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Journal of Clinical Epidemiology 67 (2014) 285–295

Journal of Clinical Epidemiology

ORIGINAL ARTICLES

A poverty-related quality of life questionnaire can help to detect health inequalities in emergency departments

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Accepted 22 July 2013; Published online 8 January 2014

Abstract

Objectives: This study aimed to develop a self-administered, multidimensional, poverty-related quality of life (PQoL) questionnaire for individuals seeking care in emergency departments (EDs): the PQoL-17.

Study Design and Setting: The development of the PQoL was undertaken in three steps: item generation, item reduction, and validation. The content of the PQoL was derived from 80 interviews with patients seeking care in EDs. Using item response and classical test theories, item reduction was performed in 3 EDs on 300 patients and validation was completed in 10 EDs on 619 patients.

Results: The PQoL contains 17 items describing seven dimensions (self-esteem/vitality, psychological well-being, relationships with family, relationships with friends, autonomy, physical well-being/access to care, and future perception). The seven-factor structure accounted for 75.1% of the total variance. This model showed a good fit (indices from the LISREL model: root mean square error of approximation, 0.055; comparative fit index, 0.97; general fit index, 0.96; standardized root mean square residual, 0.058). Each item achieved the 0.40 standard for item internal consistency, and Cronbach α coefficients were >0.70. Significant associations with socioeconomic and clinical indicators showed good discriminant and external validity. Infit statistics ranged from 0.82 to 1.16.

Conclusion: The PQoL-17 presents satisfactory psychometric properties and can be completed quickly, thereby fulfilling the goal of brevity sought in EDs.

Keywords: Quality of life; Poverty; Deprivation; Socioeconomic status; Outcome assessment; Emergency

1. Introduction

The strong relationship between poverty and increased morbidity and mortality is a growing public health concern in the current economic context [1–3]. The financial crisis that began in 2007 has led to significant increases in the number of people living in poverty in developed countries [4,5]. In 2010, 15.1% and 16.4% of the population lived below the poverty threshold in the United States and the European Union, respectively [5,6]. This dramatic impoverishment is expected to increase and have ripple effects on health [7,8]. Impoverished populations have limited access to care because they have difficulty paying for their treatment; their adherence to treatment and the continuity of the care they receive are often poor [9–11]. Health-damaging behaviors are also often strongly socially patterned, including cigarette smoking and sedentary lifestyles [11,12]. Finally, the experience of poverty may elicit stress-related activations of biological pathways that contribute to heightened risks of cardiovascular diseases [13,14]. Detecting individuals seeking care in impoverished circumstances is of great importance for health-care professionals to manage these health inequities [15,16]. Increasingly, however, poverty is being viewed as a latent concept that is difficult to define precisely, and thus far, no consensus has been reached on the most accurate and satisfactory method of measuring poverty [17,18].

Several measures of poverty in health-care settings have been proposed in the past few years. Most medical research is focused on objective indicators (also called

Conflict of interest: The authors report that there are no conflicts of interest.

Funding: This project was supported and funded by the French Ministry of Health (DRASS/PRAPS).

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0895-4356/$ - see front matter
http://dx.doi.org/10.1016/j.jclinepi.2013.07.021

What is new?

Key findings

- Our approach, based on poverty-related quality of life, provides an original, valid, and valuable tool that may be used in emergency room contexts to identify patients in poverty.
- The PQoL-17 is a self-administered instrument that can be completed quickly, thereby fulfilling the goal of brevity sought in emergency departments.

What this adds to what was known?

- The PQoL-17 adds important information that is more oriented toward patients' views on human ends (ie, well-being), as opposed to the traditionally collected information (ie, conventional economic indicators, deprivation questionnaires, and subjective socioeconomic status).

What is the implication and what should change now?

- Strengthening the ability to detect poverty in health-care settings using the PQoL-17 may facilitate appropriate management practices and address social inequalities in health.

conventional economic indicators) of poverty including income, occupational status, and education levels [17]. However, such conventional economic indicators have been criticized, particularly, because they only assess material deprivation, which is only a single aspect of poverty. Several questionnaires have been proposed to detect multidimensional aspects of poverty (eg, material deprivation, social deprivation, societal security/working conditions, and health deprivation), notably the Deprivation in Primary care Questionnaire [15], the New Zealand index of socioeconomic deprivation [19], the Factor Weighted Index of Deprivation [20], and the Evaluation of the Deprivation and Inequalities of Health [21]. Another criticism leveled against conventional methods of measuring poverty was that personal experiences of objective socioeconomic status are not necessarily equivalent among individuals—in response, several authors have proposed measuring perceived social position, also called subjective socioeconomic status (ie, a person's belief about his/her location in a status order, referring to an individual's perception of his/her place in the socioeconomic structure [22]). Subjective socioeconomic status is generally measured by asking respondents to assess their social status relative to others using the pictorial representation of a ladder [23]. A final criticism seems to concern both conventional economic indicators and multidimensional/subjective indicators. These indicators would only assess "means" to achieve general human well-being (ends). This approach of emphasizing means ignores several important components, including particular differences between individuals' abilities to transform resources or means into valuable activities and a balance of materialistic and nonmaterialistic factors (eg, relationships and emotions) [24,25]. From this perspective, the assessment of poverty should focus on human ends using indicators such as quality of life (QoL; ie, individuals' perceptions of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, and concerns [26]). A poverty-related quality of life (PQoL) questionnaire could be used in health-care settings, particularly in emergency departments (EDs), which are a privileged access point to care for vulnerable individuals [27–32], to identify patients in poverty and subsequently propose appropriate management. To our knowledge, no QoL measurement scale has been specifically developed for this purpose and adapted for emergency care. The aim of this study was to develop and validate a self-administered multidimensional PQoL questionnaire for individuals seeking care in EDs (the PQoL-17).

2. Method

2.1. General context

The development of the PQoL was undertaken in three steps from 2003 to 2005: item generation, item reduction, and the validation process [33]. A steering committee (comprising ED physicians, nurses, social workers, psychologists, epidemiologists, and experts in QoL) supervised each step. The subjects enrolled in the three phases of development aged more than 15 years and were fluent in the French language. All subjects gave verbal informed consent.

2.2. Questionnaire development

2.2.1. Item generation (PQoL-62)

The content of the questionnaire was derived from face-to-face semistructured interviews performed by a trained interviewer with patients seeking care in EDs regardless of the reason of admission and their "objective" socioeconomic status. To better define the different domains associated with the concept of poverty related to QoL, interviews were performed with individuals of low and high socioeconomic statuses, considering that both their opinions were relevant. The interviews, based on guidelines issued from the literature [34], determined the wording in question stems and the range of response options. Interviews were conducted until no new ideas emerged in up to 80 patients from one ED (a French public academic teaching hospital, La Conception hospital, Marseille, France) [35]. Content analysis was performed according to two different methods.