population such as number, percentage, mean, standard deviation (SD), and inferential statistics such as unpaired Student *t* - test and one-way analysis of variance (ANOVA) using for comparing QOL scores and social support by different factors. $P < 0.05$ was used as an indicator for statistical significance.

## Results

A total of 108 patients were invited to participate in this study in order to investigate their OC symptoms and severity, social support and quality of life. The majority of the subjects were female. The subject's age ranged from 18 to 80 years old, with most of them aging between 18 to 25 years old. Most subjects were single, had at least a Bachelor's Degree. The average of their income was 18,694 baht per month, with the highest monthly income was 100,000 Baht (**Tables 1 and 2**).



**Table 1.** The number and percentage of subjects regarding personal information: gender, age, marital status, education, occupation, income and average income per month (n = 108).

| Personal factors | Number | Percentage |
|---|---|---|
| **Gender** | | |
| Female | 74 | 68.5 |
| Male | 32 | 29.6 |
| Not specified | 2 | 1.9 |
| **Age (year)** | | |
| 18 - 25 | 41 | 38.0 |
| 26 - 35 | 34 | 31.5 |
| 36 - 45 | 12 | 11.1 |
| 46 - 55 | 6 | 5.6 |
| 56 or upper | 13 | 12.0 |
| Not specified | 2 | 1.9 |
| Mean = 33.5 SD = 15.3 | | |
| Minimum = 18 Maximum = 80 | | |
| **Marital status** | | |
| Single | 69 | 63.9 |
| Married (live together) | 33 | 30.6 |
| Separated | 2 | 1.9 |
| Widowed | 2 | 1.9 |
| Divorced | 2 | 1.9 |
| **Education** | | |
| Bachelor's Degree or upper | 72 | 66.7 |
| Lower than Bachelor's Degree | 35 | 32.4 |
| Not specified | 1 | 0.9 |

**Table 1.** (Cont.) The number and percentage of subjects regarding personal information: gender, age, marital status, education, occupation, income and average income per month (n = 108).

| Personal factors | Number | Percentage |
|---|---|---|
| **Occupation** | | |
| Company employee | 21 | 19.4 |
| Unemployed/looking for a job | 20 | 18.5 |
| Own business | 13 | 12.0 |
| Civil servant | 10 | 9.3 |
| Freelance | 7 | 6.5 |
| State enterprise employee | 4 | 3.7 |
| Not specified | 4 | 3.7 |
| Others | 29 | 26.9 |
| **Income** | | |
| Yes | 73 | 67.6 |
| No | 32 | 29.6 |
| Not specified | 3 | 2.8 |
| **Average monthly income (Baht)** | | |
| No | 32 | 29.6 |
| 10,000 or lower | 11 | 10.2 |
| 10,001 - 20,000 | 28 | 25.9 |
| 20,001 - 30,000 | 12 | 11.1 |
| 30,001 or higher | 16 | 14.8 |
| Not specified | 9 | 8.3 |
| Mean = 18,694.0 SD = 22,415.7 | | |
| Minimum = 0 Maximum = 100,000 | | |
| **Total** | **108** | **100.0** |

**Table 2.** The number and percentage of subjects divided into chance of developing OCD, number of OC symptoms and social support. (n = 108).

| Factors | Number | Percentage |
|---|---|---|
| **Reaching the cut-off scores for OCD** | | |
| Yes | 69 | 64.0 |
| No | 39 | 36.0 |
| Mean = 6.6 SD = 4.8 | | |
| Minimum = 0 Maximum = 18 | | |
| **Number of OC symptoms** | | |
| 1 | 13 | 12.0 |
| 2 | 13 | 12.0 |
| 3 | 12 | 11.1 |
| 4 | 11 | 10.2 |
| 5 | 12 | 11.1 |
| 6 | 5 | 4.6 |
| 7 | 11 | 10.2 |
| 8 | 7 | 6.5 |
| 9 | 5 | 4.6 |
| 10 | 5 | 4.6 |
| 11 | 6 | 5.6 |
| 12 | 2 | 1.9 |
| 13 | 3 | 2.8 |
| 14 | 2 | 1.9 |
| 15 | 1 | 0.9 |
| Mean = 5.6 SD = 3.7 | | |
| Minimum = 1 Maximum = 15 | | |
| **Social support** | | |
| Low | 19 | 17.6 |
| Medium | 71 | 65.7 |
| High | 18 | 16.7 |
| Mean = 55.8 SD = 12.6 | | |
| Minimum = 19 Maximum = 80 | | |

According to the FOCI-T, which was developed by the Faculty of Medicine, Department of Psychiatry, Ramathibodi Hospital, if one scored at least 5 points on the severity scales, the person had a chance of clinically developing an obsessive-compulsive disorder. In this research, most of the patients had a chance of developing OCD (64.0%), with the mean of all patients' severity scores being 6.6 points. Most patients had 1 or 2 OC symptoms (12.0% each), with the mean being 5.6 symptoms. Most patients had medium social support (65.7%) while 17.6% had low social support and 16.7% had high social support, with the minimum, maximum and mean scores being 19, 80 and 55.8 respectively (**Table 3**).

**Table 3.** The number and percentage of quality of life of subjects divided into physical domain, psychological domain, social relationships domain, environment domain and overall quality of life (n = 108).

| Quality of life | Number | Percentage |
|---|---|---|
| **Physical domain** | | |
| Poor quality of life | 24 | 22.3 |
| Medium quality of life | 63 | 58.3 |
| Good quality of life | 21 | 19.4 |
| Mean = 21.5 SD = 5.4 | | |
| Minimum = 10 Maximum = 35 | | |
| **Psychological domain** | | |
| Poor quality of life | 29 | 26.9 |
| Medium quality of life | 53 | 49.1 |
| Good quality of life | 26 | 24.0 |
| Mean = 18.1 SD = 4.9 | | |
| Minimum = 7 Maximum = 29 | | |
| **Social relationships domain** | | |
| Poor quality of life | 16 | 14.8 |
| Medium quality of life | 57 | 52.8 |
| Good quality of life | 35 | 32.4 |
| Mean = 10.4 SD = 2.7 | | |
| Minimum = 2 Maximum = 15 | | |
| **Environment domain** | | |
| Poor quality of life | 5 | 4.6 |
| Medium quality of life | 73 | 67.6 |
| Good quality of life | 30 | 27.8 |
| Mean = 26.6 SD = 4.9 | | |
| Minimum = 13 Maximum = 38 | | |
| **Overall quality of life** | | |
| Poor quality of life | 17 | 15.7 |
| Medium quality of life | 79 | 73.1 |
| Good quality of life | 12 | 11.2 |
| Mean = 76.2 SD = 15.2 | | |
| Minimum = 37 Maximum = 116 | | |



Most patients (73.1%) had medium quality of life, while 15.7% had poor quality of life, and 11.2% had good quality of life, with the minimum, maximum and average scores being 37, 116 and 77.2 respectively. (**Table 4**).

The findings revealed that the subjects of different ages had different quality of life and the patients who had depression had different quality of life from those who did not have depression. Also, those who reached the cut-off scores for OCD had different quality of life from those not reaching the cut-off scores for OCD ($P < 0.05$). In addition, among those with different social supports, there was at least one pair that had different quality of life ($P < 0.001$) (**Table 5**).

**Table 4.** The comparisons of QOL scores of subjects divided by gender, age, marital status, education, depression and chance of developing OCD by using *t* - test and the results of ANOVA for comparing differences between QQL scores and social support of subjects by using One way ANOVA.

| Quality of life scores | | Mean | SD | *P* - value |
|---|---|---|---|---|
| **Gender** | Male | 80.0 | 15.2 | 0.079 |
| | Female | 74.3 | 14.5 | |
| **Age** | 18 - 35 | 73.4 | 14.8 | 0.003** |
| | Over 35 | 83.1 | 14.3 | |
| **Marital status** | Single/divorced/ widowed/separated | 74.8 | 15.2 | 0.181 |
| | Married and live together | 79.1 | 14.7 | |
| **Education** | Lower than bachelor | 75.9 | 15.9 | 0.882 |
| | Bachelor or upper | 76.3 | 15.0 | |
| **Depression** | No | 81.8 | 13.5 | < 0.001* |
| | Yes | 71.2 | 14.9 | |
| **Reaching the cut-off scores for OCD** | No | 82.8 | 15.6 | < 0.001* |
| | Yes | 72.5 | 13.6 | |
| | Low | 64.4 | 13.009 | |
| **Social support** | Medium | 78.0 | 14.695 | < 0.001* |
| | High | 81.8 | 12.967 | |

*$P < 0.001$, **$P < 0.01$

**Table 5.** Analysis on relationships between scores on quality of life and other factors including age, average monthly income, number of OC symptoms, scores on OCD symptom severity and scores on social support by using Pearson's correlation coefficient.

| Factors | Scores on quality of life | |
|---|---|---|
| | *r* | *P* - value |
| Age | 0.289 | 0.003** |
| Average monthly income | 0.209 | 0.039*** |
| Number of OCD symptoms | - 0.315 | < 0.001* |
| Scores on OCD severity | - 0.459 | < 0.001* |
| Scores on social support | 0.438 | < 0.001* |

*$P < 0.001$, **$P < 0.01$, ***$P < 0.05$



Age and average monthly income had a low positive correlation with scores on quality of life ($P < 0.05$). Number and severity of OC symptoms had a medium negative correlation with scores on quality of life ($P < 0.001$). Scores on social support had a medium positive correlation with scores on quality of life ($P < 0.001$) social support had a medium positive correlation with scores on quality of life ($P < 0.001$)

## Discussion

In this study, we found that the mean OCD severity scores were 5.6, with 64.0% of Psychiatric Out-patients had score of 5 or higher suggesting a chance of developing OCD. Most patients had medium quality of life and social support while nearly 20.0% had poor QOL and low social support. The findings showed that OC symptoms were common in patients with mental illness, which is consistent with several studies which suggest that people with OCD have a much higher risk than people without OCD of also having comorbid major depression or any other

anxiety disorders. It has a profound impact on quality of life of those suffer from OCD. A study by Baek JH, *et al*.[8] also states that OC symptoms commonly occur in the course of schizophrenia.

The non-difference in quality of life between genders and the influence of age on quality of life in our research that the over 35-year-old tend to have better quality of life than the 18 - 35 year-old is consistent with Louzado JA, *et al*.[9]'s work which discusses the influence of age and gender on the subjective quality of life of people with severe and persistent mental illness. Their studies revealed no differences in the quality of life between men and women, but age was consistently connected to degree of satisfaction, with older participants reporting higher levels of life satisfaction than their younger counterparts. Fewer older, happier respondents reported fears, a desire for change, or future plans in their responses to the open-ended questions. This might be due to young people's feelings of uncertainty while the older are more settled, thus they were more satisfied with their lives.

A research by Motivala SJ, *et al*.[10] shows that OCD patients who also have depression (1/3 of the OCD patients), while having the same baseline of severity as those with OCD alone, do not respond to treatments as well as the latter. This finding may explain why depression patients with obsessive-compulsive symptoms, as are the majority of the patients in our research, tend to have lower quality of life than the patients with other types of mental illnesses. This might be due to the former's failure to habituate the anxiety that comes while being exposed to stimuli, and the lack of motivation for therapy, which are reasonably the nature of depressive symptoms.

Still, it is important to note that only the FOCI-T severity scale, not the symptom checklist, was used to analyze the ROC curve and cut-off scores because many people have symptoms that are similar to OCD but are not severe enough to qualify as OCD. Examples of these symptoms include doubting and checking to see if one has turned off the switch or locked the car. As a result, it was decided that the FOCI-T Severity Scale, which evaluates the distress, disturbance, and life impact of the OC symptoms, was suitable for analysis and usage with the given cut-off score.[7]

Our research is also consistent with a study by Velloso P, *et al*.[11] that in OCD patients, QOL domains are severely affected. Each medical outcome short-form questionnaire (SF-36) domain had distinct associations to clinical and sociodemographic factors, such as OC symptoms dimensions, suicidality, and treatment response.

In the same way as our research, a paper by Mahmoud AS, *et al*.[12] examines the relationship between social support and QOL among psychiatric patients. The study found that there is a significant positive correlation between social support and QOL, and recommends that social support should be an essential part of psychiatric treatment.

Our study has some limitations, however. First, the study was cross-sectional, and thus could not make a causal inference. Second, OC symptoms was assessed by a self-reported questionnaire rather than a structured diagnostic interview; however, the FOCI Symptom Checklist and Severity scores demonstrate good internal consistency, good convergent validity and was also validated in the Thai population. Finally, since the study was conducted during the COVID-19, we were unable to determine whether any biological or sociological factors caused the significant effect on OC symptoms and QOL in this population. According to Grant JE, *et al*.[13], OCD was reasonably expected to be impacted by the Covid-19 epidemic, in part because of its high incidence of contamination/washing symptoms. Also, the fact that patients with OC symptoms are more prevalent in our study than previous studies is consistent with a study by Abba-Aji A, *et al*.[14], which states that when compared to pre-pandemic rates, the prevalence of OC symptoms increased during the COVID-19 pandemic at a rate that was noticeably greater.

### *Suggestions for further research*

It might be useful to find out about the quality of life of OCD patients that have other types of mental disorders and see whether they respond to therapy and treatment as well as those without. Also, it is worth doing research on other aspects of individuals with comorbid OCD whether are at an increased risk of depression, anxiety, and suicide.

## Conclusion

Age, number of OCD symptoms, OCD severity, presence of depression and social support all play an important role in determining quality of life of psychiatric patients. Therefore, it is necessary to accurately identify the presence and severity of OCD

symptoms which should be taken into account when developing a treatment plan. Also, social support is an integral part in contributing to one's well-being. Thus, it is essential to find ways to help patients to have social support, or help them manage if they have low social support.

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**Conflict of interest statement**

Each of the authors has completed an ICMJE disclosure form. None of the authors declare any potential or actual relationship, activity, or interest related to the content of this article.

**Data sharing statement**

The present review is based on the reference cited. Further details, opinions, and interpretation are available from the corresponding authors on reasonable request.

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