

STUDY PROTOCOL

1. Project Name: EFFECT OF PEER-INTERACTIVE GROUP SUPPORT ON LIFE QUALITY, PEER RELATIONS AND COACHING LEVELS IN CELIAC-DIAGNOSED ADOLESANS

2. Rationale of the Project: Chronic diseases, generally slow progressing, lasting for 3 months or longer, caused by many risk factors, without medical treatment, reducing the degree of the disease, supporting the person in self-care, requiring periodic monitoring and life are diseases that affect their quality (1). These diseases expose children to many problems in childhood (2). With the developments in the medical world, the life expectancy has increased in childhood chronic diseases (3). Therefore, children are faced with more psychological and social problems (4). It has been reported that the incidence of celiac disease has increased in the last 30 years (5). In the study of Murray et al., It is stated that the incidence and prevalence of celiac disease has increased in Europe and America in the last 30 years, and the incidence rate was 0.9 in 100,000 in the 1950s, and 9 in 100,000 after 2000 (6). The incidence of celiac disease in Denver city of Colorado was determined as 1.6%, 2.8% and 3.1% at the age of 5, 10 and 15, respectively (7). Its prevalence is accepted as 1% in many countries around the world (8-10). While the prevalence of celiac is highest in Finland with 2.4%, it is the lowest in Germany with 0.3% (11). There are different studies on the prevalence of celiac disease in our country. In a study conducted among children admitted to hospital in Kayseri, the prevalence rate of celiac disease was found to be 1% (12). The prevalence of celiac disease was found to be 1/158 in a study conducted on 1263 school-age children in Erzurum (13). Turkey in 62 provinces, 20190 prevalence rate of celiac disease in studies with healthy school children was found to be 0.47% (14). According to the Republic of Turkey Ministry of Health data, the incidence of celiac disease ranged between 1% and 0.3% of celiac patients is estimated between 750 thousand to 250 thousand in Turkey. Celiac disease is an immune-based autoimmune disease that affects the small intestine in those with a genetic predisposition and develops against gluten (15, 16). Gluten is a group of proteins found in grains like wheat, barley, and rye (17). Common symptoms of celiac disease due to gluten intolerance are abdominal swelling, abnormal bowel movements, weight loss, fatigue, weakness, and vomiting (18).

One year after the diagnosis of celiac disease, psychological problems begin to occur and a decrease in the quality of life in patients (19, 20). The disease affects personal relationships, social conditions, and the individual's self-confidence (21). Strict adherence to a gluten-free diet is vital to achieving optimal quality of life. Adolescents who have difficulty in adapting to their diet may face lower quality of life, more physical problems, higher disease burden and family problems. It has been reported that the feeling of "being sick" is higher in these patients (22). Celiac patients with dietary incompatibility may also face complications such as anemia and osteoporosis, nutritional retardation, growth retardation, infertility, the development of other autoimmune disorders, and malignancy (23). It is important to successfully manage

celiac disease in medical and psychological terms and to provide psychosocial support (22, 24, 25).

Children who try to adapt to a gluten-free diet experience some psychological difficulties (19, 26, 27), experience adaptation problems to social life, and are prone to social isolation (19, 26). Children's lifestyles can change radically (28). Studies have found that children and adolescents have problems with adaptation in terms of social relations (29, 30), difficulty coping with gluten-free diet (30), management of daily life (29), and participation in social activities (31). In addition, children with a diagnosis of celiac experience social limitations due to stigmatization (32, 33). Studies have found that children and adolescents with celiac disease have high levels of depression and anxiety (19, 26, 34). Children with chronic illnesses and their parents cope with difficulties and restrictions in daily life. Therefore, anxiety, depression, and a decrease in quality of life are observed in children diagnosed with chronic diseases (35).

The degree of adherence to a gluten-free diet has been shown to be the reason for consistency in health-related quality of life (36). It has been found that the quality of life is impaired in children with celiac disease (5, 37, 38). It has been stated that compliance with diet can increase the quality of life (37). White et al. Reported that quality of life in adolescents with celiac disease is associated with health-related behaviors such as eating out, traveling and socializing with friends (39).

Lifetime survival of a gluten-free diet is the cornerstone of celiac disease (40). However, the biggest challenge in children with celiac disease is the requirement to follow a gluten-free diet (41). Especially adolescents with chronic diseases experience difficulties in dietary compliance in the management of the disease (42).

It has been reported that avoiding gluten-containing foods is difficult for adolescents (43, 44), and dietary non-compliance is most common in this period (31, 45, 46). Adolescents experience difficulties in complying with the diet as a result of social pressures, being independent from the family, and adding new responsibilities (41, 47). Impaired dietary compliance in adolescents, peer pressure, and inability to access gluten-free foods (41), are caused by the difference in the taste of gluten-free foods (31). In a study conducted among children and adolescents with a diagnosis of celiac disease, it was found that 50% of the participants did not comply with their diet (38). In a study conducted with children and adolescents aged 10-18 with celiac disease, they found decreased quality of life scores in mental and social areas in patients. It has been suggested that support and education should be given to adolescents to help them manage and cope (50). In a study conducted with celiac patients in the 5-12 age group, impairment was found in the quality of life of children related to social life (51). It has been reported that compliance with a gluten-free diet is strongly associated with low quality of life (52). It is stated that the establishment of support groups is effective in ensuring compliance with treatment and increasing the quality of life in the management of chronic diseases. Support groups can be effective in increasing individuals' knowledge of disease and social connectedness and decreasing social isolation (53). In the training program with group activity, the quality of life of children with asthma (54, 55), the quality of life of children with diabetes in group intervention, improvement in psychosocial functions (56, 57), decrease in the sense of loneliness in children diagnosed with cystic fibrosis (58), support with children with chronic diseases It has been reported that there is an increase in the level of knowledge and quality of life in the group intervention (59). Scholten et al. Stated that informing, relaxation techniques, increasing medical knowledge, improving social competence and positive thinking are effective in coping with the disease in children with chronic diseases. This support is provided to reduce the emotional and behavioral problems of children can reduce (60).

Healthcare professionals should be aware of the psychological burden of this disease in order to support individuals with celiac disease to increase treatment adherence (27). In order to increase compliance with the treatment of celiac disease, emerging psychological and social problems should be addressed (61). Patients usually need diet training and coping strategies that can be applied in daily life (62). In the study of Ring - Jacobsson et al., The training program for celiac patients, in which issues such as coping strategies, knowledge and obstacles in daily life were discussed, increased the psychological well-being of the participants (63). Communication of individuals with celiac disease with other celiac patients has a positive effect on individuals (62). In addition, comprehensive training is recommended for patients with a diagnosis of celiac disease in order to increase the quality of life and to increase compliance with diet (38). Having peer support enables the adolescent to feel competent and successful, to develop their skills and to use effective coping methods (64). Coexistence of peers with similar problems can help them discuss problems and learn new coping methods from each other (65). Participation in group interactive support programs has become an important determinant in the management of chronic diseases and in achieving psychosocial well-being. In medical treatment for chronic diseases, patient education is emphasized as the cornerstone of care (66). In group training, individuals find the opportunity to share their experiences with other people in similar situations (67). Comprehensive training and expert support contribute positively to the management of the disease (68). It is known that participation in support groups in individuals with chronic diseases enables them to obtain up-to-date and reliable information and to manage their illnesses better (69). In a study conducted by Kyngäs and Rissanen on 300 adolescents with chronic diseases diagnosed with asthma, epilepsy, diabetes, juvenile rheumatoid arthritis, they stated that the strongest support in terms of support, motivation and compliance with treatment came from nurses (70). It is stated that support groups formed under the leadership of nurses help adolescents to express problems better and cope with daily or long-term problems (71-75). In our country, among the duties and responsibilities of the Child Health and Diseases Nurse in the Nursing Regulation published in the Official Gazette dated 8/3/2010 and numbered 27515 of the Ministry of Health are teaching the sick child and his family the necessary care and skills, guidance and counseling (76).

It has been determined that there are no studies in the literature on peer interactive group support on celiac adolescents. In line with this information, it was planned to examine the effect of peer interactive group support to be given to adolescents with celiac disease in the 13-18 age group on the quality of life, peer relationships and coping levels of adolescents.

3. Materials and Methods of the Research:

3.1. Location of the study: The research will be carried out in Afyon Kocatepe University Hospital (Afyonkarahisar) Child Health and Diseases Polyclinic. (Institution permit certificate is attached.)

3.2. Time of study: The research will be conducted between June 2018 and December 2018.

3.3. The population, sample, and research group of the study: In the province of Afyonkarahisar where we planned to study, the incidence rate of the disease was shown to be 0.05% according to 2015 data and it was stated that there were 322 patients (77). There are 85 patients with a diagnosis of celiac disease in the 0-18 age group who were followed up in the Afyon Kocatepe University Pediatric Outpatient Clinic where the

study will be conducted. There are 36 patients with a diagnosis of celiac disease in the 13-18 age group. Patients with a diagnosis of celiac disease in the 13-18 age group who are followed up in the Child Health and Diseases outpatient clinic of Afyon Kocatepe University will constitute the universe of the study.

Research inclusion criteria;

- Agree to participate in research
- Being a patient diagnosed at least a year ago
- Being a boy or a girl in the 13-18 age group
- No other chronic illness or psychiatric disorder
- Not being in the hospital while working

There will be two groups in the study, namely the experimental and the control group. While peer interactive group support is applied to the experimental group, no intervention will be made to the control group.

Since the study was experimental, the sample size was determined by power analysis.

Sample Number Calculation

In a study conducted in our country, the mean quality of life score in children with celiac disease was found to be 69.1 ± 17.1 (49). According to this value, it was determined in the study that after the support program, it was aimed to increase the effect size of the quality of life scores by 0.8 (increase the quality of life from 69.1 ± 17.1 points to 82.8), and it was determined that at least 15 people should be included in the experimental group in calculating the sample number with 5% alpha error margin and 80% power. (G * Power 3.1.9.2). Considering the possible loss of patients, it was decided to enroll a total of 36 patients, 18 patients in the experimental group and 18 patients in the control group, with an excess of 10%.

Working groups will be assigned to the experimental and control groups by randomization by lot method.

1.4. Type of the study: The research was experimentally planned with pre-test, post-test control group.

1.5. Required manpower for research:

Prof. Dr. Hicran Çavuşoğlu: Coordinator of the research (creation of the method, follow-up of the application, evaluation of the findings, management of possible problems)

Lecturer . Melike Taşdelen Baş: She will take part in the stages of obtaining institution and ethical approvals, implementation, data collection, data entry, interpretation and evaluation of study findings. In this process, information will be shared with the researcher.

Assoc. Dr. Ayşegül Bükülmez: She will contribute to the stages of obtaining patient records, sharing patient information and directing patients for application.

1.4. Research method and data collection tools:

Peer interactive group training will be applied for 3 months, one week apart, and will consist of 6 sessions in total. Support group meetings were planned to be held at the weekend in order to prevent adolescents' attendance at school. Adolescents will be contacted by phone before each session, and will be invited by informing about the date and time of the meeting. Each session will continue for 1.5 to 2 hours.

Adolescents to be included in the control group will be administered an Introductory Information Form for Adolescents with a diagnosis of Celiac disease, the Quality of Life Scale for Children, the Peer Relations Scale, and the Coping Scale for Adolescents in the outpatient clinic in order to compare the effect of education in the hospital routine and peer interactive group support. After three months, the Adolescents in the control group will be re-administered the Quality of Life Scale for Children, the Peer Relationship Scale, and the Adolescent Coping Scale.

First Session; In this session, adolescents will be provided to share their knowledge of the disease. "What is celiac?", "What are the symptoms of celiac?" , "What does the celiac treatment include?" questions will be asked. By enabling adolescents to discuss among themselves, sharing of information, completing the missing information by the researcher and correcting the wrong information will be provided. In this session, Introductory Information Form, Children's Quality of Life Scale, Peer Relationship Scale, Adolescent Coping Scale will be applied to Adolescents with Celiac Diagnosis.

Second Session; In this session, to enable adolescents to share their difficulties with the disease, group members,

1- "How do you perceive living with celiac disease?"

2- "How is it an experience to live with celiac disease?", "How did celiac disease affect your life?"

3- "What are the difficulties you experience in daily life?"

4- "How do you deal with these problems in your daily life?", "What are the areas that you have difficulties in coping with the difficulties you experience?" questions will be asked.

Questions directed to the participants will be discussed among the group leader and participants.

The contents of the Third, Fourth, Fifth and Sixth sessions will be created regarding the problems identified in the first and second sessions. The determined problem areas will be discussed in each session. At the end of the sixth session, the Adolescents will be again applied to the Quality of Life Scale for Children, the Peer Relationship Scale, and the Adolescent Coping Scale.

After peer interactive group support, celiac patients will be given an educational booklet named "Living with Celiacs" to be created by the researcher.

In the content of the training booklet;

- What is celiac disease?
- What are the symptoms of celiac disease?
- Celiac and life
- What is the treatment for celiac disease?
- What is gluten?
- What are edible foods for people with celiac disease?
- What foods should celiac patients avoid?

- What should celiac patients pay attention to in their diet?
Food shopping and reading labels for people with celiac disease
- Alternative solutions, food suggestions
- Living gluten-free in school, home and social life will be covered.

After the research is completed, the control group will also be given training on celiac disease and a training booklet titled "Living with Celiacs" to be prepared by the researcher will be given..

DATA COLLECTION TOOLS

INTRODUCTORY INFORMATION FORM FOR DIAGNOSED ADOLESCENTS

The introductory information form for adolescents with a diagnosis of celiac disease was created by the researcher. It consists of 14 multiple choice questions in total.

QUALITY OF LIFE SCALE FOR CHILDREN

The quality of life scale for children is a quality of life scale developed in 1999 as a result of a 15-year study by Varni et al. In order to measure the health-related quality of life of children and adolescents between the ages of 2 and 18 (78). Children's health-related quality of life measurement is used to determine the risks of their diseases, to evaluate their health status subjectively, to monitor the results of the treatment and to make comparisons. The Turkish validity and reliability study of the scale for 13-18 years old was carried out by Nursu Çakın Memik et al. In 2005. The scale has sub-dimensions consisting of physical health, emotional functionality, social functionality and school functionality (79). The quality of life scale for children consists of 23 items. Physical health consists of 8 items, emotional functionality 5, social functionality 5, and school functionality 5 items. Scoring is done in 3 areas. First, the total score of the scale (STP) (23 items), secondly the physical health total score (FSTP) (8 items), and the third, the psychosocial health total score (PSTP), which consists of calculating the item scores evaluating emotional, social and school functionality (15 item) is calculated (80). The Cronbach alpha coefficient of this study was 0.82 in the adolescent form. With this study, it was determined that the 13-18 year-old adolescent forms of the "Children's Quality of Life Scale" are valid and reliable in our country and can be used to evaluate the health-related quality of life of adolescents (79).

The most important features of the quality of life scale for children are that it can be completed in about 5-10 minutes, and it is easy to apply and score by the researcher. This scale questions the last month of adolescents. A Likert-type scale with 5 options has been developed for children and adolescents aged 8-18. The lowest score that can be obtained from the scale is 0, the highest score is 92. The total score is obtained by adding the scores and dividing them by the number of filled items. If there are missing items in the scale, the scores of the filled items are added up and divided by the number of items marked. If more than 50% of the scale is not filled, the scale is not evaluated. In conclusion, the higher the total score of the quality of life scale for children, the better perceived health-related quality of life (80).

Friendship Qualities Scale

This scale aims to evaluate the quality of the relationships children and adolescents have with their best friends. The draft items prepared by Berndt and Perry through interviews were made into a scale by Bukowski et al. (1994) (81). The structure of the measuring tool, which has a structure of thirty items and six factors, was supported by experimental studies, and the structure of the concept was evaluated and reviewed. The measurement tool consists of a total of 23 items with five factors. These sub-dimensions were named as Solidarity (4 items), Conflict (4 items), Assistance (5 items), Protection (5 items) and Proximity (5 items). The Turkish validity and reliability study of the scale was conducted by Zeynep Erkan Atik et al in 2014 (82).

Aiming to evaluate the quality of the adolescent's relationship with his best friend, the Friendship Qualities Scale consists of 22 items and five sub-dimensions (Togetherness, Conflict, Help, Protection, Proximity). The scale is scored with a 5-Likert (1 = Not Correct, 5 = Completely Correct) type rating.

The Cronbach alpha internal consistency coefficients of the scale were .66 for the Unity subscale, .66 for the Conflict subscale, .86 for the Help subscale, .71 for the Protection subscale, .83 for the Proximity subscale, and .85 for the whole scale. has been determined. Four items in the scale are scored in reverse. The scores that can be obtained from the scale range from 4-20 in the Togetherness, Conflict and Protection sub-dimensions, and 5-25 in the Assistance and Proximity sub-dimensions. High scores to be obtained from both the total score and the subscales from the AIS indicate highly positive peer relationships (82).

COPING SCALE FOR ADOLESCENTS (KIDCOPE)

The Adolescent Coping Scale, known as KIDCOPE in the international literature, was developed by Spirito et al in 1988 (83). Bedel et al. Conducted the Turkish validity and reliability study of the scale in 2014. The scale consists of 11 items in three sub-dimensions: active coping, avoiding coping, and negative coping. Ratings are made on a scale of four from never (0) to always (3). Internal consistency reliability coefficient of the EBÇÖ was found to be 0.72 for Active Coping (ABC), 0.70 for Avoided Coping (ALW) and 0.65 for Adverse Coping (ADW). The test-retest reliability coefficient, which was evaluated three weeks apart, was found to be $r = 0.66$ for Active Coping, $r = 0.61$ for Avoided Coping, and $r = 0.76$ for Adverse Coping. These results show that the Turkish form of the three-factor EBÇÖ is a valid and reliable measurement tool that can be used to evaluate the coping approaches of adolescents. Each subscale score is

obtained by summing the relevant items in order. The scores that can be obtained range from 0-12 for ABC and KBC, and 0-9 for ADF. The higher the score, the more frequent the related coping approach is used (84).

Collection of Data: The data will be collected face to face by survey method.

1.5. Data analysis: In the evaluation of the data of the study, the number,%, mean and standard deviation will be given in descriptive statistics. Compliance of numerical data to normal distribution will be evaluated with Kolmogorow-Smirnow test. The homogeneity of the descriptive characteristics of the experimental and control groups will be evaluated with the Chi-square test for categorical variables, and parametric or nonparametric tests according to the normal distribution in numerical variables. In comparison of the scale scores (dependent variable results) of the two groups, dependent groups t test or Mann Whitney U test will be used according to the normal distribution feature. The scale scores of the groups before and after the intervention will be compared with the dependent sample t test or the wilcoxon test. Significance level will be accepted as $p < .05$.

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STATISTICAL ANALYSIS

Sample Number Calculation

In a study conducted in our country, the mean quality of life score in children with celiac disease was found to be 69.1 ± 17.1 . According to this value, it was aimed to increase the quality of life scores by 0.8 (effect size) level (increase the quality of life from 69.1 ± 17.1 points to 82.8) after peer-interactive group support, and to calculate the sample size with an alpha error margin of 5% and power of 80%, the research group was It was determined that people should be taken (G * Power 3.1.9.2).

The list of adolescents with celiac disease, which was created in accordance with the inclusion criteria in the study, was created by an education nurse working in the hospital. Randomization was performed using the simple random sampling method (lottery method), in which equal participation of each patient was possible. All patients were assigned a sequence number between 1 and 36 in computer environment and assigned to the research and control groups of the study in the Excel program.

Considering the possible loss of patients, it was decided to enroll a total of 36 patients, 18 patients in the study group and 18 patients in the control group, with an increase of 10%. When the study was planned, all 36 patients in the 13-18 age group who were followed in Afyonkarahisar Health Sciences University Faculty of Medicine and constitute the population of the study were included in the sample. The study was conducted on two groups as research and control groups. While peer interactive group support was applied to the research group, no intervention was made to the control group.

Independent Variables: Sociodemographic characteristics (gender, age, place of residence, family type, number of people in the home, education level, family income level, age of diagnosis) Dependent Variables: The Quality of Life Scale for Children, Friendship Qualities Scale, Coping Scale for Adolescents are the total points.

Statistical analyzes were performed using a package program called SPSS (IBM SPSS Statistics 24). Frequency tables and descriptive statistics were used in the interpretation of the findings. In the analysis of all tests, p value <0.05 was considered statistically significant. The homogeneity of variances was evaluated by the "Levene test" and the conformity of the study data to normal distribution was evaluated by the "Shapiro-Wilk" test. According to this; "frequency distributions (number and percentage)" are given for independent variables.

"Independent Sample-t" test (t-table value) for comparing two independent groups for normally distributed data; "Paired Sample" test (t-table value) statistics were used in the comparison of two dependent groups. "Mann-Whitney U" test (Z-table value) in comparison of two independent groups for data that do not show normal distribution; "Wilcoxon" test (Z-table value) statistics were used to compare two dependent groups.

"Pearson correlation" analysis was used to examine the relationship between the mean scale of the two groups. Correlation coefficient; It has been accepted that there is a high relation between 0.70-1.00, a medium relation between 0.30-0.70, and a low level between 0.00-0.30

Informed Consent Forms

FOR ADOLESCENTS AGED 13-15

(Study group)

Dear;

I am a student of Hacettepe University Health Sciences Institute Child Health and Disease Nursing Doctorate Program. My name is Melike Bař. The name of this research, which is my doctoral dissertation, is "The Effect of Peer Interactive Group Support on Quality of Life, Peer Relationships and Coping Levels in Adolescents with Celiac Diagnosis". Dr. Ayřegöl Bükölmez, Associate Professor of Pediatrics Department of Afyon Kocatepe University Ahmet Necdet Sezer Application and Research Hospital, who is responsible for the study. We will talk to them about the illness and share our knowledge. The meetings will take place every two weeks and we will meet with our friends for a total of six meetings. Our fellow will attend the meeting six times in total. We will be about 18 people at each meeting. You will have the opportunity to meet all friends. Before we invited you to this investigation, we made a lottery. As a result of the lottery, we invited you because it is your name. If you do research, you will not be charged or paid. If you do not agree to participate in the research, you will not be charged a fee. Our request from you regarding this research is that you should come to the Afyon Kocatepe University Ahmet Necdet Sezer Application and Research Hospital, where the meeting will be held on the day and date we call you or when we reach your guardian. Because the place where we will organize all the meetings is Afyon Kocatepe University Ahmet Necdet Sezer Application and Research Hospital Pediatric Health and Diseases Polyclinic. Your participation in this research is at your discretion. You can leave your study whenever you want without facing penalty. If you participate in this research, information about you will not be shared with anyone. Even if the research results are published in scientific journals, identity information will not be shared with anyone or an institution. Some institutions following the research can access your information by signing this form, but this information will be kept confidential. I'll tell you when there are innovations in research. To get information about the research, 24 hours a day, Inst. See. Melike Bař (Tel: 0 505 705 84 99) and Assoc. Dr. You can reach Ayřegöl Bükölmez (Tel: 0505 266 45 44). If you are hospitalized during the research period or if you move out of the province, you can leave the study by informing us.

"I have read all the explanations on the informed consent form. Written and verbal explanation about the research, whose subject and purpose is stated above, was given to me by the physician and researcher named below. I know that I have participated in the research voluntarily and that I can leave the research with or without justification whenever I want.

FOR ADOLESCENTS AGED 13-15

(Control Group)

Dear;

I am a student of Hacettepe University Health Sciences Institute Child Health and Disease Nursing Doctorate Program. My name is Melike Bař. The name of this research, which is my doctoral dissertation, is “The Effects of Peer Interactive Group Support on Quality of Life, Peer Relationships and Coping Levels in Adolescents with Celiac Diagnosis.” My advisor, Hacettepe University Nursing Faculty Child Health and Diseases Nursing Faculty Member Prof. Dr. Hicran avuřođlu and the research Ayřegöl Bükölmez, Associate Professor of Pediatrics Department of the Department of Child Health and Diseases of Afyon Kocatepe University Ahmet Necdet Sezer Application and Research Hospital, who is in charge of our study. Our study was planned as a research. Our aim is to examine the changes in their lives with the meetings we will hold with adolescents with celiac disease. With this research, we will learn how regular support meetings affect the lives of adolescents with celiac disease. The research will be conducted in Afyon Kocatepe University Child Health and Diseases Outpatient Clinic. We will conduct a survey twice, including ten. After the research is over, we will organize a training meeting (with about 18 people) with your friends who are conducting the survey like you. You will not be charged any fees for participating in this study. No additional payment will be made to you for participating in the study. We will publish these research results in scientific journals, but we will not say your name.

Our request from you about this research is that you need to come to the place where the surveys will be conducted on the day and date we specified when we call you or reach your guardian. Surveys will be collected in Afyon Kocatepe University Child Health and Diseases Polyclinic. Your participation in this research is at your discretion. There is no penalty for quitting work. If you participate in this research, information regarding your identity information will be kept confidential. Even if the research results are published in scientific journals, we will not reveal credentials to anyone. Some institutions can access your information by signing this form, but this information will be kept confidential. As we learn new things about research, we will share them with you. To get information about the research, 24 hours a day, Inst. Sec. Melike Bař (Tel: 0 505 705 84 99) and Assoc. Dr. You can reach Ayřegöl Bükölmez (Tel: 0505 266 45 44). If you are hospitalized during the research period or if you move out of the province, you can leave the study by informing us.

“I have read all the explanations on the informed consent form. Written and verbal explanation about the research, whose subject and purpose is stated above, was given to me by the physician and researcher named below. I know that I have participated in the research voluntarily and that I can leave the research with or without justification whenever I want.

FOR ADOLESCENTS 16-18 AGE AGES

(Study group)

My dear friend;

I am a student of Hacettepe University Health Sciences Institute Child Health and Disease Nursing Doctorate Program. My name is Melike Bař. The name of this research, which is my doctoral dissertation, is “The Effect of Peer Interactive Group Support on Quality of Life, Peer Relationships and Coping Levels in Adolescents with Celiac Diagnosis”. Our study was planned as a study. The meetings held during the research will last three months and will be held every two weeks. We will have a total of six meetings. Please call me before the meeting to inform you of the date and time of the study. I will reach you with a participant friend who will attend the meeting six times in total. We think there will be approximately 18 people in each meeting. Within the scope of the research, your participation in the meeting was determined by lot. If you participate in the research, you will not be charged or paid. If you do not agree to participate in the research, you will not be charged a fee. Our request from you regarding this research is that you should come to the Afyon Kocatepe University Ahmet Necdet Sezer Application and Research Hospital, where the meeting will be held on the day and date we call you or when we reach your guardian. Because the place where we will organize all the meetings is Afyon Kocatepe University Ahmet Necdet Sezer Application and Research Hospital Pediatric Health and Diseases Polyclinic. You must attend a total of six meetings that will be held within the scope of the research. Your participation in this research is at your discretion. You can leave your study at any time without incurring a penalty. If you participate in this research, information regarding your identity information will be kept confidential. Even if the research results are published in scientific journals, identity information will not be shared with anyone or an institution. Some institutions following the research can access your information by signing this form, but this information will be kept confidential. When new information about the research becomes available, this information will be shared with the volunteers. To get information about the research, 24 hours a day, Inst. Sec. Melike Bař (Tel: 0 505 705 84 99) and Assoc. Dr. You can reach Ayřegül Bükülmez (Tel: 0505 266 45 44). If you are hospitalized during the research period or if you move out of the province, you can leave the study by informing us.

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FOR ADOLESCENTS 16-18 AGE AGES

(Control Group)

My dear friend;

I am a student of Hacettepe University Health Sciences Institute Child Health and Disease Nursing Doctorate Program. My name is Melike Bař. The name of this research, which is my doctoral dissertation, is "The Effects of Peer Interactive Group Support on Quality of Life, Peer Relationships and Coping Levels in Adolescents with Celiac Diagnosis." My advisor, Hacettepe University Nursing Faculty Child Health and Diseases Nursing Faculty Member Prof. Dr. Hicran avuřođlu and the research Ayřegöl Bükölmez, Associate Professor of Pediatrics Department of the Department of Child Health and Diseases of Afyon Kocatepe University Ahmet Necdet Sezer Application and Research Hospital, who is in charge of our study. Our study is planned as a research. Our aim is to meet with adolescents with celiac disease, quality of life, peer With this research, we will learn how regular support meetings affect the lives of adolescents with celiac disease. We will conduct surveys twice, at the beginning and at the end. After the research is over, we will organize a training meeting (with about 18 people) with your friends who are conducting the survey like you. You will not be charged any fees for participating in this study. No additional payment will be made to you for participating in the study. We will publish these research results in scientific journals, but we will not say your name.

Our request from you regarding this research is that you should come to the Afyon Kocatepe University Ahmet Necdet Sezer Application and Research Hospital, where the surveys will be conducted on the day and date we call you or when we reach your guardian. Your participation in this research is at your discretion. You can leave your study at any time without incurring a penalty. If you participate in this research, information regarding your identity information will be kept confidential. Even if the research results are published in scientific journals, identity information will not be shared with anyone or an institution. Some institutions following the research can access your information by signing this form, but this information will be kept confidential. When new information about the research becomes available, this information will be shared with the volunteers. To get information about the research, 24 hours a day, Inst. See. Melike Bař (Tel: 0 505 705 84 99) and Assoc. Dr. You can reach Ayřegöl Bükölmez (Tel: 0505 266 45 44). If you are hospitalized during the research period or if you move out of the province, you can leave the study by informing us.

"I have read all the explanations on the informed consent form. Written and verbal explanation about the research, whose subject and purpose is stated above, was given to me by the physician and researcher named below. I know that I have participated in the research voluntarily and that I can leave the research with or without justification whenever I want.

FOR PARENT OR GUARDIAN

(Study group)

Dear Parent;

I am a student of Hacettepe University Health Sciences Institute Child Health and Disease Nursing Doctorate Program. My name is Melike Bař. The name of this research, which is my doctoral dissertation, is "The Effect of Peer Interactive Group Support on Quality of Life, Peer Relationships and Coping Levels in Adolescents Diagnosed with Celiac". Dr. Ayřegöl Bükölmez, Associate Professor of Pediatrics Department of Afyon Kocatepe University Ahmet Necdet Sezer Application and Research Hospital, who is responsible of the study, was planned as a study. The study was planned as a study in meetings where adolescents diagnosed with celiac disease came together. We draw a lottery among adolescents with a diagnosis of celiac disease between the ages of 13-18 and have determined that they will participate in the study. will happen with up. Before organizing meetings, we will call you and your child to let you know the time of day of the meeting. If you accept the research, you will not be paid or charged. If you do not accept the research, you will not be charged. Our request from you is to be present with your child at the meeting place on the day and date specified when we call you. Participation in the research is at your discretion. If you participate in the research, your child's information will be kept confidential. Even if the research results are published in scientific journals, identity information will not be shared with anyone or an institution. Some institutions that follow the research can access your child's information by signing this form, but this information will be kept confidential. When new information about the research becomes available, this information will be shared with the volunteers. To get information about the research, 24 hours a day, Inst. See. Melike Bař (Tel: 0 505 705 84 99) and Assoc. Dr. You can reach Ayřegöl Bükölmez (Tel: 0505 266 45 44). If your child is hospitalized during the research period or if you move out of the province, you can leave the study by informing us.

"Your child will be informed about this research in a way that he / she understands and his / her consent to participate in the research will be obtained."

"I have read all the explanations on the informed consent form. Written and verbal explanation about the research, whose subject and purpose was stated above, was given to me by the physician named below. I know that I have participated in the research voluntarily and that I can leave the research with or without justification at any time.

FOR PARENT OR GUARDIAN

(Control Group)

Dear Parent;

I am a student of Hacettepe University Health Sciences Institute Child Health and Disease Nursing Doctorate Program. My name is Melike Bař. The name of this research, which is my doctoral dissertation, is "The Effect of Peer Interactive Group Support on Quality of Life, Peer Relationships and Coping Levels in Adolescents with Celiac Diagnosis". Our study was planned as a study. It was planned to provide support to each other. A training meeting about Celiac Disease will be organized for the children who fill up. You have to come to the hospital (Afyon Kocatepe University Child Health and Diseases Polyclinic) to fill the questionnaires. We will call you and your child to let you know the time of day of the meeting. If you accept the research, you will not be paid or charged. If you do not accept the research, you will not be charged. We request you to be at the hospital with your child on the day and date specified when we call you. Participation in the research is at your discretion. If you participate in the research, your child's information will be kept confidential. Even if the research results are published in scientific journals, identity information will not be shared with anyone or an institution. Some institutions that follow the research can access your child's information by signing this form, but this information will be kept confidential. When new information about the research becomes available, this information will be shared with the volunteers. To get information about the research, 24 hours a day, Inst. See. Melike Bař (Tel: 0 505 705 84 99) and Assoc. Dr. You can reach Ayřegöl Bükölmez (Tel: 0505 266 45 44). If your child is hospitalized during the research period or if you move out of the province, you can leave the study by informing us.

"Your child will be informed about this research in a way that he / she understands and his / her consent to participate in the research will be obtained."

"I have read all the explanations on the informed consent form. Written and verbal explanation about the research, whose subject and purpose was stated above, was given to me by the physician named below. I know that I have voluntarily participated in the research and that I can leave the research with or without justification at any time.