

---

---

PROGRAMME ON MENTAL HEALTH

---

---

*WHOQOL*

**Measuring  
Quality of Life**



---

---

DIVISION OF MENTAL HEALTH AND  
PREVENTION OF SUBSTANCE ABUSE  
WORLD HEALTH ORGANIZATION

© World Health Organization 1997

This document is not a formal publication of the World Health Organization (WHO), and all rights are reserved by the Organization. The document may, however, be freely reviewed, abstracted, reproduced or translated, in part or in whole, but not for sale or use in conjunction with commercial purposes.

# MEASURING QUALITY OF LIFE

## THE WORLD HEALTH ORGANIZATION QUALITY OF LIFE INSTRUMENTS

### (THE WHOQOL-100 AND THE WHOQOL-BREF)

#### Introducing the WHOQOL instruments

The Constitution of the World Health Organization (WHO) defines health as "A state of complete physical, mental, and social well-being not merely the absence of disease . . .". It follows that the measurement of health and the effects of health care must include not only an indication of changes in the frequency and severity of diseases but also an estimation of well being and this can be assessed by measuring the improvement in the quality of life related to health care. Although there are generally satisfactory ways of measuring the frequency and severity of diseases this is not the case in so far as the measurement of well being and quality of life are concerned. WHO, with the aid of 15 collaborating centres around the world, has therefore developed two instruments for measuring quality of life (the WHOQOL-100 and the WHOQOL-BREF), that can be used in a variety of cultural settings whilst allowing the results

The WHOQOL-100 was developed simultaneously in 15 field centres around the world. The important aspects of quality of life and ways of asking about quality of life were drafted on the basis of statements made by patients with a range of diseases, by well people and by health professionals in a variety of cultures. The instrument was rigorously tested to assess its validity and reliability in each of the field centres and is

from different populations and countries to be compared. These instruments have many uses, including use in medical practice, research, audit, and in policy making.

WHO defines Quality of Life as individuals' 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.

It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs and their relationship to salient features of their environment.

#### Strengths of the WHOQOL instruments

*The WHOQOL instruments were developed cross-culturally*

currently being tested to assess responsiveness to change. The WHOQOL-BREF, an abbreviated 26 item version of the WHOQOL-100, was developed using data from the field-trial version of the WHOQOL-100. The WHOQOL instruments can be used in particular cultural settings, but at the same time results are comparable across cultures.

The WHOQOL is now available in over 20 different languages and its development in

further languages is progressing.

*The WHOQOL instruments place primary importance on the perception of the individual*

Most assessments in medicine are obtained by examinations by health workers and laboratory tests. The WHOQOL instruments, by focusing on individuals' own views of their well being, provide a new perspective on disease. For example, that diabetes involves poor body regulation of blood glucose is well understood, but the effect of the illness on the perception that individuals have of their social relationships, working capacity, and financial status has received little systematic attention. The WHOQOL instruments are tools that will enable this type of research to be carried out. They not only inquire about the functioning of people with diabetes, across a range of areas but also how satisfied the patients are with their functioning and with effects of treatment.

*Systematic development of the WHOQOL-100*

The method used to develop the WHOQOL-100 involved considerable research and checking over several years to ensure that it accurately measures the issues that are important to a person's quality of life, and that it does so reliably. The institutions which participated in this research now serve as reference centres and can provide technical support to users in their cultural setting (see later section for contact information). In return for this support, centres request a copy of data collected to be sent to them.

*The Instruments have different forms for different uses*

The core WHOQOL instruments can assess quality of life in a variety of situations and population groups. In addition, modules are being developed to allow more detailed assessments of specific populations (e.g. cancer patients, refugees, the elderly and those with certain diseases, such as Both the WHOQOL-100 and the WHOQOL-BREF have been shown to display good

HIV/AIDS.

Administration of the WHOQOL instruments

*The national versions of the WHOQOL*

The WHOQOL instruments are available in over 20 different languages. The appropriate language version, and permission for using it, can be obtained from the appropriate national centre, as listed on pages 7-8.

Centres may request a copy of data collected for collation in a national data set. A methodology has been developed for new centres wishing to develop further language versions of the WHOQOL-100 or the WHOQOL-BREF. This information can be obtained from The WHOQOL Group, Programme on Mental Health, World Health Organisation, CH-1211, Geneva 27, Switzerland. The WHOQOL-BREF is self-administered if respondents have sufficient ability; otherwise, interviewer-assisted or interview-administered forms should be used.

*Scoring the WHOQOL instruments*

The WHOQOL-100 produces scores relating to particular facets of quality of life (e.g. positive feelings, social support, financial resources), scores relating to larger domains (e.g. physical, psychological, social relationships) and a score relating to overall quality of life and general health. The WHOQOL-BREF produces domain scores, but not individual facet scores. Details on scoring are included in manuals available from The WHOQOL Group, Programme on Mental Health, World Health Organisation, CH-1211 Geneva 27, Switzerland. Syntax files for checking and cleaning data, and for computing facet and domain scores are also available from The WHOQOL Group.

*Psychometric properties of the WHOQOL instruments*

discriminant validity, content validity and test-retest reliability. Their sensitivity to

change is currently being assessed. Domain scores produced by the WHOQOL-BREF have been shown to correlate at around 0.9 with the WHOQOL-100 domain scores.

The Uses of the WHOQOL instruments

*In medical practice*

In clinical practice the WHOQOL instruments may be used with other forms of assessment, giving valuable information that can indicate areas in which a person is most affected and help the practitioner in making the best choices in patient care. In addition they may be used to measure change in quality of life over the course of treatment.

*Improving the doctor-patient relationship*

By increasing the physician's understanding of how disease affects a patient's quality of life, the interaction between patient and doctor will change and improve. This gives more meaning and fulfilment to the work of the doctor and leads to the patient being provided with more comprehensive health care. Because a more complete form of assessment covering different aspects of patients' functioning is being carried out, patients themselves may find their health care more meaningful.

*In assessing the effectiveness and relative merits of different treatments*

The WHOQOL instruments can form a part of the evaluation of treatments. For example, chemotherapy for cancer may prolong a person's life, but may only do so at considerable cost to their quality of life. By using the WHOQOL instruments to look at changes in the person's well being over the course of treatment, a much fuller picture can be gained.

*In health services evaluation*

In the periodic review of the completeness and quality of medical services, the patients' concerns are of importance. The instruments provide an invaluable supplementary appraisal of health care services, by yielding a measure of the relationship between the health care service and patients' quality of life, and also by directly presenting a measure of patients' perception of the quality and availability of health care.

*In research*

The WHOQOL instruments provide new insights into the nature of disease by assessing how disease impairs the subjective well being of a person across a whole range of areas.

*In policy making*

When health providers implement new policies it is important that the effect of policy changes on the quality of life of people in contact with health services is evaluated. The WHOQOL instruments allow such monitoring of policy changes.

*The Structure of the WHOQOL-100*

The structure of the WHOQOL-100 reflects the issues that a group of scientific experts as well as lay people in each of the field centres felt were important to quality of life. The six broad domains of quality of life, and the twenty-four facets covered within each domain are shown below. Four items are included for each facet, as well as four general items covering subjective overall QOL and health, producing a total of 100 items in the assessment. All items are rated on a five point scale (1-5).

Domain	Facets incorporated within domains

	Overall Quality of Life and General Health
1. Physical health	Energy and fatigue Pain and discomfort Sleep and rest
2. Psychological	Bodily image and appearance Negative feelings Positive feelings Self-esteem Thinking, learning, memory and concentration
3. Level of Independence	Mobility Activities of daily living Dependence on medicinal substances and medical aids Work Capacity
4. Social relationships	Personal relationships Social support Sexual activity
5. Environment	Financial resources Freedom, physical safety and security Health and social care: accessibility and quality Home environment Opportunities for acquiring new information and skills Participation in and opportunities for recreation/leisure Physical environment (pollution/noise/traffic/climate) Transport
6. Spirituality/Religion/Personal beliefs	Religion /Spirituality/Personal beliefs

### Structure of the WHOQOL-BREF

The WHOQOL-BREF contains two items from the Overall Quality of Life and General Health, and one item from each of the remaining 24 facets included in the WHOQOL-100. Recent analysis of the WHOQOL-100 structure has suggested the possibility of merging domains 1 and 3, and also merging domains 2 and 6, thereby

creating four domains of quality of life. In our current approach to scoring the WHOQOL-BREF, these domains have been merged therefore and four major domains are assessed: physical, psychological, social relationships and environment. The WHOQOL-BREF is currently being field tested.

The Development of the WHOQOL instruments

Stage	Method	Products	Objectives
Concept clarification	International expert review.	Quality of Life definition. Study protocol.	Establishing an agreed upon definition of quality of life and an approach to international quality of life assessment.
Qualitative pilot	Expert review. Focus groups.	Definitions of domains and facets. Global item pool.	Exploration of the quality of life concept across cultures. Item generation.
Development pilot	Administration of WHOQOL Pilot Form in 15 field centres to 250 patients and 50 "healthy" respondents.	300 item standardised questionnaire.	Refine the WHOQOL structure. Reduce the global question pool.
Field test of the WHOQOL-100	Series of smaller scale studies involving clear and homogenous populations, longitudinal design and parallel use of other national / international QOL measures.	Common 100 item pool. Standardised and cross-nationally equivalent response scales.	To further establish the psychometric properties of the WHOQOL.
Development of the WHOQOL-BREF	Analysis of data from the WHOQOL-100	Abbreviated 26 item assessment	Develop a brief version of the WHOQOL-100 for use in large studies, audit and clinical work, where use of a longer questionnaire is not practicable.

Future Developments

A number of WHOQOL centres have begun to develop additional modules to the WHOQOL which will provide greater detail on particular aspects of the quality of life of those, for instance, with certain diseases.

Some studies have led to the development of national items to supplement the core WHOQOL. These reflect special aspects of quality of life not included in the core because they are not universally valued. A scoring

**system is being developed which will permit these national items or modules to be included in national data analyses.**



Principal Investigators and Field Centres Involved in the Development of  
the WHOQOL Instruments

--

**INITIAL 15 CENTRES**

Professor Helen Herrman, Department of Psychiatry, St. Vincent's Hospital, 41 Victoria Parade, Fitzroy, Vic. 3065, Australia, Tel:..61 3 9288 4751, Fax:..61 3 9288 4802,  
e-mail: herrmah@mail2.svhm.org.au

Professor S. Szabo, Professor M. Pi bernik-Okanovic, Vuk Vrhovac Institute, University Clinic for Diabetes, Endocrinology, and Metabolic Diseases, Medical Faculty, University of Zagreb, Dugi Dol 4A, 10000 Zagreb, Croatia, Tel:..385 1 2 33 22 22, Fax:..385 1 2 33 15 15, Private address for correspondence with Dr S. Szabo: Svacicev trg 13, 41000 Zagreb, Croatia

Dr Nicole Quemada, Centre collaborateur de l'OMS, INSERM Centre Paul Broca, 2ter rue d'Alésia, F - 75014 Paris, France, Tel:..33 1 40 78 92 55, Fax:..33 1 45 80 72 93

Dr Alain Leplège, INSERM U 292, Hôpital de Bicêtre, F-94275 Le Kremlin Bicêtre Cdx, France, Tel: 01 49 59 19 78 or 01 48 78 04 45, Fax: 01 45 21 20 75, e-mail: Alain.Leplège@wanadoo.fr

Dr Shekhar Saxena, Department of Psychiatry, All India Institute of Medical Sciences, Ansari Nagar, New Delhi 110029, India, Tel:..91 11 686 4851, Fax:..91 11 686 2663,  
e-mail: saxenas@mediinst.ernet.in

Dr S. Rajkumar, Dr Shuba Kumar, For correspondence: Dr Shuba Kumar, Clinical Epidemiology Unit, Physiology Block (Level 1), Madras Medical College, Madras 600 003, India, Tel: ..91 44 561, 550, Fax: ..91 44 580 153, e-mail: gems%vsnl@mci mail.com

Dr Marianne Amir, Department of Behavioral Sciences, The Cukier Goldstein-Goren Building, Ben-Gurion University of the Negev, P.O.B. 653, 84105 Beer-Sheva, Israel, Tel: ..972 7 6472425-7, Fax: ..972 7 6472930, e-mail mami r@bgumail.bgu.ac.il

Dr Miyako Tazaki, Science University of Tokyo, Kagurzaka 1-3, Shinjuku-ku, Tokyo, Japan, Tel:..81 3 3260 4271, Fax:..81 3 3260 0322, e-mail: Tazaki@rs.kagu.sut.ac.jp

Professor G. Van Heck, Mrs J. De Vries, Department of Psychology, Tilburg University, P.O. Box, 90153 NL-5000 LE Tilburg, The Netherlands, Tel:..31 13 466 2522, Fax:..31 13 466 2370,  
e-mail: G.L.vanHeck@kub.nl

Dr Jaime Arroyo Sucre, Apartado 6651, Panama 5, Panama, Tel:..507 261 02 22, Fax:..507 22644 77

Dr M. Kabanov, Dr G. Burkovsky, Dr A. Lomachenkov, V.M. Bekhterev Psychoneurological Research Institute, 3 Bekhterev Street, St. Petersburg 193019, Russian Federation, Tel:..81 2 567 54 06, Fax:..81 2 567 7128, e-mail: spbinst@sovam.com

Dr Ramona Lucas Carrasco, Alcudia 32-34, 3-2, 08016 Barcelona, Spain, Tel: ..34 3 353 87 88, Fax: ..34 3 210 3302, e-mail: tanguera@psi.ub.es

**INITIAL WHOQOL CENTRES (continued)**

Mr Kitikorn Meesapya, Bureau of Mental Health, Technical Development Department of Mental Health, Ministry of Public Health, Tivanon Rd., Nonthaburi 11000, Thailand, Tel:..66 2 9511300-40 Ext. 8205, Fax:..66 2 9511384 or 9511386, e-mail: kitikorn@health.moph.go.th

Dr S. Skevington, University of Bath, School of Social Sciences, Claverton Down, Bath BA2 7AY, United Kingdom, Tel:..44 1225 826826, Fax:..44 1225 826381, e-mail: S.M.Skevington@bath.ac.uk

Dr Donald Patrick, Department of Health Services, H689, University of Washington, Box 357660, Seattle, Washington 98195-7660, USA, Tel:..1 206 616 2981, Fax:..1 206 543 3964, Assistant: Monica Tolliver (206) 616 2979, e-mail: donald@u.washington.edu,

Professor W. Acuda, Dr Jane Mutambirwa, Department of Psychiatry, University of Zimbabwe, P.O. Box A 178, Avondale, Harare, Zimbabwe, Tel:..263 4 791 631, Fax:..263 4 333 407 or 724 912

**NEW WHOQOL CENTRES**

Dr Sylvia Bonicatto, FUNDONAR, Fundacion Oncologica Argentina, Calle 37 Numero 423, La Plata 1900, Argentina, Tel/Fax: ..54 21 25 3406, e-mail: bonicatto@netverk.com.ar

Dr Gao Yongping (Chinese Australian version developed in Melbourne), Hebei Mental Health Center, 10 Weisheng Road, Baoding City, Hebei Province 071000, People's Republic of China, Tel: 2022688

Dr Marcelo Fleck, University of the State of Rio Grande do Sul, Department of Psychiatry and Legal Medicine, Rua Ramiro Barcelos 2350, Sala 177C - HCPA, CEP 90035-003 Bairro Rio Branco, Porto Alegre, Brazil, Tel/Fax: ..55 51 330 5655, Fax: ..55 51 330 8965

Dr Anita E. Molzahn, Faculty of Human and Social Development, University of Victoria, POB 1700, Victoria BC, Canada V8W 2Y2, Tel: ..1 604 721 8050, Fax: ..1 604 721 7067, e-mail: amolzahn@hsd.uvic.ca

Dr Ginette Page, School of Nursing, University of Quebec, at Rimouski 300 avenue des Ursulines, Rimouski, PQ, Canada G5L 3A1, Tel: ..1.418 724 1628, Fax: ..1 418 724 1525

Professor Jiqian Fang, Department of Medical Statistics and Community Medicine, School of Public Health, Sun Yat-Sen University of Medical Sciences, 510089 Guangzhou, People's Republic of China, Fax: ..86 20 8776 5679

Professor M.C. Angermeyer, Dr R. Kilian, Universitätsklinikum, Klinik und Poliklinik für Psychiatrie, Johannsallee 20, D-04317 Leipzig, Germany, Tel: ..49 171 508 94 49, Fax: ..49 341 97 24 509

Mr Leung Kwok-fai, Hong Kong Project team on Chinese version, WHOQOL, Hong Kong Hospital Authority, c/o Department of Occupational Therapy, Queen Elizabeth Hospital, 30 Gascoigne Road, Kowloon, Hong Kong, Fax: ..852 2958 6719, Tel: ..852 2958 6166 or 6077, e-mail: kfleung@ha.org.hk

Dr Judit Harangozo, Semmelweis University of Medicine, Department of Psychiatry and Psychotherapy, Balassa u. 6, H-1083 Budapest, Hungary, Tel/Fax: ..36 1 210 0336 or 210 0339

Dr Lajos Kullmann, National Institute for Medical, Rehabilitation, P.O. Box 1, H-1528 Budapest 123, Hungary, Tel: ..36 1 200 8830, Fax: ..36 1200 8834

Dr G. de Girolamo, Department of Mental Health, Azienda USL Città di Bologna, Viale Pepoli 5, I-40123 Bologna, Italy, Tel: ..39 51 649 1166, Fax: ..39 51 649 2322, e-mail: nof2637@iperbole.bologna.it

Dr Mary Kalfoss, Department of Public Health and Primary Health Care, Division of Nursing Science, University of Bergen, Ulriksdal 8c, N-5009 Bergen, Norway, Tel: ..47 55 58 61 62, Fax: ..47 55 58 61 30, e-mail: mary.kalfoss@isf.uib.no

Dr Malik H. Mubbashar, Department of Psychiatry, Rawalpindi General Hospital, Rawalpindi, Pakistan, Tel: ..92 51 844030, Fax: ..92 51 411165

Professor Ingela Wiklund, Health Economics & Quality of Life, Astra Hässle AB, S-431 83 Mölndal, Sweden, Tel: ..46 31 776 10 97, Fax: ..46 31 776 38 05

Dr Caner Fidaner, Mi thatpasa cad. 259/10, 35400 Balçova/Izmir, Turkey, Tel: ..90 232 425 24 63, Fax: ..90 232 484 39 47, e-mail: Eser@tipfak.ege.edu.tr

Professor Per Bech, Psychiatric Research Unit, Frederiksberg General Hospital, DK-3400 Hillerød, Denmark, Tel: ..45 48 29 32 52, Fax: ..45 42 26 38 77, e-mail: slej@logi.n.dknet.dk

Professor Mare Teichmann, Tallinn Technical University, Ehitajate tee 5, EE-0026 Tallinn, Estonia, Tel: ..372 2 53 22 18, Fax: ..372 2 53 24 46, e-mail: jyrijr@edu.ttu.ee

## Publications to date

De Vries, J. and Van Heck, G.L. (1997). The World Health Organization Quality of Life Assessment Instrument (WHOQOL-100): Validation Study with the Dutch Version. *European Journal of Psychological Assessment*, 13(3), 164-178.

Kuyken, W., Orley, J., Hudelson, P. and Sartorius, N (1994). Quality of life assessment across cultures. *Int. J. Mental Hlth*, 23, 5.

Orley, J. and Kuyken, W. (Eds, 1994). *Quality of Life Assessment: International Perspectives*. Springer Verlag, Heidelberg.

Orley, J., Saxena, S. and Herrman, H. Quality of Life and Mental Illness. Reflections from the Perspective of the WHOQOL. *British Journal of Psychiatry*. (in press).

Pibernik-Okanovic, M., Szabo, S. and Metelko, Z. (1996). Quality of Life in Diabetic, Otherwise Ill and Healthy Persons. *Diabetologia Croatica*, 25(3), 117-121.

Sartorius, N. (1993). WHO Method for Assessment of Health-related Quality of Life. In S.R. Walker and R.M. Rosser (Eds). *Quality of Life Assessment: Key Issues in the 1990s*. Dordrecht, Netherlands: Kluwer Academic Publishers.

Szabo, S. (on behalf of the WHOQOL Group) (1996). The World Health Organisation Quality of Life (WHOQOL) Assessment Instrument. In *Quality of Life and Pharmacoeconomics in Clinical Trials* (2nd edition, Edited by Spilker B.). Lippincott-Raven Publishers, Philadelphia, New York.

Szabo, S., Orley, J. and Saxena, S. (on behalf of the WHOQOL Group) (1997). An approach to Response Scale Development for Cross-Cultural Questionnaires. *European Psychologist*, 2(3), 270-276.

The WHOQOL Group. (1994a). Development of the WHOQOL: Rationale and current status. *International Journal of Mental Health*, 23 (3), 24-56.

The WHOQOL Group (1995a). The World Health Organization Quality of Life assessment (WHOQOL): position paper from the World Health Organization. *Soc. Sci. Med.*, 41, 1403.

The WHOQOL Group (1995b). La Qualità della Vita e la sua misura: la prospettiva del WHOQOL. *Psicoterapia Cognitiva e Comportamentale*, 1(3), 5-12.

The WHOQOL Group. The World Health Organization Quality of Life Assessment (WHOQOL): Development and General Psychometric Properties. *Soc. Sci. Med.* (in press).

The WHOQOL Group. Development of the World Health Organization WHOQOL-BREF Quality of Life Assessment. *Psychological Medicine*, (in press).

The WHOQOL Group. Subjective Importance of Various Aspects for People's Quality of Life: Results from a Cross-cultural Study by WHO. (in preparation a).

The WHOQOL Group. The World Health Organization WHOQOL-100 : Tests of the Universality of Quality of Life in Fifteen Different Cultural Groups World-wide. (in preparation b).

World Health Organization. (1991). *Report of the WHO Meeting on the Assessment of Quality of Life in Health Care*. Geneva: WHO (MNH/PSF/91.4)

World Health Organization. (1992a). *Report of Meeting on Quality of Life*. Geneva: WHO (MNH/PSF/92.2).

World Health Organization. (1992b). *Report of the Meeting of Investigators on Quality of Life*. Geneva: WHO (MNH/PSF/92.6)

**World Health Organization. (1992c). *Report of the Meeting for the Training of WHOQOL Focus Group Moderators.* Geneva: WHO (MNH/PSF/92.9)**

**World Health Organization. (1993a). *Report of WHOQOL Focus Group Work.* Geneva: WHO (MNH/PSF/93.4).**

**World Health Organization (1993b). *WHOQOL Study Protocol.* WHO (MNH/PSF/93.9).**

**World Health Organization. (1994). *Quality of Life Assessment: An Annotated Bibliography.* Geneva: WHO (WHO/MNH/PSF/94.1).**

*Further information from:*

WHOQOL Group  
Programme on Mental Health  
Division of Mental Health and Prevention of Substance  
Abuse  
World Health Organization  
CH-1211 Geneva 27  
Switzerland  
Tel: ..41 22 791 3610 or 4739 or 3634  
Fax: ..41 22 791 4160  
e-mail: whoqol@who.ch

**Information about national versions may be obtained from relevant national WHOQOL centres. Those who wish to inquire further about the development of additional modules should contact the WHOQOL Group.**