

ตัวอย่างโครงร่างการวิจัย (concept paper)

Development of a quality of life measure for drug addicts

สำหรับผู้สมัครสาขาวิชาเภสัชศาสตร์สังคมและการบริหาร (หลักสูตรนานาชาติ)

Abstract

Quality of life is patient's perception of their own health. It is a measure of treatment effectiveness from the viewpoint of patients. The supplement of quality of life information to physiological and clinical measures would render a more holistic care. Instrument to assess the quality of life among drug addict is needed. Previous research employed a narrow-conceptualized measures or general measures of quality of life which are not sensitive to the change as a result of treatment. They do not capture dimensions considered important for substance users. The objective of this study is to develop a comprehensive, valid and reliable measure for quality of life among substance users. Moreover, the scale will be tested for its practicality in clinical use.

Rationale of research

In the health and medical fields, quality of life (QoL) is widely used to evaluate social and clinical interventions, treatment side effects, and disease impact over time [1]. Most of these QoL instruments tend to focus on health-related quality of life (HRQOL) or the functional effects of respondents' perceived mental and physical health [2]. Gill and Feinstein [2], however, defined QoL as a reflection of respondents' perceptions and reactions to not only their mental and physical health, but also to non-health related aspects of their lives (e.g., family, friends, work). Thus, measurement of QoL needs to encompass more than just the health-related aspects of respondents' lives.

Nearly all studies of QoL in substance users use measures of HRQOL [3]. Commonly used measures of HRQOL with this population include the Opiate Treatment Index, Nottingham Health Profile, the Berlin Quality of Life Profile and the SF-36. Many studies have shown that substance users experience significantly lower HRQOL relative to the general population [4] but, as noted by Fernández Miranda [5], remarkably little published research has examined QoL as an outcome variable in the treatment of drug addiction.

Measures developed specifically for the substance user population and using a context sensitive approach that considers the many life areas deemed by substance users as critical to their QoL, are still needed. QoL, as defined by the World Health Organization Quality of Life (WHO-QoL) group, refers to "an individual's perceptions 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" [6]. The item content and methods of administration for most available QoL instruments do not measure the QoL of substance users in a culturally-sensitive fashion [7]. Substance users live in a distinct environment characterized by a high prevalence of infectious disease, crime, violence, and lack of stable housing. Many cannot depend on basic necessities and experience considerable instability in many aspects of their lives. Available HR-QoL measures such as the SF-36 and WHOQoL-100 do not include these dimension. As a result, they are not sensitive to the change in the quality of life in responsive of treatment. Therefore, there is a need for the development of specific measures for substance users.

From literature review, two measures have been developed specially for substance users: the Injection Drug User Quality of Life (IDUQOL) scale [8] and the Quality of Life scale for Drug Addict (QOL-DA) [9]. The IDUQOL and its Spanish adaptation for use in injection and non-injection drug users (DUQOL) [10] summarize quality of life scale into a single index without providing the score in each dimension. Each of their 18 dimension is measured by single item. However, the use of these measures is not recommended because single item measures tend to be less valid, and less reliable than multi-item measures. Nunnally and Bernstein recommended the use of multi-item measures instead of a single item for measuring psychological constructs. A single item has considerable random measurement error and is unreliable. "Measurement error averages out when individual scores are summed to obtain a total score" [11]. The most compelling reason against the use of single item measures is it is very unlikely that a single item can fully capture a complex theoretical concept such as moral distress. The degree of validity and reliability of these single item measures for moral distress is not available. The QOL-DA is in Chinese without validated English version. It is close to HR-QoL measure because it includes only 4 domains of life: physical functioning, psychological functioning, social functioning and symptoms or side effects due to detoxification. Many important domains to substance users are left out such as self-esteem, craving, security etc.

As a result, there a need to develop a comprehensive measure of quality of life for substance users. Quality of life represents the effectiveness of treatment from patient's point of view. The measures would be useful in evaluating the effectiveness of treatment in clinical trials and routine treatment. It could be used to compare the outcomes of treatment among various institutions. The information would be beneficial for policy planning and quality assurance.

Methodology

Study 1: Qualitative study to identify the meaning of quality of life among Thai addicts
Information from literature review and focus group discussion with drug addicts undergoing narcotic treatment centers will provide insight on the meaning of quality of life among Thai addicts

Study 2: Questionnaire development

- The information from study 1 will be used to construct the questions
- The question will be pretested using think aloud method in 5 drug addicts
- Then, it will be reviewed by 5 experts in substance addictions and experienced researchers in the field. This process would provide some evidence for content validity.
- The resulting scale will be submitted to 3 focus groups of drug addicts to determine its clarity, readability and comprehensiveness.
- The scale will be pretested again in 30 subjects for its practicality.

Study 3: Psychometric study of the scale

- The scale will be administered to drug addicts undergoing the treatment at narcotic centers.
- Reliability is assessed using Cronbach alpha.
- Validity is tested using exploratory factor analysis, known group validity, and the correlation of the scale and the SF-36.
- Responsiveness is determined by comparing the scale scores at day1 and day14 after treatment.
- Effect size will be calculated to compare responsiveness of our scale and the SF-36.

Study 4: Monitoring the treatment of drug addiction

- The validated scale will be tested for its practicality for using in routine clinic. It will be used to monitor the patient's quality of life from the starting of treatment to 6 months after the discharge. The relationship between quality of life profile and relapse will be study
- Health professionals involved in the treatment will be interviewed for their perception of the scale usefulness.

Bibliography

1. Koch T. Life quality vs the 'quality of life': assumptions and underlying prospective quality of life instruments in health care planning. *Soc Sci Med* 2000;51:419-27.
2. Gill TM, Feinstein AR: A critical appraisal of the quality of quality-of-life measurements. *JAMA* 1994, 272:619-26.
3. Burgess AP, Carretero M, Elkington A, Pasqual-Marsettin E, Lobaccaro C, et al. The role of personality, coping style, and social support in health-related quality of life in HIV infection. *Qual Life Res* 2000;9:423-37.
4. Perez IR, Baño JR, Lopez-Ruz MA, Jiminez AA, Prados MC, Liaño JP, et al. Health-related quality of life of patients with HIV: impact of sociodemographic, clinical, and psychosocial factors. *Qual Life Res* 2005; 14:1301-10.
5. Fernández JJ. Quality of life in addictions: a measure of treatment effectiveness. *Anales de Psiquiatría* 2003; 19:377-84.
6. Bonomi AE, Patrick DL, Bushnell DM, Martin M: Validation of the United States' version of the World Health Organization Quality of Life (WHOQOL) instrument. *J Clin Epi* 2000; 53:1-12.
7.