

International Encyclopedia of Rehabilitation

Copyright © 2010 by the Center for International Rehabilitation Research Information and Exchange (CIRRIE).

All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system without the prior written permission of the publisher, except as permitted under the United States Copyright Act of 1976.

Center for International Rehabilitation Research Information and Exchange (CIRRIE)
515 Kimball Tower
University at Buffalo, The State University of New York
Buffalo, NY 14214
E-mail: ub-cirrie@buffalo.edu
Web: <http://cirrie.buffalo.edu>

This publication of the Center for International Rehabilitation Research Information and Exchange is supported by funds received from the National Institute on Disability and Rehabilitation Research of the U.S. Department of Education under grant number H133A050008. The opinions contained in this publication are those of the authors and do not necessarily reflect those of CIRRIE or the Department of Education.

Self Report

Jennifer Fleming PhD
Senior Research Fellow in Occupational Therapy
The University of Queensland and
Princess Alexandra Hospital
Brisbane, Australia

Introduction

In the rehabilitation context, self-report is a term used to describe subjective or personal information that is collected directly from the individual client. Two sources of self-reports are interviews and questionnaires. Self-reports are usually used in combination with formal clinical testing. The degree of reliance on self-reports depends on a number of factors including the stage of rehabilitation, the cognitive status of the individual, and the nature of the information being collected. Compared to the acute stage of rehabilitation, reliance on self-reports tends to be greater in the community rehabilitation stage when the client has had more experience living with disability. Cognitive impairments such as confusion, memory impairments, and low levels of self-awareness may impact on the accuracy of self-reports in some client groups. In these cases, collateral reports from significant others are required to supplement self-reports, in addition to objective clinical assessments.

Self-reports are the primary means of gathering particular types of information pertinent to rehabilitation such as the individual's premorbid lifestyle, preferences and abilities. The use of self-reports is fundamental to a client-centred approach to rehabilitation in which the emphasis is on meeting the perceived needs and goals of the individual. By their very nature, self-report is the primary means of gaining access to information on an individual's internal processes such as pain and subjective responses such as feelings. Information on a person's social situation and home environment is usually elicited via self-report during a clinical interview. For example, the decision to undertake a home visit to assess the need for environmental modifications may be based on the client's description of the features of their home.

In rehabilitation research, as well as in clinical practice, the use of self-reports can be an efficient means of collecting large volumes of data and screening to determine the need for more in-depth assessment. Standardised self-report questionnaires measuring a wide range of variables have been designed for these purposes. Self-reports of level of satisfaction are also a recognised means of program evaluation in rehabilitation research and quality improvement.

Self –Report by Interview

The clinical interview is central to the rehabilitation process. A clinical interview in which the individual provides a self-report is usually the first step of any consultation with a rehabilitation practitioner. While an initial interview is often a formal process, less formal interviews with clients are a repeated and regular component of a rehabilitation program. Asking clients about their views on their goals, progress and perceptions enables a rehabilitation program to be tailored to their individual needs. Specific structured interviewing tools and techniques have been developed to

facilitate this process. Motivational interviewing is one recognised approach to establishing collaborative rehabilitation goals (Cox and Klinger 2004). The Canadian Occupational Performance Measure (Law et al. 1994) is a structured interview-based assessment for setting activity-based goals and determining the client's perceived level of performance and satisfaction. Other interview based assessments use self-report to evaluate specific functions such as the Self-Awareness of Deficits Interview (Fleming et al. 1996). Furthermore, the rise in qualitative research approaches in rehabilitation has resulted in the development of increasingly sophisticated methodologies for collecting and analysing self-report information from in-depth and semi-structured interviews with participants.

Given that many of the subjects broached in a clinical interview may be personal and sensitive in nature, it is necessary for the rehabilitation practitioner to develop a level of trust and rapport with the client during the interview process. The accuracy of self-reports are dependent on the extent to which the individual feels that disclosure of the information will be of benefit to him or her. Level of self-disclosure is likely to be higher in a context where the individual understands the role of practitioners, and has confidence in their expertise, feels respected and valued, and is assured of how that information will be used. Even when attention is paid to building rapport, it is well-known that self-reports are often biased by a desire to present oneself in a more favourable light. For example, the true level of alcohol use is frequently under-reported. In other cases, individuals may feel that the costs of revealing information in a clinical interview may be too high. For example, they may perceive that discharge will be delayed, or clearance to return to valued activities such as work or driving may be jeopardised by disclosing the true extent of problems they are experiencing. Often information is only disclosed after an extended period of building trust in the client-practitioner relationship.

Other barriers exist to the use of interviews to obtain self-reports. Communication disabilities such as dysphasia and dysarthria are relatively common in neurological rehabilitation and can severely limit the amount of information that can be obtained using self-report. Consultation with a speech pathologist to determine the most effective means of communication is recommended in these circumstances. Clients with significant cognitive impairments such as confusion, disorientation, low levels of awareness/arousal, and unreliable memory are poor candidates for self-report interviews. This includes individuals with advanced dementia and those in a state of post-traumatic amnesia following traumatic brain injury. Language and cultural differences can also pose a barrier to the use of clinical interviews. The use of interpreters and consultation with trained cultural liaison officers is essential for ensuring that interviews are conducted in a culturally safe and sensitive manner, and that self-report data is accurate.

Self-Report Questionnaires

A plethora of self-report questionnaires exists for use in rehabilitation research and clinical practice. Some are well-established with excellent psychometric properties while others are less so. Questionnaires are a popular means of data collection because they are relatively low cost and quick to administer and have the potential to assess a wide range of personal, functional and environmental dimensions.

A number of studies have investigated the accuracy of self-report via questionnaire methodologies, with mixed results. Hilton et al. (2001) found problems with the use of the Assessment of Living Skills and Resources (ALSAR), a measure of instrumental activities of daily living. Specifically the ALSAR 3-point rating scale was sensitive as a performance-based measure but less so as a self-report measure. In contrast, a comparison of self-reports and clinical judgements of psychosocial adjustment to illness in patients with chronic lung disease found that a self-report questionnaire was able to identify adjustment difficulties in patients who were not identified by clinical judgement (Stubbing et al. 1998). Jensen et al. (2005) found that a self-report version of the FIM was a reliable and valid measure in adults with neuromuscular disease and chronic pain. Studies of clients with brain injury have found little difference between self-ratings and ratings of significant others on questionnaires of psychosocial function (e.g. Kuipers et al. 2004) and memory function (Port et al. 2002), despite a tendency for this population to overestimate their abilities.

Self-report questionnaires provide a standardised means of accessing clients' perspectives on subjective factors (e.g. pain level, mood, self-efficacy, quality of life). They allow information to be quantified about environmental variables (e.g. level of social support) and participation outcomes (e.g. community integration) that are not able to be observed in the clinical environment. Questionnaires can be administered in-person, via telephone interview, or by mail-out, making them staple measures in rehabilitation research. The method of administration of self-report questionnaires may need to be adapted for clients with cognitive impairment such as impaired sustained attention, communication impairment such as aphasia, or visual impairment. The administrator may need to read out each question, check for understanding, and assist the client to mark the correct response. A quiet non-distracting environment and adequate rest breaks are also necessary. It is also important to choose questionnaires that have an appropriate literacy level and are well-designed (e.g. sufficient font-size and white space) to facilitate ease of comprehension.

Collateral Reports

It is not always possible to obtain an accurate self-report from a client. Therefore it is standard practice in rehabilitation to obtain collateral reports from significant others. This is particularly the case when the information will be used to inform important decisions. Family members and primary caregivers will often have a different perspective than clients about issues, and can be used to verify the accuracy of self-reported information. It should be acknowledged however that reports by family members may be biased by factors such as stress, fatigue and caregiver burden. Family members may also demonstrate unawareness or denial as to the full extent of problems particularly in the early stages of rehabilitation. Issues of self-disclosure may also affect reports by family members, especially if they feel the information may have a negative influence on their relative's treatment, or if they perceive that 'informing' on their relative is a form of disloyalty. Therefore, it is just as important to establish trust and rapport with family members and demonstrate sensitivity to cultural differences during the interview process. Honest responses may be facilitated by interviewing family members without the client present.

Other sources of collateral reports may be general practitioners, other health professionals and members of the client's broader community (e.g. employers, teachers) provided the client consents to their release of information.

Reliability and Validity of Self-Reports

Criticisms of self-report measures are related to their reliability (i.e. whether the data is reproducible) and validity (i.e. whether it measures what it purports to measure). The reliability of self-reports of clients in neurological rehabilitation is particularly questionable if cognitive impairments and reduced insight is present. Reliability is likely to be greater for clients in the later stages of rehabilitation, who have developed a greater understanding of their current status. Encouragingly, Meyer et al. (2006) found that most rehabilitation patients demonstrated sufficient motivation and cognitive ability to provide valid self-reports on a rehabilitation questionnaire. While most were able to complete the questionnaire independently at home, patients who experienced difficulty asked a partner to assist them, giving a 95.5% participation rate in questionnaire completion.

Clinicians and researchers can maximize the reliability and validity of self-reports by choosing measures with established psychometric properties and well-documented administration and scoring guidelines. Structured and standardised formats for collecting data can help ensure self-reported data more accurately reflects client function. The cost-effectiveness and speed of collecting questionnaire data needs to be carefully weighed against the meaningfulness of the data obtained. The clinical utility of self-report questionnaires may also be limited by scaling inconsistencies and ceiling effects and may lack sensitivity to change. This can affect their usefulness in evaluating the effectiveness of rehabilitation programs. A challenge for the future is to develop self-report measures that are sensitive to the subtle, yet often functionally very significant changes that are seen in clients over the course of rehabilitation. In the meantime, verifying self-report data with other sources such as observations of functional performance is recommended.

References

- Cox WM, Klinger E. 2004. Handbook of motivational counselling: concepts, approaches, and assessment. Chichester: Wiley & Sons.
- Fleming JM, Strong J, Ashton R. 1996. Self-awareness of deficits in adults with traumatic brain injury: how best to measure? *Brain Injury* 10(1):1-15.
- Hilton K, Fricke J, Unsworth C. 2001. A comparison of self-report versus observation of performance using the Assessment of Living Skills and Resources (ALSAR) with an older population. *British Journal of Occupational Therapy* 64(3):135-43.
- Jensen MP, Abresch RT, Carter GT. 2005. The reliability and validity of a self-report version of the FIM instrument in persons with neuromuscular disease and chronic pain. *Archives of Physical Medicine and Rehabilitation* 86(1):116-22.

- Kuipers P, Kendall M, Fleming J, Tate R. 2004. Comparison of the Sydney Psychosocial Reintegration Scale (SPRS) with the Community Integration Questionnaire (CIQ): Psychometric properties. *Brain Injury* 18(2):161-77.
- Law M, Baptiste S, Carswell A, McColl M, Polatajko H, Pollock N. 1994. *Canadian Occupational Performance Measure Manual*. 2nd ed. Toronto: CAOT Publications ACE.
- Meyer T, Deck R, Raspe H. 2006. Validity of patient self report data in rehabilitation research: identifying circumstances of the patients' completion of questionnaires. *Rehabilitation* 45(2):118-27.
- Stubbing DG, Haalboom P, Barr P. 1998. Comparison of the Psychosocial Adjustment to Illness Scale-Self Report and clinical judgment in patients with chronic lung disease. *Journal of Cardiopulmonary Rehabilitation* 18(1):32-6.

Suggested Readings

- Fayers PM, Machin D. 2007. *Quality of life: the assessment, analysis, and interpretation of patient-reported outcomes*. 2nd ed. Chichester: J.Wiley.
- Purtilo R, Haddad AM. 2007. *Health professional and patient interaction*. 7th ed. Philadelphia, (PA): Elsevier Saunders.