ORIGINAL ARTICLE

Translation and Validation of Urdu Version of Pediatric Quality of Life Inventory Generic Core Scale for Neoplase Children

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ABSTRACT

Aim: To Translate and validate the Urdu version the Pediatric Quality of Life Inventory Generic Core Scale among neoplase children.

Methods: The descriptive cross-cultural linguistic validation study in which PedsQL Generic core scale was conducted by following Bombardier, Beaton and Guillemin's guidelines for cross cultural adaptation. The study was conducted in different phases i.e. translation and validation. The original English version of PedsQL was translated into Urdu by two individuals, one with an Urdu background and the other from a medical background, during the translation phase (T1, T2) (Forward translation). The T3, T4 Versions were then developed by two independent translators (one with an English background and the other with a medical background). The T1, T2, T3, and T4 versions were compared to the original English version and evaluated by a group of multilingual specialists, resulting in the T5-urdu version. Twenty pediatric rehab professionals were given the T5-urdu version to validate.

Results: Chronbach's alpha value of PedsQL of both child and parent reported after translation were 0.986 and 0.987 respectively and after testing on population were 0.956 and 0.910 respectively. P-values showed significant results which are <0.05 in all domains. The inter domain correlations of child and parent reports after translation and testing on population were >0.70 that interpreted good Pearson correlation. The interclass coeffieneint was ranged from 0.541-0.982.

Conclusion: The Urdu version of PedsQL Generic Core Scale of Age 8-12 years both child and parent proxy report is valid for neoplase children.

Keywords: Children, Health Related Quality of Life, Neoplase, Pediatric Quality of Life Inventory, Translation, Validation.

INTRODUCTION

Pediatric Cancer is representing a little fraction of the wide-reaching malignancy. It turns out to be increasingly inconvenient for source tightened nations like Pakistan, where 60% infants passed away with malignancy. This is regularly a result of the late identification and excessively expensive treatment of the illness. Wellbeing analysts have perceived that personal assessment of the effect of specific diseases on people's feeling of well-being give a valuable addition of objective measures among clinical outcomes[1].

Neoplasm, also known as neoplasia, refers to the uncontrolled and uneven growth of cells or tissues in the body. A benign or malignant euplastic tumor can exist. The benign neoplasm does not grow rapidly or assault healthy body tissues. In this vein, benign neoplasm is less dangerous, yet depending on its size, it can claim a person's life. Malignant neoplasm, on the other hand, has the ability to invade and spread. Malignant neoplasm is extremely harmful[2].

Quality Of Life (QOL) encompasses the full range of human experiences, states, levels of perception, and circles of thought relating to a person's life. Social, physical, mental, relational, profound, economic, political, worldly, and philosophical measures can all be included in QOL[3].

Health Related Quality Of Life (HRQOL) is a multidimensional builds that comprising on three wide areas – physical, mental and social working. Physical work is defined as the activity of daily living. Mental working extents from extreme mental confusion to a positive feeling of well-being .Social working is combination of societal connection and their interactions[4]. Disease-Related QOL assessment instruments are designed to find out the contact of disease and treatment on the quality of patient's life. So, there are specific number of instruments designed to measure the HRQOL of pediatric patients with cancer[5,6].

The Pediatric Quality of Life Inventory (PedsQL), which has both generic and disease modules just as patient reported and parent reported. It is one of only a few instruments that is broadly used to evaluate HRQOL among youngsters and teenagers between the ages of 2 and 18 years. Briefly it can be conducted in 5-15 minutes and scored effectively. Children and their parents both are evaluated

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Mature children 5 to 18 years are approached to assess their own HRQOL child reported and parents of infants age 2 to 18 years are approached to assess their infants HRQOL parent reported. The PedsQL Generic Core Scales are made for both sound and diseased person[7].

The Pediatric Quality of Life Inventory Generic Core Scales have different modules for such critical conditions for example, asthma, joint inflammation, mind tumors, cardiac conditions, malignant growth, cerebral paralysis, diabetes, neuromuscular infection and end-organize renal ailment[8]. The PedsQL Generic Core Scales have been validated among school going children health measure in a U.S. sample as well as in different clinical conditions. These past investigations exhibit the soundness and reliability of PedsQL Generic Core Scales by Classical Test Theory[9].

Pakistan is a multilingual country with many different languages; Urdu is the most widely spoken language. PedsQL is not available in Urdu language as per researchers' best knowledge. The purpose of this project is to translate and validate the Pediatric Quality of Life Inventory Generic Core scale in Urdu for both parents and children. As a result, this will aid in a better understanding of the aforementioned tool during evaluation and treatment protocol design for family, careers, and therapists to understand the basic QOL of their children following therapy.

METHODS

After permission from Ethical Review Board, this descriptive cross-cultural linguistic validation study in which PedsQL Generic core scale was conducted by following Bombardier, Beaton and Guillemin's guidelines for cross cultural adaptation. The study was conducted in different phases i.e. translation and validation. The original English version of PedsQL was translated into Urdu by two individuals, one with an Urdu background and the other from a medical background, during the translation phase (T1, T2) (Forward translation). The T3, T4 Versions were then developed by two independent translators (one with an English background and the other with a medical background). The T1, T2, T3, and T4 versions were compared to the original English version and evaluated by a group of multilingual specialists, resulting in the T5-urdu version. Twenty pediatric rehab professionals were given the T5-urdu version to validate. All of the patients gave their consent in advance. The Statistical Package for Social Sciences (SPSS) version

21 was used to enter the data, and the same program was used to analyze it. Descriptive statistics were used to present the study variables.

RESULTS

Translated version of PedsQL is tested on targeted population and the Chronbach's alpha of PedsQL Generic Core Scale (child reported) after testing on population results 0.986. The four domains of child reported PedsQL questionnaire are physical functioning, emotional functioning, social functioning and school related problems has Pearson correlation coefficient values of 0.706, 0.770, 0.937, 0.684 and p-values 0.000, 0.000, 0.000 and 0.000 respectively (ranged from 0.684-0.937).

Internal consistency:

	Chronbach's Alpha	No of Items
PedsQL child reported	0.956	23

Test-retest reliability:

Domains of PEDSQL	Statistics	Total score of PEDSQL
Physical functioning	Pearson correlation	.706
	Sig. (2-tailed)	.000
	N	80
Emotional functioning	Pearson correlation	.770
	Sig. (2-tailed)	.000
	N	80
Social functioning	Pearson correlation	.937
	Sig. (2-tailed)	.000
	N	80
School related problems	Pearson correlation	.684
	Sig. (2-tailed)	.000
	N	80

Inter-rater and intra-rater reliability: The interclass coeffieneint was ranged from 0.541-0.982.

DISCUSSION

The validity and reliability of the translated Urdu version of the PedsQL 4.0 Generic Core scales among neoplase children aged 8 to 12 years are demonstrated in this study. The validity and reliability of the instrument for child and parent reported HRQOL measurement for Pakistani cancer patients aged 8 to 12 years were examined by an expert panel in this study. For the translation and validation of instruments, the Beaton and Guillemin criteria were followed[19].

According to other studies PEDSQL child and parent reported questionnaires standard Chronbach's alpha coefficient for reliability after translation is >0.70[11]. Brazilian Portuguese version[12] Iranian version[8] Chinese version[13]. At the different age groups both parent and child reported scale of PEDSQL Generic Core Scale values reached the Chronbach's alpha of 0.90 then suggested for patients examination at clinical trials for health related quality of life measurement[14].

In our study Chronbach's coefficient alpha for PEDSQL Generic Core Scale after translation child reported scale is 0.986 and for parent proxy report is 0.987 and after testing on population is 0.956 and 0.910 respectively for the reliability i.e. excellent reliability. Thus the value more than 0.50 is considerable and acceptable in those diseases which are chronic for QOL assessment. Thus the reliability of PEDSQL in this study is acceptable[15,16].

In PedsQL Generic Core Scale the inter item Correlations were assessed for both parent and child reported scales have significant values i.e. p<0.05 which is Good and Pearson correlations. According to Portney and Watkins criteria r <0.25 shows no or less correlation, 0.25 ≤ r < 0.50 shows fair correlation, 0.50 ≤ r <0.75 shows moderate correlation, and 0.75 ≤ r < 1 shows good correlation[17]. Thus this study have Fair to Good inter-item correlations after translation and testing on population for both child and parent reports.

In our study some domains have lower correlation of age 8-12 years groups school related functions. Those children have poor health and don't go to school due to cancerous disease and some may quit school due to poor background. Parents were also illiterate and found difficulty while solving the questionnaire. This shows that some modifications is needed in child and parent questionnaires or merge both of them.

Child-parent conformity about Quality of Life is notorious in the literature[18]. Some of literature report high agreement and some shows low[15,19]. In our study both questionnaires shows good correlation. Parent reported is a typical instrument for the measurement of HRQOL and it's the parents concern to assess the quality of life of their children for better health care operations[20]. In practice of clinics some child does not respond to questionnaires due to illness or sometimes not willing to solve the instrument. Thus in such type of cases in which children do not respond to child reported questionnaire then use of parent proxy reports are needed which should be reliable and valid[21].

CONCLUSION

The Urdu version of PedsQL Generic Core Scale of Age 8-12 years both child and parent proxy report is valid for neoplase children.
Conflict of interest: Nil

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