

THE VALUE OF HEALTH-RELATED QUALITY OF LIFE IN PRIMARY CARE PATIENTS WITH MAJOR DEPRESSIVE DISORDER

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BACKGROUND

- Major Depressive Disorder (MDD) is common in primary care and is associated with impaired patient functioning and significant reductions in patients' Health-Related Quality of Life (HRQL)^{1,2}. The concept of HRQL has become an important criterion in evaluating therapeutic strategies, since its aim is to assess the impact of patients' health status on their everyday life. Antidepressant treatments, such as selective serotonin reuptake inhibitors (SSRIs) are effective in reducing depression severity³ and in increasing patient functioning as well as their HRQL⁴.
- One way to determine the subjective impact of a patient's health state is by using a preference-based measure called a "utility"⁵. A utility rating is a comprehensive measure that takes into account all factors influencing HRQL and arrives at a measurement of patient preference or desirability for a specific health state. Health state utilities are needed to calculate quality-adjusted life years (QALYs), a measure of effectiveness wherein utility scores are used to weight periods of time for the effect of disease progression and treatment on HRQL.

OBJECTIVE

The objectives of this study are to estimate utility of patients suffering from MDD by demographic and clinical data, and to examine differences in utility by patients demographic, clinical and HRQL characteristics.

METHODS

- Study Description**
Data from a multicentre, observational, eight-week study of primary care SSRI-treated patients with a DSM-IV diagnosis of MDD were used. Clinical efficacy was assessed by the Montgomery-Åsberg Depression Rating Scale (MADRS), which was given at baseline and at weeks 2, 3, 4 and 8. Patient-reported outcomes consisted of the Medical Outcome Study 36-Item Short-Form Health Survey (SF-36) and the EuroQoL scales. These two HRQL instruments were completed by the patient at baseline and at weeks 4 and 8. Using MADRS scores at week 8, patients were classified into two groups: those who had scores lower or equal to 12 were considered as "Remitters", the others were considered as "Non-remitters". Patients who had a decrease of at least 50% in relation to baseline score were considered as "Responder", whereas the others were "Non-responders". These two patients groupings led to the creation of three mutually exclusive groups: "Remitters", "Responders" and "Non-responders".

- Patient Reported Outcomes**
The SF-36 is a widely used generic profile consisting of 36 items⁶, which is divided into eight subscales: Physical Functioning (PF), Role-physical Limitations (RP), Bodily Pain (BP), General Health (GH), Vitality (VT), Mental Health (MH), Role-emotional Limitations (RE), and Social Functioning (SF). From these eight subscales, two composite summary scores can also be computed: Physical Composite Summary (PCS), and Mental Composite Summary (MCS). All these scores range between 0 (the worst HRQL) and 100 (the best HRQL). The EuroQoL scale is a generic preference-based HRQL instrument, which computes an index based on the rating of five items⁷. This index ranges from 0 (death) to 1 (perfect health).

- Statistical analyses**
The scales were scored using algorithms provided by the scale authors. Student's t-tests, ANOVA, Mann-Whitney or Kruskal-Wallis tests were performed when appropriate to compare mean scores across subgroups. Regression analyses were used to examine the relationships between differences in utility assessed by EuroQoL and demographics, clinical response and differences in HRQL measures.

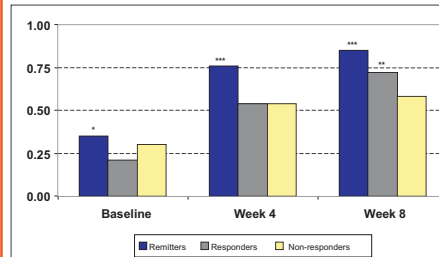
RESULTS

Following the study protocol, 95 general practitioners enrolled 250 patients for inclusion in this observational study.

No significant differences were found on utility scores by demographic characteristics: men and women reported the same preference-based score at baseline, and their scores increased in a same manner during follow-up. Younger patients reported higher utility scores than older patients at baseline, week 4 and week 8, without reaching statistical significance (Table 1).

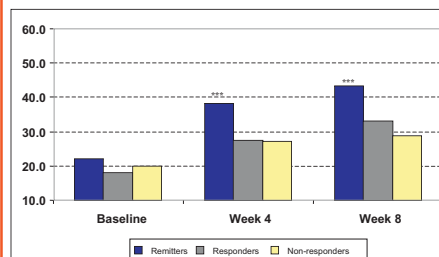
EuroQoL scores increased in all groups of clinical response during the study (Figure 1).

Figure 1: Mean EuroQoL score and Clinical Response



Comparison with non-responders: *p<0.05; **p<0.01; ***p<0.001

Figure 3: Mean SF-36 MCS score and Clinical Response



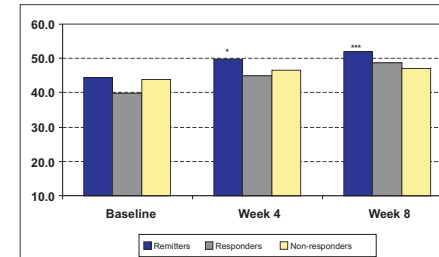
Comparison with non-responders: ***p<0.001

Table 1: Mean EuroQoL score and Demographics

	Baseline		Week 4		Week 8	
	Mean ± SD	p	Mean ± SD	p	Mean ± SD	p
Gender		0.94		0.48		0.70
Male	0.32 ± 0.22		0.66 ± 0.24		0.79 ± 0.20	
Female	0.32 ± 0.26		0.68 ± 0.25		0.77 ± 0.21	
Age group		0.76		0.12		0.64
30 years	0.35 ± 0.23		0.76 ± 0.24		0.81 ± 0.23	
31-65 years	0.32 ± 0.24		0.66 ± 0.25		0.77 ± 0.21	
> 65 years	0.30 ± 0.38		0.68 ± 0.17		0.79 ± 0.14	

Throughout the study, remitters reported an improved HRQL, using the SF-36 when compared with responders and non-responders. (Figures 2 & 3).

Figure 2: Mean SF-36 PCS score and Clinical Response



Comparison with non-responders: *p<0.05; ***p<0.001

Even if HRQL scales were moderately correlated, an ordinary least-square regression analysis to predict differences in EuroQoL using demographic features, clinical and HRQL evolution only explained 40% of the variance in the utility difference scores. The statistically significant contributors in the regression model were differences in Physical Functioning, Bodily Pain, General Health and Mental Health (Table 2).

Table 2: SF-36 Contributors of the Difference in EuroQoL scores

	Parameter estimate	Standard error	p-value	95% Confidence Interval
Difference in PF	0.0019	0.0007	< 0.01	[0.0005 - 0.0033]
Difference in BP	0.0016	0.0007	< 0.05	[0.0001 - 0.0030]
Difference in GH	0.0030	0.0009	< 0.01	[0.0011 - 0.0048]
Difference in MH	0.0044	0.0009	< 0.001	[0.0027 - 0.0061]

ABSTRACT

Background. Major depressive disorder (MDD) is a prevalent psychiatric disorder associated with impaired patient functioning and reductions in health-related quality of life (HRQL). The present study describes the impact of MDD on patient HRQL measured in terms of utility, and examines differences in variations by patient and clinical characteristics.

Methods. 95 French primary care practitioners recruited 250 patients with a DSM-IV diagnosis of MDD for inclusion in an eight-week follow-up cohort. Patient assessments included the Montgomery-Åsberg Depression Rating Scale (MADRS), the Clinical Global Impression of Severity (CGI), the Short Form-36 Item Health Survey (SF-36) and the EuroQoL (EQ-5D). EQ-5D was converted into a single index summary score using previously published utility weights.

Results. The mean EQ-5D utility at baseline was 0.33, and 8% of patients recorded a current health state with a negative value worse than dead. There were no statistically significant differences in utilities by demographic features. Significant differences were found in mean utilities by level of disease severity assessed by CGI. Different clinical response profiles assessed by MADRS were revealed by EQ-5D at endpoint, with a mean of 0.85 for responder-remitters, 0.72 for responder-non-remitters, and 0.58 for non-responders. Even allowing for a moderate correlation between SF-36 and EQ-5D, differences in SF-36 between endpoint and baseline explained only 40% of the variance of the difference in EQ-5D during the study period.

Conclusion. Self-reported patient valuations for depression can easily be obtained using EQ-5D, and are important for economic evaluations of new antidepressant compounds.

CONCLUSION

- Preference-based utility scores provided by patients suffering from MDD using EuroQoL are consistent with previous findings using other scales.
- Even if their conceptual framework is similar, health state utility and HRQL provide distinct and complementary levels of information.
- The collection and reporting of utilities can be applied to cost-utility analyses either within clinical decision modelling studies or within prospective, randomised clinical trials.

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