

# Does quality of life of schizophrenia different from other mental disorder? Quality of life: A study in Outpatient Psychiatric Disorders at King Chulalongkorn Memorial Hospital, Thai Red Cross Society

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**Background** : Quality of life (QOL) can be used to assess the treatment outcomes.

No ranking of quality of life of Thai outpatients based on psychiatric

diagnosis was studied before.

**Objective** : To study the quality of life of psychiatric outpatients of King

Chulalongkorn Memorial Hospital and ranking of quality of life by

diagnosis.

Setting : Psychiatric Outpatient Clinic at King Chulalongkorn Memorial

Hospital, Thai Red Cross Society of Thailand

Research design : Descriptive study.

Material and Method: In this research, the quality of life of 113 psychiatric outpatient of

King Chulalongkorn Memorial Hospital, the Red Cross Society of Thailand was studied with WHOQOL-BREF-THAI. The study

analyzes means, variances and the differences of averages

whether they significantly differ or not.

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Result

One hundred and thirteen outpatients, 44 males and 69 females were recruited. Their average age was  $47.14 \pm 12.47$  years old. The common diagnoses were schizophrenia, depression and generalized anxiety disorder. The average quality of life scores of all patients were  $97.54 \pm 10.00$ . Panic disorder had the highest average score at  $102 \pm 12.61$ . Obsessive compulsive disorder had mean scale at  $93.00 \pm 8.27$  which is the lowest quality of life of other diagnostic. The QOL score of 43 schizophrenia were  $97.30 \pm 10.34$ , compared to the 70 non-schizophrenia, whose, QOL score were  $98.28 \pm 9.64$ . Scores in both groups had no significant statistical difference.

Conclusion

The outcome of interpretation of QOL scores showed that the overall quality of life of the patients was in the better level. The quality of life in diagnoses sort by order was panic disorder, depressive disorder, schizophrenia, generalized anxiety disorder, bipolar disorder and obsessive compulsive disorder. The quality of life of the schizophrenic did not differ from that of the non-schizophrenia. This study may demonstrate the treatment outcomes that affect the improvement of the quality of life, even if it is a serious disease.

Keywords

Quality of life, diagnosis, schizophrenia, ranking, outpatient, Thai.

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เดชา ลลิตอนันต์พงศ์. โรคจิตเภทมีคุณภาพชีวิตแตกต่างกับโรคอื่น ๆ ทางจิตเวชอื่น ๆ หรือไม่? การจัดลำดับของคุณภาพชีวิตของผู้ป่วยตามเกณฑ์วินิจฉัย ผลการศึกษาในผู้ป่วยนอกจิตเวช โรงพยาบาลจุฬาลงกรณ์ สภากาชาดไทย. จุฬาลงกรณ์เวชสาร 2555 มี.ค. – เม.ย.; 56(2): 163 – 76

เหตุผลของการทำวิจัย : คุณภาพชีวิตสามารถใช้เพื่อประเมินผลลัพธ์ของการรักษา ยังไม่เคยมี

การศึกษาเกี่ยวกับการจัดลำดับของคุณภาพชีวิตของผู้ปวยนอกจิตเวช

ในคนไทย มาก่อน

วัตถุประสงค์ : เพื่อศึกษาคุณภาพชีวิตของผู้ปวยนอกจิตเวช ใน รพ.จุฬาลงกรณ์ และ

จัดลำดับคุณภาพชีวิตตามเกณฑ์วินิจฉัย

สถานที่ : คลินิกผู้ปวยนอกจิตเวช โรงพยาบาลจุฬาลงกรณ์ สภากาชาดไทย

ประเทศไทย

รูปแบบการวิจัย : การวิจัยเชิงพรรณา

วิธีการศึกษา : การศึกษาคุณภาพชีวิตของผู้ปวยนอกจิตเวช จำนวน 113 คน ใน

รพ.จุฬาลงกรณ์ สภากาชาดไทย ด้วยแบบวัดคุณภาพชีวิต WHOQOL-BREF-THAI. วิเคราะห์ค่าเฉลี่ย ความแปรปรวน และ ความแตกต่างของ

คาเฉลี่ย วามีความแตกตางอยางมีนัยสำคัญทางสถิติหรือไม่

ผลการศึกษา : ผู้ปวยนอกจิตเวช จำนวน 113 คน ประกอบด้วยผู้ปวยเพศชาย 44 คน

หญิง 69 คน อายุเฉลี่ยของผู้ป่วยคือ 47.14 ± 12.47 ปี โรคที่ถูกวินิจฉัย บ่อย คือ โรคจิตเภท โรคซึมเศร้า โรควิตกกังวล ชนิด GAD ค่าเฉลี่ยของ คะแนนคุณภาพชีวิตของผู้ป่วยคือ 97.54 ± 10.00 โรคแพนิกมีคะแนน คุณภาพชีวิตเฉลี่ยสูงที่สุด คือ 102 ± 12.61 โรคย้ำคิดย้ำทำ มีคะแนน คุณภาพชีวิตเฉลี่ย คือ 93.00 ± 8.27 ซึ่งเป็นค่าคุณภาพชีวิตเฉลี่ยที่ ต่ำที่สุด ผู้ป่วยโรคจิตเภท จำนวน 43 คน มีคะแนนคุณภาพชีวิตเฉลี่ย เท่ากับ 97.30 ± 10.34 เมื่อเปรียบกับโรคจิตเวชอื่น ๆ ที่ไม่ใช่โรคจิตเภท 70 คน มีคะแนนคุณภาพชีวิตเฉลี่ยเท่ากับ 98.28 ± 9.64 ซึ่งคะแนน คุณภาพชีวิตเฉลี่ยกั้งสองกลุ่ม ไม่มีความแตกต่างอย่างมีนัยสำคัญทาง

สถิติ

สรุป

การวิเคราะห์ผลลัพธ์ของคะแนนคุณภาพชีวิตเฉลี่ยโดยภาพรวมของ ผู้ปวยทั้งหมด อยู่ในระดับที่ดี โดยสามารถจัดเรียงลำดับคะแนนคุณภาพ ์ ชีวิตเฉลี่ย ดังนี้ โรคแพนิก โรคซึมเศร้า โรคจิตเภท โรควิตกกังวลชนิด GAD โรคอารมณ์แปรปรวน และ โรคย้ำคิดย้ำทำ คุณภาพชีวิตของผู้ป่วย โรคจิตเภทไม่ได้แตกตางกับโรคจิตเวชอื่น ๆ ที่ไม่ใช่โรคจิตเภท การศึกษา นื้อาจจะแสดงให้เห็นผลลัพธ์การรักษาซึ่งสามารถเพิ่มระดับคุณภาพชีวิต

ของผู้ปวย แม้วาจะถูกวินิจฉัยเป็นโรคร้ายแรง

คำสำคัญ

คุณภาพชีวิต, วินิจฉัย, โรคจิตเภท, จัดลำดับ, ผู้ปวยนอก, คนไทย.

The World Health Organization (WHO) has emphasized the significance of the quality of life (QOL). QOL has been used in applications in research and evaluation of various diseases such as in medicine, surgery and patients with mental health problem. (1) The development of the brief version (WHO-QOL-BREF) is another instrument that represents WHOQOL-100 in evaluating the changes of the quality of life and the results of treatments include physical, psychological, and environmental factors. (2) The researcher selected this test because it is a standard test used widely in research on mental health. The findings can be a reference and a comparison with other studies.

QOL has been studied in Thailand, such as studies on the quality of life of postmenopausal women. It was found that the quality of life declined, particularly in chronic diseases such as diabetes<sup>(3)</sup> and in cancer patients. The assessments of treatments were used to measure the quality of life with WHOQOL-BREF-THAI in cancers who had received radiotherapy. <sup>(4)</sup>

In psychiatric patients, the quality of life of patients with schizophrenia was poor, especially in the subscales of physical health and relationships with others. (5) Financial problems, depression symptoms or positive symptoms often interfere with all aspects of quality of life of schizophrenia patients. (6) Furthermore, the burden of care for patients, in particular, health factors and social support of other chronically ill family members also affect the quality of life of the caregivers. (7)

# Methodology

This study is a descriptive study at a point in

time (cross-sectional descriptive study). A total of 113 outpatients were randomly selected and assessed by psychiatrist during 2009 - 2010. The Thai version of Quality of Life Scale WHOQOL-BREF-THAI, which measures four aspects of Article 26 consists of four components of quality of life as follows. (8)

1. The body (physical domain) is to recognize the physical condition of the person that affects their daily life. 2. The mind (psychological domain) is to recognize the mental state of the person. 3. The social relations (social relationships) is on the perception of their relationships with others. 4. Environmental aspects that affects their life.

The quality of life scores were calculated by using descriptive statistics such as percentages, means, standard deviations and differences of average whether they are significantly different or not. Quality of life scores from 26 to 130 points can be compared with the norm defined as follows: 26 - 60 indicates a poor quality of life; 61-95, moderate quality of life; and 96 - 130, better quality of life.

The inclusion criteria in this study were; an outpatient; older than 15 years old; having no active or sever co-morbid medical illness. The exclusion criteria were; having physical disease; having acute or chronic levels of noise associated with the quality of life; having organic mental disorder includes dementia; having variation in personality problems that need treatment; having significant substance abuse problems; having severe symptoms or risk that must be considered for treatment as a inpatient; and patients who used the service for the first time, or having been recently discharged from inpatient service within a month. The diagnosis, sex, age, duration of the treatment, and records of all patients

recruited were analyzed. This study evaluated the outcomes of all patients who meet the inclusion criteria .Subjects were examined by psychiatrist during Jan. - Feb. 2011.

# Result

One hundred and thirteen outpatients who received evaluation QOL were divided into 44 males and 69 females. The most common diagnosis was schizophrenia. The average age of the patients was  $46.91 \pm 13.39$  years old. OCD had the minimum average age  $(31.66 \pm 6.65)$ .

Quality of life scores according to gender showed that both the male and female patients had average level of quality of life scores at  $96.52 \pm 14.96$ , and  $97.44 \pm 10.15$ , respectively. There was no statistically significant difference between genders (p = 0.902) Table 2.

The average quality of life scores of all patients were 97.91  $\pm$  9.88. Panic disorder had the highest average score at 102.2  $\pm$  12.61. Obsessive

compulsive disorder had the mean scale at  $94.0\pm10.23$  which is the lowest quality of life compared to of other diagnoses. This study demonstrates the outcomes of interpretation of QOL scores which showed that the overall quality of life of patients were in the better level. Only bipolar disorder and OCD were of the medium level. (Table 3)

Studying the scores of the quality of life in each component separately show that the important part of overall quality of life is the component in mental health. Panic disorder had the highest overall quality of life scores and had the highest average quality of life in mental component at  $23.50 \pm 3.21$ . Obsessive compulsive disorder (OCD) had the lowest score in overall scale and mental component at  $17.83 \pm 2.32$ . (Table 4)

Table 5 shows that the QOL between non-schizophrenia (QOL =  $98.28 \pm 9.64$ ) and schizophrenia ( $97.3 \pm 10.34$ ) group does not show statically significant difference (p = 0.29).

**Table 1.** Shows the characteristics of the sample population.

| Diagnosis     | N   | Male | Female | Average<br>age (year) | Sd       |
|---------------|-----|------|--------|-----------------------|----------|
|               |     |      |        | ,                     |          |
| schizophrenia | 44  | 14   | 30     | 43.2955               | 12.11875 |
| depression    | 22  | 3    | 19     | 49.3636               | 14.01545 |
| Gad           | 22  | 12   | 10     | 49.5455               | 13.93771 |
| panic         | 10  | 8    | 2      | 53.9000               | 11.57056 |
| OCD           | 6   | 3    | 3      | 31.6667               | 6.65332  |
| bipolar       | 4   | 1    | 3      | 47.7500               | 5.56028  |
| other         | 5   | 3    | 2      | 60.0000               | 10.53565 |
| Total         | 113 | 44   | 69     | 46.9115               | 13.39147 |

**Table 2.** The mean quality of life classified by sex.

|       | Sex    | N  | Mean    | Std. Deviation | Sig.      |
|-------|--------|----|---------|----------------|-----------|
| Score | female | 69 | 97.8261 | 9.96015        | P = 0.952 |
|       | male   | 44 | 98.0455 | 9.87822        |           |

**Table 3.** Mean level of quality of life based on diagnosis.

|                     |     | Percent |          |                | QOL            |
|---------------------|-----|---------|----------|----------------|----------------|
| Diagnosis           | N   |         | Mean     | Std. Deviation | Interpretation |
| Panic disorder      | 10  | 8.85    | 102.2000 | 12.61216       | Better         |
| Depressive Disorder | 22  | 19.47   | 99.9545  | 11.09044       | Better         |
| Schizophrenia       | 44  | 38.94   | 97.2273  | 10.23869       | Better         |
| GAD                 | 22  | 19.47   | 97.1364  | 6.88888        | Better         |
| Bipolar disorder    | 4   | 3.54    | 95.7500  | 10.21029       | Medium         |
| OCD                 | 6   | 5.31    | 94.0000  | 10.23719       | Medium         |
| Other               | 5   | 4.42    | 96.2000  | 6.18061        | Better         |
| Total               | 113 | 100     | 97.9115  | 9.88465        | Better         |

**Table 4.** Quality of life based on diagnosis and component aspects.

| Diagnosis     | Component | Physical | Mental | Social | Environment |
|---------------|-----------|----------|--------|--------|-------------|
| Panic         | mean      | 27.70    | 23.50  | 11.10  | 32.20       |
|               | sd        | 4.72     | 3.21   | 2.02   | 5.49        |
| Depression    | mean      | 26.50    | 22.19  | 10.75  | 32.00       |
|               | sd        | 3.67     | 4.13   | 2.38   | 4.41        |
| Schizophrenia | mean      | 27.77    | 21.00  | 10.11  | 31.18       |
|               | sd        | 3.43     | 3.68   | 1.88   | 3.69        |
| Gad           | mean      | 27.69    | 21.19  | 9.88   | 31.88       |
|               | sd        | 2.28     | 2.16   | 2.60   | 2.20        |
| Bipolar       | mean      | 28.00    | 19.25  | 9.75   | 31.50       |
|               | sd        | 4.12     | 1.79   | 1.64   | 0.87        |
| OCD           | mean      | 26.33    | 17.83  | 11.33  | 31.33       |
|               | sd        | 1.97     | 2.32   | 2.58   | 4.63        |
| Other         | mean      | 28.00    | 20.25  | 9.50   | 32.00       |
|               | sd        | 5.35     | 2.75   | 3.00   | 2.16        |

**Table 5.** Quality of life, between non-schizophrenia and schizophrenia.

|       | Group           | N  | Mean  | Std. Deviation | Sig.     |
|-------|-----------------|----|-------|----------------|----------|
| Score | nonschizohrenia | 70 | 98.28 | 9.64           | P = 0.29 |
|       | schizophrenia   | 44 | 97.30 | 10.34          |          |

# **Discussion**

Although the incidence of mental illness between males and females are different, there was no statistically significant difference between sex (p = 0.9) in this study. The average age of patients was  $46.91 \pm 13.39$  years. OCD had the minimum average age (31.66  $\pm$  6.65). Factors affecting the overall quality of life include being a young male patients with better improvement (high cgi) and having received psychotherapy treatment. (8) The difference between races may affect the quality of life scores. However, the studies of quality of life among races showed not difference. The study in Chinese schizophrenia outpatients showed low quality of life than the general population especially in schizophrenic with depressive symptom, marriage, good social support and adherence to treatment. (9, 10) The study of schizophrenia inpatients in African found that the patients perceived better quality of life after treatment. Employment and marital status were also factors predictive of the quality of life. (11)

Previous studies found that Thai patients with bipolar disorder had poor quality of life, <sup>(12, 13)</sup> although they responded well to treatments. <sup>(14)</sup> Thai depressive patients after received treatment had better quality of life. <sup>(15)</sup> Depression symptom can predict the quality of life. The recognition of illness (insight) did not have any direct effect on the quality of life. <sup>(16)</sup> A previous

study of outpatients with mental illness at King Chulalongkorn Memorial Hospital showed a favorable clinical manifestations and good level function. (17) Although psychiatric patients are often assessed as high-risk, (18) in patients with epilepsy, after surgery they find a better quality of life. (19)

# Comparing: Schizophrenia *vs* non-schizophrenia: Schizophrenia (Third Rank)

Schizophrenia patients are seen as sufferers from chronic illness. The patients are expected to have poor quality of life score. However, the quality of life of schizophrenic in this study did not differ from the non-schizophrenia. The QOL between non-schizophrenia (QOL =  $98.28 \pm 9.64$ ) and schizophrenia (97.30 ± 10.34) group do not statically significantly differ (p = 0.29). Patients in this study had mild and less severe symptomsand they maintained good cooperation. (17) A previous study showed the relationship between QOL and severity of symptoms in schizophrenia. (20) According to the relationship between the quality of life (QOL) and cognitive dysfunction in schizophrenia, one study suggested that negative symptom, depressive symptom and cognitive performance were important factors on patients' QOL. (21) Severity of symptoms can be assessed by psychiatric rating scale like brief psychiatric rating scale (BPRS). The relation between BPRS and QOL previously studied in schizophrenia

patients in Japan showed that BPRS negative symptoms scores predicted the QOL. The study suggests that active treatment for depressive and negative symptoms might be recommended to improve the schizophrenic's QOL. (22) Sufficient financial resources appeared to be a necessary condition for achieving satisfactory QOL in schizophrenia patients. (23) Marital status and employment are predictive of QOL. (24) In addition, schizophrenic patients' caregivers in the community had low moderate level of QOL. (25) Schizophrenic under antipsychotic treatment over 12-month study period showed that both QOL and symptom severity improved, regardless of the type of antipsychotic taken. (26) Quality of life is superior on atypical treatment especially in younger, less seriously ill patients. (27) The results of atypical antipsychotic treatment indicate that, in patients with schizophrenia, olanzapine and ziprasidone treatment are associated with significant QOL and clinical improvements. (28)

# Ranking of QOL : Anixety Disorders and Panic Disorder (ranked highest)

This study showed that anxiety disorders have highest levels of QOL in panic disorder while OCD had the lowest quality of life scores .This study found the mean QOL in panic disorder and generalized anxiety disorder were 102.21 ± 12.61 and 97.13 ± 6.56, which considered as the better quality of life and responded better to treatment<sup>(29)</sup> when compared to the poor QOL in previous studies in panic disorders. The anxiety symptoms were significantly associated with poorer QOL in all domains of QOL. Meanwhile, socio-demographic characteristics had moderating effects on the associations between some domains of QOL and anxiety symptoms. Especially

in panic disorder, frequency of panic attacks and agoraphobic avoidance were variables accounting for poor QOL in physical functioning and mental health, respectively. (32) The QOL of the panic disorder significant improve after effective treatments (33) and this study supports this point. Other factors such as depressive symptoms, age, frequency of symptoms, agoraphobia and panic attacks may affect the quality of life. The treatment such as CBT can add to improve the quality of life of these patients. (34)

# Obsessive compulsive disorder (ranked lowest)

This study found that obsessive patients had a mean score of QOL at least. OCD had the minimum average age (31.66  $\pm$  6.65) and the lowest score in overall scale and mental component (17.83  $\pm$  2.32). The results of this study support the concept that anxiety patients, like OCD may have the QOL less than psychotic patients. A previous study revealed that QOL scores for the general, physical, psychological and social relationship domains were lower in the OCD group than in the control group. However, it showed no difference in the environmental domain.  $^{(35)}$ 

# Affective Disorder : Depressive Disorder (ranked second)

Depressive disorder patients that are expected to have poor quality of life but scores in this study is as good as the second. Depressive symptoms even mild depressive symptoms are associated with major deficits in QOL and poor self-acceptance. Depressive symptoms predicted all QOL domains, while positive symptoms predicted overall and physical QOL domains.

# Bipolar disorder (ranked fifth)

Comparative study in psychotic disorder in schizpophrenia, schizoaffective and bipolar I disorder showed that schizoaffective disorder was associated with the lowest of QOL, bipolar I disorder associated with similar or lower QOL than schizophrenia. (38) Bipolar patients showed lower scores in all QOL domains and the impairments in QOL may occur even in euthymia or stable phase. (39 -41) Poorer self-reported QOL correlated significantly with worse cognitive performance, especially on tests of executive functioning and verbal abstraction. Cognitive rehabilitation may be an important factor for restoring QOL to baseline levels among bipolar patients. (42)

### Limitation

The limited population in this study is somewhat less than the overall summary. There are many other factors that may affect the quality of life such as educational level, economic status, family support and the environment. Mental illness symptoms like delusion in schizophrenia can affect realistic perception of the quality of life. Interpersonal relation problems may adversely impact with the quality of life. (43) The variations of mental illness treatments may also affect QOL. Moreover, poor psychiatric patients in development countries have not access to novel pharmacological drugs such as the second generation of antipsychotic drugs. Some studies implied better QOL of patients receiving treatments. (44, 45)

# Conclusion

The outcome of interpretation of QOL scores showed that the overall quality of life of the patients

were in the better level. The levels of the quality of life of the diagnosed are accordingly ranked, namely, panic disorder, depressive disorder, schizophrenia, generalized anxiety disorder, bipolar disorder and obsessive compulsive disorder. The quality of life of schizophrenic patients did not differ from the non-schizophrenia. This study may also demonstrate the treatment outcomes that affect improvement of the quality of life of the schizophrenic patients, even though if it is a serious disease.

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Vol. 56 No. 2 March - April 2012

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Vol. 56 No. 2 March - April 2012

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