УДК [616.33/.342:616.37]-002-002.44-036.12-053.2:613.86:303.621.33

**DETECTION PSYCHOLOGICAL CHARACTERISTICS IN CHILDREN WITH CHRONIC GASTROENTEROLOGICAL DISEASES USING THE QUESTIONNAIRE MOS-SF-36**

Margaryta Gonchar, Olena Omelchenko, Maryna Strelkova, Mykhail Yermolayev, Anastasiya Silicheva

**Резюме:** в статті викладено основні дослідження фізичних та психологічних особливостей у дітей з хронічною гастроентерологічною патологією за даними опитувальника MOS SF-36.

**Ключові слова:** діти, опитувальник MOS-SF-36, хронічна гастроентерологічна патологія.

**Резюме:** в статье изложены основные подходы исследования психологических особенностей у детей с хронической гастроэнтерологической патологией по данным опросника MOS SF-36.

**Ключевые слова:** дети, опросник MOS-SF-36, хроническая гастроэнтерологическая патология.

**Resume:** the article describes the main approaches study the psychological characteristics of children with chronic gastroenterological diseases according to the questionnaire MOS SF-36.

**Key words:** children, the questionnaire MOS-SF-36, chronic gastroenterological diseases.

**Introduction**

The World Health Organization 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 [1].

Any diseases affect both the physical and the psychological conditions: changing emotional reactions, place and role in everyday life. It is very important to get a complete picture of the disease impact on the most important humans’ functions during studying the nature of the disease. Precise type of violation and the level of severity are necessary to know for right planning, treatment and rehabilitation. Often, physician assesses only physical, laboratory and instrumental data describing only the physical condition of the patient. The most doctors don’t interest the information about individual psychological and social problems that have emerged in human life due to the disease [2,3].

In recent years, evaluation of quality of life - (QOL) has become important new methodological approach to assessing the results of medical interventions in clinical and epidemiological studies in countries with high levels of medicine, because the traditional criteria of effectiveness of medical measures, reflecting changes in the physical condition, don’t give the full picture not only of the physical but also psychological and social condition of the patient. QOL research methodology enhances capabilities of the standardization of treatment, provides individual monitoring with the evaluation of early and long-term results of treatment, develop predictive models of disease course and outcome in the practice of health care [4,5].

In other words, it is a new an integral approach to complex evaluation of the patient's health, that is based on the set of objective medical data and subjective evaluation of the patient .

**The aim:** Quality of life depends on the health status of children with chronic gastroenterological diseases.

To study physical and psychological characteristics of children with gastroenterological disorders according to the questionnaire MOS SF-36.

**Materials and Methods:** Quality of life was assessed in 66 patients aged from 2 to 17 years, girls - 32 (48.5%) and boys - 34 (51.5%), with diseases of the digestive system. The average age of the patients was 11, 3 ± 4, 1 years. The survey respondents were treated in gastroenterological department of Regional Children's Clinical Hospital in Kharkov in the period from 2015 to 2016. The control group consisted of 47 healthy children (students Merefs’ gymnasium number 1).

The main and control groups were comparable in age and gender mean. The average age was 12,1 ± 3,2 years; boys - 25 (48.1%) and girls - 22 (51.9%).

The examined children with gastrointestinal diseases have such structure of the diseases: chronic gastritis - 42.4%, biliary dyskinesis -15.2% pancreatopathy - 12.1%, duodenal ulcer - 9.1%.

The questioning was the method of assessing the quality of life. Patients or their parents completed questionnaires, and then its individual parts were analyzed with special scales or summary index.

The Short Form Health Survey (MOS SF-36) is one of the most common methods for measuring quality of life related to health. The questionnaire Medical Outcome Study- SF-36 consists of 36 questions that form the eight scaled scores, which are the weighted sums of the questions in their section: vitality(VT), physical functioning(PF), bodily pain (ВP), general health perceptions(GH), physical role functioning(PR), emotional role functioning(RE), social role functioning(SF), mental health (MH).

The questionnaire forms the two components of health: physical and psychological. Each scale is directly transformed into a 0-100 scale on the assumption that each question carries equal weight. The higher the score the less disability i.e., a score of zero is equivalent to maximum disability and a score of 100 is equivalent to no disability.

**Results:** The survey patients with gastroenterological pathology and children without it gave answers, describing the quality of life. The survey results are expressed in concrete numbers presented in Table 1

**Table 1**

**Quality of life in children with gastroenterological diseases**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | PF | RР | ВP | GH | VT | SF | RE | MH |
| The main group  N=66 | 76,7±6,4 | 71,2±4,9 | 69,1±5,3 | 56,3±6,4 | 64,4±4,4 | 68,9±6,4 | 70,7±3,3 | 64,7±7,6 |
| The control group  N=47 | 93,6±5,6 | 97,4±7,1 | 87,2±8,6 | 70,4±8,8 | 66,3±2,8 | 83,4±2,1 | 88,7±2,2 | 78,3±9,5 |
| р | р˂0,05 | р˂0,05 | р˂0,05 | р˂0,05 | р˂0,05 | р˂0,05 | р˂0,05 | р˂0,05 |

Exacerbation of chronic gastroenterological diseases cause pain, it is reflected in the reduction indicators of bodily pain from 87,2 ± 8,6 to 69,1 ± 5,3. Draws attention to decline indicators of the physical activity from 93,6 ± 5,6 to 76,7 ± 6,4, significantly worsening emotional role functioning from 88,7 ± 2,2 to 70,7 ± 3,3. The ability to perform their social responsibilities also reduced from 83,4 ± 2,1 to 68,9 ± 6,4. There has been decrease general health scale - from 70,4 ± 8,8 to 56,3 ± 6,4. Also significantly decline physical condition - from 97,4 ± 7,1 to 71,2 ± 4,9.

The received data due to the fact that the 12-duodenum synthesizes regulatory peptides, to support not only the digestive tract, but also participate in neuroregulation (for which it was called "pituitary gland" of the gastrointestinal tract); also the results showed systematic changes of the microorganism at the local gastroduodenal lesions. Thus, there is the tendency to deterioration the each indicators of the quality of life: physical and psychological health scales.

**Conclusions:** The quality of life of children with gastroduodenal pathology is lower than healthy children; it is mostly associated with decreased physical component. The most significant violations of quality of life have patients in role-functioning, due to the physical component (RР), that is lowered ability of their daily social responsibilities. Also such indicators are reducing as bodily pain (ВP) due to exacerbation of diseases of the digestive system; general health (GH), reducing by the impact of gastroduodenal pathology on the general condition of the patient, and potentiating other organs and systems diseases. The psychological component of health also suffers, mainly due to emotional role functioning (RE). Thus, the quality of life of children with gastroenterological diseases is reduced both by physical and psychological component.

**Література:**

1. Пипа Л.В. Депресія й пов’язана з нею суїцидальна поведінка в дітей і підлітків: сучасні уявлення і стан проблеми. Л.В.Пипа, С.В.Римша, Р.В.Свістільник, Ю.М.Лисиця. Здороье ребенка – 2014. №6(57). С.92-99.
2. Эйдемиллер Э. Г., Билецкая М. П. Системная семейная психотерапия при ожирении и заболеваниях желудочно-кишечного тракта у детей // Под ред. А. Ю. Барановского, Н. В. Ворохобиной.— СПб.: Диалект, 2007.— С. 211–229.
3. Нечитайло Ю.М. Методологічні основи оцінки якості життя, пов’язаної зі здоров’ям у дітей. //Международний журнал педиатрии, акушерства и гинекологии . – 2013. №3. С.5-9.
4. <http://www.pearsonclinical.com/psychology/products/100000153/beck-youth-inventories-second-edition-byi-ii.html>
5. World Health Organization. Suicide rates and absolute numbers of suicide by country (2012). URL: <http://www.who.int/mental_health/> prevention/suicide.