

# Reliability of the WHOQOL-BREF Quality of life questionnaire for use with drug addict patients with Selected Yoga Module Practices

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**Abstract-**The aim of the present study was to evaluate reliability of World Health Organization Quality of Life questionnaire (WHOQOL-BREF) in an adult population of Drug addicts in Shimla, India. Total 120 adults in the Shimla district were interviewed using a questionnaire containing the WHOQOL-BREF. To assess the reliability of WHOQOL-BREF, Cronbach's  $\alpha$  was calculated, and test-retest reliability was evaluated, after analyses, the WHOQOL-BREF showed good internal consistency and was sensitive to improvement after practices+ of selected Yoga module. Convergent validity between the WHOQOL-BREF and the Yoga practice was statistically significant as well as WHOQOL-BREF's ability to discriminate between patient on the basis of their Yoga practices. In conclusion, the WHOQOL-BREF seems to be valid and reliable instrument with some modification, it is suitable for evaluating Quality of life of Drug addicts with practice of selected Yoga module.

**Key words-** Yoga, Drug addicts, WHOQOL-BREF, Cronbach's  $\alpha$

## INTRODUCTION

Currently, Quality of life (QOL) as a measure of individuals' subjective feelings on various aspects of life and health is regarded as an important concept. The World Health Organization (WHO) defines QOL as 'an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns' (The WHOQOL-BREF group,1996)<sup>1</sup>. To evaluate the extent of QOL, the WHOQOL Group developed an assessment instrument called WHOQOL-BREF, a shortened version of WHOQOL-100.

The WHOQOL-BREF contains 26 items divided into four domains: Physical (domain 1), Psychological (domain 2), Social relationships (domain 3), and Environmental (domain 4), with a higher score indicating a better QOL. The WHOQOL-BREF is available in approximately 20 languages, including those of both developed and

developing countries, and in Christian, Islamic, and Hindu culture settings, with several studies in developing countries having demonstrated its cross-cultural and content validity.

## METHOD

### Participants

The present study was conducted in 2021 in a rehabilitation centre of Shimla, the capital of Himachal Pradesh, India.

Respondents, consisting of the patients of the rehabilitation centre were interviewed in the hall after giving verbal consent. As part of the procedure to inform participants of the purpose and aims of the study, and to obtain informed consent, a University letter from the Head of the department was presented to potential participants. To ensure privacy and confidentiality, interviews were conducted in an independent room or area separate from other members of the centre. As a result, a total of 120 adults participated in the study and there were no excluded from the studies.

To determine the discriminant validity of the questionnaire, drug addicts were included as an experimental group and a control group.

## QUESTIONNAIRE

The QOL information was obtained using a structured questionnaire containing questions on the WHOQOL-BREF. The components of the original English-language questionnaire and some of them used Hindi translated version of questionnaire.

All respondents answered the questionnaire through interviews or one to one interaction.

## FOLLOW-UP

12 weeks after the initial interview, 120 patients were re-interviewed with the same questionnaire to

assess the test–retest reliability of the WHOQOL-BREF.

DATA-ANALYSIS

Cronbach’s  $\alpha$  was calculated to determine the internal consistency of the WHOQOL-BREF. For test–retest reliability, intraclass correlation coefficient (ICC) between the first and second administrations was calculated. To evaluate its discriminant validity, total WHOQOL-BREF scores and scores for all domains of all the participants. SPSS-25, Statistical Software Package used for all data analysis. we performed a separated analysis for each domain of the WHOQOL-BREF (Physical, Psychological, Social Relationships and Environment).

Reliability Statistics

Pre-test

Domain 1 (Physical Health)		Domain 2 (Psychological)		Domain 3 (Social Relationships)		Domain 4 (Environment)	
Cronbach's Alpha	.698	Cronbach's Alpha	.667	Cronbach's Alpha	.470	Cronbach's Alpha	.715
N of Items	7	N of Items	6	N of Items	3	N of Items	8

Table-2

Reliability Statistics

Post-test

Domain 1 (Physical Health)		Domain 2 (Psychological)		Domain 3 (Social Relationships)		Domain 4 (Environment)	
Cronbach's Alpha	.706	Cronbach's Alpha	.567	Cronbach's Alpha	.417	Cronbach's Alpha	.747
N of Items	7	N of Items	6	N of Items	3	N of Items	8

Table-3

DISCUSSION

The WHOQOL-BREF proved to be an adequate instrument, with a moderate level of reliability, being easily administered.

Cronbach’s alpha gives us a simple way to measure whether or not a score is reliable. The values of Cronbach’s alpha, regarding the total scale as well as its domains, were higher than 0.65, except for the Social Domain ( $\alpha = 0.470$ ) in pre-study and re-test there were two domains are less then this scale which are Social Domain and Psychological Domain, which is considered by other studies as well.

Even though there are fewer other studies using the same instrument to evaluate the severity of drug addiction in the discriminant validation of this instrument, the discriminative capacity of the WHOQOL-BREF was proved in other studies.

There were no differences between those subjects with moderate and mild addiction.

RESULTS

It was ensured that each sample completed the task without any hassle. The two groups were given a pre-test. After the pre-test 12, week selected Yoga module was given to the experimental group, whereas the control group was

Case Processing Summary

		N	%
Cases	Valid	120	100.0
	Excluded <sup>a</sup>	0	.0
	Total	120	100.0

Table-1a. Listwise deletion based on all variables in the procedure.

The effect size between mild and moderate drug dependents was trivial for psychological domain and small for the other domains.

CONCLUSION

This study showed that the properties of WHOQOL-BREF are adequate, as well as its capacity to evaluate the Quality of life of drug addicts. The Physical, Psychological, Social and Environmental domains are interrelated in the measurement of the Quality of life in this population.

We hope that the WHOQOL-BREF might be a useful instrument not only for the researchers, but also for health care professionals who work with Drug-addicted patients as an auxiliary tool in the evaluation of the Quality of life.

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#### REFERENCE

- [1] WHO-QoL Wikipedia
- [2] Vickrey, BG, Hays, RD, Genovese, BJ, Myers, LW, Ellison, GW. Comparison of a generic to disease-targeted health-related quality-of-life measures for multiple sclerosis. *J Clin Epidemiol.* 1997;50:557-569. [CrossRef](#) [Google Scholar](#) [PubMed](#)
- [3] Miller, D, Rudick, RA, Hutchinson, M. Patient -centered outcomes: translating clinical efficacy into benefits on health-related Quality of life. *Neurology.* 2010;74(Suppl 3):S24-S35. [CrossRef](#) [Google Scholar](#) [PubMed](#)
- [4] Mitchell, AJ, Benito-Leon, J, Gonzalez, JM, Rivera-Navarro, J. Quality of life and its assessment in multiple sclerosis: integrating physical and psychological components of wellbeing. *Lancet Neurol.* 2005;4:556-566. [CrossRef](#) [Google Scholar](#) [PubMed](#)
- [5] Solari, A. Role of health-related quality of life measures in the routine care of people with multiple sclerosis. *Health Qual Life Outcomes.* 2005;3:16. [CrossRef](#) [Google Scholar](#) [PubMed](#)
- [6] Nedjat S, Montazeri A, Holakouie K, Mohammad K, Majdzadeh R. Psychometric properties of the Iranian interview-administered version of the World Health Organization's Quality of Life Questionnaire (WHOQOL-BREF): A population-based study. *BMC Health Serv Res.* 2008; 8:61. [PMC free article] [PubMed](#) [Google Scholar](#)
- [7] Mary H. Kalfoss, Randi J. Reidunsdatter, Christian A. Klöckner & Marianne Nilsen Validation of the WHOQOL-Bref: psychometric properties and normative data for the Norwegian general population *Health and Quality of Life Outcomes*
- [8] Marta Gil-Lacruz, Miguel Cañete-Lairla, Jorge Navarro, Rosa Montaña-Espinoza, Iris Espinoza-Santander, Paulina Osorio-Parraguez Validation of the WHOQOL-BREF Quality of Life Questionnaire in an Urban Sample of Older Adults in a Neighbourhood in Zaragoza (Spain)