

## The Word of Adolescence That Have Type 1 Diabetes Mellitus and Empathy **Development for Nurses Caring**

### Tip 1 Diyabetes Mellitusu olan Adölesanlara Bakım Veren Hemşirelerde Empati Geliştirme

İlknur Kahriman 🗈, Nurgün Platin 🗈

<sup>1</sup>Karadeniz Technical University, Department of Pediatric Nursing, Trabzon, Turkey <sup>2</sup>Department of Nursing, KTO Karatay University School of Health Sciences, Konya, Turkey

Cite this article as: Kahriman İ, Platin N. Developing Empathy Among Nurses Who Provide Care to Adolescents with Type 1 Diabetes Mellitus. Clin Exp Health Sci 2018; 8: 73-9.

### Abstract

Objective: The research was conducted as a guasi-experimental study using a single-group pretest post-test design to develop empathic approaches in the nurses who care for adolescents with type 1 diabetes mellitus.

Methods: All the nurses working in the adolescent service at Farabi Hospital Faculty of Medical Sciences at Karadeniz Technical University participated in the study. Implementation of empathy education program was conducted by the researcher on 8-9 August 2011. Program lasted for 16 hours totaly, eight hours a day. Data were collected using "self description document for adolescents," "in-depth interview form," "empathy data form for nurses," and "nurses verbal record form." Necessary official permissions from the hospital administrators were obtained. In the study, adolescents between the ages of 13 and 18 with type I diabetes mellitus for at least one year participated.

Results: It was found in the study that there were little similarities, particularly about physical subjects, between the perceptions of patient adolescents and nurses before the training in term of patients' feeling of being different and stigma; their management strategies of stress, anxiety, and fear depending on their illness; and in terms of doing risky behaviors and of dealing with the illness. After the training, it was found that there was a big change, particularly emotional change, in the perception of nurses in a more comprehensive way compared to their perception before the training. In the second phase of the study, a total of 136 verbal communications between adolescents and nurses were recorded before the training when patients were admitted to the hospital, during treatment and dinner. It was observed that 80.1% of these communications performed by the nurses before the education showed characteristics of "non-empathic approach," while 19.9% of them showed some characteristics of empathic approach, which indicates that nurses were more inclined to use non-empathic approaches before the training. When the communications after the training were observed, 15.9% of 82 communications showed non-empathic characteristics, while 84.1% of them showed emphatic characteristics. According to this decrease in the number of unempathic behaviors, it was seen that the nurses after the training usedless unemphatic behaviors.

Conclusion: The results of the study also showed that while the level of unempathic approaches of the nurses before the training was much higher and they were used more often than emphatic approaches that the nurses provided after the training. It was also seen that empathy training is quite effective in developing nurses'emphatic behaviors.

Keywords: Empathy, type 1 diabetes, adolescent, empathy education, nursing care

### Öz

Amac: Araştırma, Tip 1 Diyabetes Mellitusu (DM) olan adölesanlara bakım veren hemşirelerin empatik yaklaşımlarını geliştirmek üzere tek gruplu öntest-sontest yarı deneysel desen ile yapılmıştır.

Yöntemler: Karadeniz Teknik Üniversitesi Tıp Fakültesi Farabi Hastanesi Adölesan Servisi'nde hasta bakımında yer alan sekiz klinik hemşiresinin tamamı araştırmaya alınmıştır. Empati eğitim programının uygulanması 08-09 Ağustos 2011 tarihlerinde araştırmacı tarafından gerçekleştirilmiştir. Program iki gün, günde sekiz saat olmak üzere toplam 16 saat sürmüştür. Araştırmada veriler "Adölesanların Kendilerini Anlatma Formu", "Derinlemesine Görüşme Formu" "Hemşirelerde Empati Veri Formu" ve "Hemşirelerin Sözel ifade Kayıt Formu" ile toplanmıştır. Araştırmanın yapıldığı hastaneden kurum izni alınmıştır. Araştırmaya 13-18 yaş grubu ve en az bir yıl tip 1 DM olan adölesanlar katılmıştır.

Bulgular: Araştırmada tip 1 diyabet hastası olan adölesanların dönem özellikleri ve benliklerinin etkilenmesi; damgalanma ve kendini farklı hissetme; hastalığa bağlı yaşadığı stres, kaygı, korku ve hastalıklarını yönetme stratejileri, riskli davranışlara girme ve hastalıkları ile bas etmeleri yönünden eğitim öncesi bakım veren hemsirelerle adölesanların algılamaları arasında özellikle fiziksel konularda kısmen benzerlikler olduğu saptanmıştır. Hemşirelerin eğitim sonrası algılamalarında eğitim öncesine göre özellikle duygusal yönlerde daha kapsamlı algılama yönünde bir değişim olduğu bulunmuştur. Araştırmanın ikinci kısmında hemşirelerin eğitim öncesi gözlemlerinde adölesanlarla teslim, tedavi ve aksam yemeği sırasında kurdukları toplam 136 sözel iletişim kaydedilmiştir. Bu iletişimlerin %80,1'inin "empatik olmayan" %19,9'unun "empatik" yaklaşım özelliği göstermesi ile "empatik olmayan" yaklaşımların eğitim öncesi hemşireler tarafından daha sık kullanıldığı belirlenmiştir. Eğitim sonrası iletişimlere bakıldığında, toplam 82 iletişimin %15,9' unun "empatik olmayan" ve %84,1'inin empatik yaklaşım özelliği gösterdiği bulunmuştur. Empatik olmayan iletişim sayısında belirlenen bu gerilemeye göre hemşirelerin eğitim sonrası bu yaklaşımları daha az kullandıkları görülmüştür.

Sonuc: Hemşirelerin eğitim sonrası "empatik olmayan" yaklaşımları daha az, empatik yaklaşımları ise çok ve sık kullandıkları görülmüş ve empati eğitiminin hem- şirelerin empati becerilerinin geliştirilmede etkili olduğu belirlenmistir.

Anahtar Kelimeler: Empati, tip 1 diyabet, adölesan, empati eğitimi, hemşirelik bakımı

3rd World Conference on Learning, Teaching and Educational leadership. 25-28 October 2012, Maison N.-D. Chat d'Oiseau, Brussels, Belgium (Oral Presentation)

©Copyright by 2018 Journal of Marmara University Institute of Health Sciences - Available online at www.clinexphealthsci.com ©Telif Hakki 2018 Marmara Üniversitesi Sağlık Bilimleri Enstitüsü - Makale metnine www.clinexphealthsci.com web sayfasından ulaşılabilir

Correspondence Author/Sorumlu Yazar: İlknur Kahriman E-mail/E-posta: ilknurkahriman@hotmail.com Received/Gelis Tarihi: 22.03.2017 Accepted/Kabul Tarihi: 30.07.2017 DOI: 10.5152/clinexphealthsci.2017.407

#### INTRODUCTION

It is observed that the nursing practices in our country, including medical treatment, are performed through routine tasks or procedures instead of providing personal care that aims at patient needs by using problem-solving approaches (1). This working style alienates the nurses from the patients as well as makes their mutual relation mechanical, fails to uncover the patient and nurse interaction, and places the nurses in a position that serves not the patients but the institution. Besides, this approach not only limits nurses' interventions, but also results in unreasonable and irrational interventions not based on knowledge but done automatically. However, in 1952, Hildegard Peplau defined nursing as an "interpersonal process" toward maturation and learning for patients/individuals. According to the six nursing roles defined by Peplau (2) in her nursing model, the nurses receive their clients with respect and without prejudice and accept them as they are; give them information, answer their questions, and interpret their treatment or clinical data; instruct them in line with their interests and abilities; lead them with cooperation and active participation; and create emotional tones and counsel them to answer their needs (2). In 1966, Joyce Travelbee described nursing as an interpersonal process that helps human beings cope with an illness, learn from the experience, find meaning in the experience, and grow from the experience. One of the basic concepts of Travelbee's nursing definition is "the ability of nurses to provide therapeutic use of self by letting themselves be used for therapeutic nursing interventions." The "therapeutic use of nurses" includes introspection, self-understanding, understanding of dynamics of the human behaviors, ability to interpret their and others' behaviors, and ability to provide an effective nursing intervention. According to Travelbee, the phase of "empathy" involves sharing another's psychological state and "sympathy" is the wish to help the person under stress after understanding their psychological state. Hence, empathy represents the similarities in experiences and the wish to understand others, whereas sympathy represents helpful nursing interventions as a component of "the ability of nurses to provide therapeutic use of self by letting themselves be used for therapeutic nursing interventions" and disciplined mental approaches by going beyond empathy after understanding others (3, 4).

In the study by Peitchinis (5), it was identified that nurses attained low scores in terms of therapeutic activities associated with traditional personal characteristics. However, the study highlighted that nurses demonstrated an increasing awareness about the problems and the failures encountered and made sincere efforts to cope with these problems (5).

Although the author discussed about the general deficiencies and shortcomings of the nurses in terms of their readiness in face of the situations, Peitchinis emphasized that therapeutic activities generally emerge after experiencing a personal crisis and nurses lacked nursing competence. Similarly, many studies have highlighted that nurses' empathic levels were low or moderate (6-9). Some studies investigated patient-nurse interaction, nurses' approaches toward patients, and their caregiving activities in patients' eyes and found that nurses' approaches were unsatisfactory and insufficient (10,11).

Wilkinson (12) reported that there have been insignificant improvements in the communication skills of nurses in the last 20 years. The studies on empathy and communicational skills emphasized and indicated that nurses should make more efforts to increase empathy and communicational skills providing effective nursing care (7).

The working conditions and general emphatic approaches of the nurses are accepted unsatisfactory in our country; alternatively, an adolescent with diabetes lives along with his/her routine medical processes, but it becomes important that the nurses understand and are aware of the world of a diabetic adolescent. Moreover, little is known about the experiences of diabetic adolescents, except that most of them cannot achieve a well-balanced standard of metabolic control. There is no study on nurses' understanding of diabetic adolescents' worlds and the development of their empathic skills.

Overall, the study was conducted with one group using pretest and post-test questionnaires in a semi-experimental design to determine the effect of the empathic-skills-education provided to the nurses who give care to the adolescents with type 1 diabetes mellitus on their nursing-patient communication.

#### Hypothesis tested in the study

H<sub>1</sub>: The empathic-skills-education was effective for increasing nurses' empathic approaches.

H<sub>2</sub>: The empathic-skills-education was effective for decreasing nurses' non-empathic approaches.

#### METHODS

The study included 46 adolescents, who presented to diabetes polyclinics and voluntarily participated in the study, and eight clinic nurses who worked in a university hospital. The study was conducted between the June 20, 2011, and September 10, 2011. To conduct the study, the empathic-skills-education program and data collection forms were developed. Before the study, the ethical suitability of the research was approved by Ethical Council of the Kayseri with the decision dated and numbered 06.08 2009 and 09/08, respectively, and the necessary official permission from the hospital management was obtained for the implementation phase of the research. Additionally, oral consent from the participant diabetic adolescents who volunteered to join the study and the nurses who worked at the adolescent service was obtained.

#### Development of empathic-skills-education program

The aim of empathic-skills-education program developed to undertake the study was to provide the nurses with useful empathic skills. The empathic-skills-education program was structured with the assumption that the participants would be able to adopt their own learning responsibilities. The program mainly focused on teaching affection/emotion and accordingly using the appropriate techniques to improve the abilities to perceive and demonstrate an empathic response. The data of the literature reviewed were clustered into four themes: (1) characteristics of adolescent period and exposure of personality; (2) stigmatize and feeling different; (3) affections experienced, such as stress, anxiety, and fear; and (4) strategies used, risky behaviors demonstrated, and coping methods used. As for the general education techniques, didactic narration, watching visual materials, using imagination, discussion and experience sharing were utilized. To improve the skill to give empathic response, role play, exercises, question-answer, puzzle games, feedback, and homework were utilized. Regarding the teaching approach, the empathic-skills-education program was based on Edith Stein's threestage model of empathy (13,14): (1) active listening to understand, (2) empathizing or merging for identification, and (3) sympathy and self-recovery. The empathic-skills-education program was composed of two main parts: (1) introducing the world of the type I diabetic adolescent patients and (2) developing empathic response for type I diabetic adolescent patients. Part I included the dimension of the adolescent patients' world, similarities and differences related to the adolescents' experiences as explored by nurses' observations and literature knowledge, and implementation of active listening to understand, empathize, and improve intrapersonal cognitive and emotional dimensions associated with the diabetic adolescent patients. Part II covered dimensions of the indifferent, ineffective, offending, or superficial responses or reactions, and active listening to understand was emphasized. The second part was implemented through scenarios and role plays showing non-empathic responses to consolidate the educational topics.

To reveal empathic approaches, classical empathy definitions and communicational techniques were discussed, and the same scenarios were performed with empathic techniques and role play. In this phase, nurses watched a video that contained a specialist's interview with an adolescent diabetic patient to reinforce the educational topic, to provide realistic images, and to solve a puzzle about empathic communication. At the end of empathic-skills-education program, the importance and significance of developing empathy in nursing was highlighted and the participants were requested to assess the empathic-skills-education program. This program was analyzed using the opinion of an expert psychiatric nurse. In line with the recommendations and changes offered by the expert psychiatric nurse, the necessary corrections were made and the program was finalized. The empathic-skills-education program was held by the researcher between the August 8, 2011, and August 9, 2011. The program lasted for 16 hours in total: 8 hours a day for 2 days. The empathic-skills-education program was held at the same time because all the eight nurses who worked at the adolescent service participated.

**Developing Data Collection Tools:** To collect the data of the study, four forms were designed. The forms were developed by a researcher. After a literature review, specialists' opinions were taken and informal interviews with adolescent patients having diabetes mellitus were conducted.

Adolescent's Self-Account Form: A literature review was conducted to understand the adolescents' feelings, thoughts, difficulties, dilemmas, reactions, and their world. Form 1 addressed a total of 21 questions with four main themes and five sociodemographic questions; 21 questions targeted factual answers about themselves, events, and people and perceptional/non-factual answers about the situations, people, or objects explained by the adolescents.

**In-Depth Interview Form:** To increase the reliability of the data collected with "The form of adolescent's self-account" designed in line with literature, to understand the world of adolescent patients in our country, three in-depth interviews were conducted with three adolescent diabetic patients. During the interviews, a semi-structured "In-depth Interview Form" was used. The interview form included a total of 30 questions and was employed before the empathic-skills-education program.

**Empathic Data Form for Nurses:** The form included 35 questions about four main themes used in the first two forms and 30 sociode-mographic questions. All the 35 questions addressed how the nurses perceived the world of the adolescent diabetic patients. The form was used both before the education and after the education.

**Oral Statement Form for Nurses:** The form was intended to observe how the nurses developed oral communications with the diabetic adolescent patients and was used to register oral statements used by the nurses in the nurse-patient communication and the reasons. The form was used both before the education and after the education.

#### **Data collection**

#### **Data Collection before the Education**

The adolescent diabetic patients who were followed-up at Diabetics Education Policlinic of Farabi Hospital of Karadeniz Technical University were contacted through the telephone numbers in the polyclinic registries. During the interviews, the adolescents were informed about the study; 46 adolescent patients having diabetes mellitus aged between 13 and 18 years and volunteered to participate in the study were identified and the interviews were conducted with appointments. In-depth interviews were conducted with three adolescent diabetic patients who came to the polyclinic for medical checkups at the time of data collection and accepted for in-depth interviews through "Adolescent's Self-account Form."

The data about the nurses were collected by the researcher through "Empathic Data Form for Nurses." The researcher observed a participant (the researcher did not participate in the patient care) to study the oral statements made by the nurses in the nurse-patient communication, and the reasons and the data were registered in Oral Statement Form for Nurses.

The observations were made in three different time intervals: mostly at the time of shift change, treatment, and mealtime, during which the nurse-patient communication was strong, and in different working hours. Therefore, the observations were made around 10 a.m., which was the busiest treatment/working hour; around 6 p.m. during which period dinner was given; and around shift change (08.00 a.m. and 04.00 p.m.) to explore the nurses' communications with patients. During these time intervals, at least three complete oral communications of the nurses with the patients were observed. Because of the forgetfulness factor, the nurses were asked about the reasons to communicate with the patient just after the observed oral communication ended in case reliability of the data might have been affected.

Observation registrations were instantly and exactly noted in the form in another room just after the observation. The observations were conducted thrice by the researcher and were randomly observed by another specialist instructor who was trained previously about the observations at the time of shift change, treatment, and meal time, and these observations of the specialist instructor were compared with the data of the observation made by the researcher. It was found that both observation registrations were similar.

#### **Data Collection after Education**

Fifteen days later after the empathic-skills-education program was conducted with the help of an expert opinion on educational sciences, nurses' abilities to use empathic communication in perceiving the adolescents' world and developing communication with the adolescents were again examined. The study data after the education were collected by the researcher using Empathic Data Form for Nurses and Oral Statement Form for Nurses under the same conditions before the empathic-skills-education program was held.

#### Scope and limitation of the study

The study-results were generalizable only to the nurses who provided care to the adolescent diabetic patients at adolescent service of a university hospital. One of the limitations of the study was that it comprised type 1 adolescent diabetic patients aged 13-18 years; another limitation of the study was that it was composed of the nurses who provided care to these adolescents.

#### **Data analyses**

Separate analyses were performed for the qualitative and quantitative data of the study. To analyze quantitative data, the Statistical Package for Social Sciences (SPSS 13.0) was used. As for the qualitative data of the study, the observed nurses' oral statements were sorted out into two groups by the researcher, thesis adviser, and a professor from psychiatric nursing: empathic approaches and non-empathic approaches. The sorting was based on the statements as well as the content of the empathic-skills-education program. Thus, qualitative data of the study were transformed into quantitative data in accordance with the frequency of the qualitative data. These findings were presented in descriptive statistical figures, percentages, and graphics.

#### RESULTS

# Findings about the sociodemographic characteristics of the nurses

It was found that all the participant nurses were adults (aged 25-45 years), most of them belonged to 21-32 age group (62.5%; average age  $32 \pm 6.67$  years), received higher education on professional nursing, and had academic titles on nursing (62.5%), had prior hospitalization experience (62.5%), and had a diabetic patient in the family (62.5%). Moreover, one-half of the nurses were married, had children, and had brothers and sisters, all had nuclear family, and none had any experience of life crisis. Most of the participant nurses did not choose the nursing profession willingly (62.5%) and emphasized that they would not choose the profession again (87.5%); 75.0% of the nurses mentioned that they were not working willingly at the medical service of the hospital. Most of the nurses who worked under these conditions had  $\geq$ 7 year-working-experience in the profession (62.5%) and were working for  $\leq 6$  years at the adolescent service where they were still employed (62.5%). It was noted that all of the nurses worked shifts in mixed working hours and shared the workload (100.0%) and served on an average for 15 patients.

It was found out that all the nurses could not use professional skills/ knowledge much while providing care (100.0%), felt "mostly" (50.0%) and "sometimes" (50.0%) competent in understanding patients and spared sufficient time for patient care (75.0%). All the nurses agreed that intra-team communication was "good," most of them were "satisfied" with the work-environment and described working conditions as "normal" (50.0%) and "very stressful" (50.0%). It was discovered that most of the nurses did not receive any training on empathy during basic academic education before the graduation (75.0%); during onjob-trainings organized by the institution where they were employed after graduation (62.5%); had nobody as a role model for empathy during the early professional period (75.0%); and did not need any knowledge and skill for empathy (75.0%).

#### Findings about empathic and non-empathic approaches used in the oral communication with the diabetic adolescents before and after the empathic-skills-education

This part included findings about the nurses' ability to demonstrate emphatic communication skills explained in the empathic-skills-education. The data about empathic skills demonstrated or empathic communications made by the nurses were collected using observation registrations that included the communication the nurses made with the adolescents at the time of shift change, treatment, and mealtime before and after the empathic-skills-education. The communications registered were sorted into two groups in terms of empathic approaches and non-empathic approaches and assessed.

Table 1 showed the distributions of nurses' empathic approaches and non-empathic approaches used in the oral communication with the adolescents before and after the empathic-skills-education. A total of 136 oral communications with adolescents were registered at the time of shift change, treatment, and mealtime before the empathic-skills-education. When these oral communications were evaluated in terms of being empathic approaches and non-empathic approaches, 80% (109 communications) were non-empathic approaches, whereas 19.9% (27 communications) were empathic approaches. Of these 109 non-empathic approaches observed before the empathic-skills-education (at the time of shift change, treatment, and mealtime), the most commonly used communication approach was "data/information collection" (28.4%; mostly during the treatment 63.3%). The second most commonly used communication approach was "changing the subject" (11.9%), and the third was "negative criticism-judgment" (11.0%). It was noted that 19.9% of the oral communications with the adolescents before the empathic-skills-education (27 communications) were empathic approaches. Of these 27 empathic approaches used in the oral communications, the most commonly used empathic approach (6) was "informing" and "facilitating emotion/reflecting emotion" (22.2%).

Table 1 demonstrates 82 oral communications registered at the time of shift change, treatment, and mealtime after the empathic-skills-education. When these oral communications were evaluated in terms of being empathic approaches and non-empathic approaches, it was explored that 15.9% (13 communications) were non-empathic approaches, whereas 84.1% (69 communications) were empathic approaches. Of the 13 non-empathic approaches observed after the empathic-skills-education (at the time of shift change, treatment, and mealtime), the most commonly used communication approach was again "data/information collection" (61.5%; mostly during the treatment 63.3%). Following "data/information collection," the second most commonly used communication approach was "changing the subject" (23.0%).

It was found out that 84.1% of the oral communications with the adolescents after the empathic-skills-education (69 communications) were empathic approaches. Of these 69 empathic approaches, the most commonly used empathic approach (22) was "facilitating emotion/reflecting emotion." There was a difference between empathic approaches and non-empathic approaches used by the nurses in the communication with the adolescents before and after the education. Fourteen of the 18 non-empathic approaches used before the ed**Table 1.** The distributions about nurses' empathic approaches and non-empathic approaches used in the oral communicaton with the adolescents before and after the empathic-skills-education

Reactions	Before the empathic-skills-education (n=8)				After the empathic-skills-education (n=8)			l
	Shift-change	Treatment	Meal-time	Total	Shift-change	Treatment	Meal-time	Total
Non-empathic reactions	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Data collection	7 (22.5)	16 (51.6)	8 (26.0)	31 (28.4)	2 (25.0)	3(37.5)	3(37.5)	8 (61.5)
Changing the subject	2 (15.4)	11(84.6)	-	13 (11.9)	-	3 (100.0)	-	3 (23.1)
Negative criticism/judgement	4(33.3)	7(58.3)	1 (8.3)	12 (11.0)	-	-	_	-
Questioning/interrogating/ inquisition	4(44.4)	4(44.4)	1 (11.1)	9 (8.3)	-	-	-	_
Warning/threatening	-	7(87.5)	1 (12.5)	8 (7.3)	-	-	-	-
Mocking/giving nicknames	1(16.7)	5(83.3)	_	6 (5.5)	-	-	_	-
Blaming	1(16.7)	5(83.3)	_	6 (5.5)	-	_	_	-
Convincing	-	1(20.0)	4 (80.0)	5 (4.6)	-	-	-	-
Recommending	-	1(25.0)	3 (75.0)	4 (3.7)	-	1(100.0)	-	1(7.7)
Preventing expression of the								
emotions	-	4 (100.0)	-	4 (3.7)	-	-	-	-
Not recognizing anxiety clues	-	3 (100.0)	-	3 (2.9)	-	-	-	-
Breaking up the communication	1(50.0)	1 (50.0)	-	2 (1.8)	-	-	-	-
Advising	-	-	2 (100.0)	2 (1.8)	-	-	-	-
Arguing	-	-	1 (100.0)	1 (0.9)	-	-	-	-
Dictating	-	1(100.0)	-	1 (0.9)	-	-	-	-
Emphasing their opinions	-	1(100.0)	-	1 (0.9)	-	-	-	-
Giving examples from their experiences	-	-	1 (100.0)	1 (0.9)	-	-	-	-
Consoling	-	-	-	-	1(100.0)	-	-	1(7.7)
Total	20 (18.3)	67 (63.3)	22 (20.2)	109 (100.0)	3 (23.1)	7 (53.8)	3 (23.1)	13 (100.0
Empathic reactions								
Informing	-	6 (100.0)	-	6 (22.2)	4 (36.7)	2 (18.2)	5 (45.5)	11 (15.9
Facilitating emotions/ reflecting emotions	-	6 (100.0)	-	6 (22.2)	7 (31.9)	10 (45.5)	5 (22.7)	22 (31.9
Encouraging	2 (40.0)	3 (60.0)	-	5 (18.5)	1(14.3)	3(42.9)	3 (42.9)	7 (10.1)
Clarifying	1(33.3)	2 (66.7)	-	3 (11.2)	-	-	1(100.0)	1(1.5)
Approving	-	2 (100.0)	-	2 ( 7.4)	-	-	-	-
Consolidation	-	-	-	-	2 (33.3)	1(16.7)	3(50.0)	6 (8.7)
Communicating the observations	-	2 (100.0)	-	2 (7.4)	1 (100.0)	-	-	1(1.5)
Searching the reason of the behavior	-	2 (100.0)	-	2 (7.4)	5 (27.8)	6 (33.3)	7(38.9)	18 (26.0
Reassuring	-	1 (100.0)	-	1 (3.7)	-	-	-	-
Using silence	-	-	-	-	1 (100.0)	-	-	1 (1.5)
Helping	-	-	-	-	1 (100.0)	-	-	1(1.5)
Justifying	_	-	-	_	-	1(100.0)	-	1(1.5)
Total	3 (11.1)	24 (88.9)	_	27 (100.0)	22 (31.9)	23 (33.3)	24 (34.8)	69(100.0
General Total	23 (16.9)	91 (66.9)	22 (16.2)	136 (100.0)	25 (30.5)	30 (36.6)	27 (32.9)	82(100.0
<sup>a</sup> Percentages were calculated with total		,	,			,	····,	

ucation by the nurses ("negative criticism/judgment," "questioning/ interrogating/inguisition," "warning/ threatening," "mocking/giving nicknames," "blaming," "convincing," "preventing expression of the emotions," "not recognizing anxiety clues," "breaking up the communication," "recommending," "arguing," "dictating," "emphasizing their opinions," and "giving examples from their experiences") were not used after the empathic-skills-education. Four non-empathic reactions (data collection, changing the subject, recommending, and consoling) were still used after the empathic-skills-education. Of these non-empathic reactions, it was observed that "consoling" was not used before the empathic-skills-education but it was used after the empathic-skills-education. It was observed that 8 reactions used in the communication with the adolescents before the empathic-skills-education were empathic approaches, whereas 10 reactions were empathic approaches after the empathic-skills-education. Before the empathic-skills-education, the nurses resorted to empathic approaches, such as "informing," "facilitating emotions/reflecting emotions," "encouraging," "clarifying," "approving," "communicating the observations," "searching the reason of the behavior," and "reassuring," whereas after the empathic-skills-education, they used "consoling," "silence," "helping," and "justifying" in addition to the abovementioned empathic approaches.

#### DISCUSSION

In the study, nurses' communication with the adolescents was observed in the clinic at different periods, such as shift change, treatment, and mealtime before and after the empathic-skills-education, and was assessed in terms of using empathic approaches and non-empathic approaches. The assessment was based on the contents of the empathic-skills-education program. The findings were presented in numbers and percentages. A total of 136 oral communications with adolescents were registered at the time of shift change, treatment, and mealtime before the empathic-skills-education. It was noted that 80% of these communications were non-empathic approaches. Accordingly, it was observed that nurses largely and frequently used non-empathic approaches before the empathic-skills-education. It was understood that of these 109 non-empathic approaches used before the empathic-skills-education (at the time of shift change, treatment, and mealtime), the most commonly observed communication approach was "data/information collection" (28.4%; mostly during the treatment 63.3%). Although communication made for data collection was not our study criteria, this finding indicated that data about the patients was not systematically collected, but data collection was aimlessly and purposelessly conducted at different times.

In addition to the communication made for data collection, other important points that appeared in the study before the empathic-skills-education were the 16 approaches used. These were changing the subject, negative criticism/judgment, questioning, warning/ threatening, mocking, blaming, convincing, recommending, preventing expression of the emotions, not recognizing anxiety clues, breaking up the communication, advising, arguing, dictating, emphasizing their opinions, and giving examples from their experiences. Regarding the use of these communication-preventive approaches, Maguire (15) argued that nurses feared to discover patients' emotions and opinions, which they thought they could not cope with due to lack of knowledge and skills. Wilkinson (16) claimed that the nurses used communication-preventive approaches as a measure against the possible psychological problems that the nurses and the patients may have for not being involved with the psychological problems of the patients. The other studies reviewed in literature also explained that nurses resorted to communication-preventive approaches because they felt incompetent about communicational skills (16).

When the oral communications were evaluated after the empathic-skills-education, 15.9% of the 82 communications (13 communications) were non-empathic approaches. Judging by the decreasing number of the non-empathic approaches, it was noted that nurses used these approaches less frequently, which confirmed " $H_2$ . The empathic-skills-education was effective upon decreasing nurses' non-empathic approaches." Of these non-empathic communications made after the empathic-skills-education, the most common non-empathic communication was made for "data collection" (61.5%) and during the treatment. We believed that the reason that non-empathic approaches of the nurses decreased after the empathic-skills-education resulted from the emphasis made on "the issues damaging people" in line with the content of the education.

Overall, 19.9% of the nurses' communications with the adolescents were empathic approaches before the empathic-skills-education. It was noted that six of the 27 oral communications based on empathic approaches (22.2%) were "data/information collection" and "facilitating emotion/reflecting emotion." After the empathic-skills-education, 84% of the nurses' communications with the adolescents (69) were empathic approaches. Judging by the increase in the empathic approaches after the empathic-skills-education compared with the situation before the empathic-skills-education (from 19.9% to 84%), nurses used these approaches more frequently after the education, which confirmed "H<sub>1</sub>: The empathic-skills-education was effective upon increasing nurses' empathic approaches."

Four other empathic reactions (consolidation, using silence, helping, and justifying) were added after the empathic-skills-education to the most commonly used 8 empathic reactions before the empathic-skills-education (informing, facilitating emotions, encouraging, clarifying, approving, communicating the observations, searching the reason of the behavior, and reassuring); it was ensured that 12 empathic reactions were used in total. As a result, it was identified that nurses used non-empathic approaches less but empathic approaches more and frequently after the education. Similar issues were emphasized in educational programs discussed in literature. For example, in the study of Lucio et al. (17) conducted with oncology nurses, it was noted that significant improvements occurred in nurse-patient communication, listening, offering an option, allowing the expression of emotion, and expressing the emotion. The study by Maguire et al. (15), which was conducted with the health care professionals working with cancer patients, nearly 70% of which were nurses, pointed out that professionals' use of diagnostic approach for basic problems increased considerably, whereas the behaviors of early recommendation and asking questions about physical signs of the patients decreased, but there was no increase in the use of empathic expressions that helped the patients discuss their problems and emotions. Fallowfield et al. (18) suggested that self-confidence level to deal with patient problems of the oncology nurses increased a great deal after an educational program that aimed at improving communication skills. Similarly, in the study by La Monica and Karshmer (19), a 16-hour educational program to improve empathic skills was organized for the nurses who cared for individuals with chronic

diseases for 7 weeks, and it was demonstrated that empathic skills level, which were rather low at the beginning, increased statistically and significantly after the 16-hour educational program.

There were also native studies on the correlation between the quality of nursing care and empathic communication skills. In the study by Öz (20), it was observed that ineffective empathic communications of the nurses in the control group and experimental group reduced, whereas effective empathic communications and ability to understand the patients and to use empathic approaches increased in the experimental group after the education. In conclusion, it was argued that the ability to use empathic communications could be inculcated or improved with the education given to the nurses. Moreover, in the study by Ünal (21), it was found that the difference between pretest mean score and post-test mean score in terms of levels of empathic tendency, empathic ability, and empathic communication was statistically significant and the educational program provided to the nurses was successful in increasing "empathic tendency," "empathic ability," and "communicational skills" of the nurses.

The current study did not investigate "empathic approaches" and "non-empathic approaches" used by nurses in the communication before and after the empathic-skills-education in relation with their individual, sociodemographic, and professional characteristics. However, it was observed that two nurses used non-empathic approaches in their oral communication before the empathic-skills-education least. When sociodemographic characteristics of these nurses were examined, it was found out that these were the oldest ones of the eight participant nurses. Except for the demographic characteristic, the nurses were similar in terms of professional characteristics and empathic skills.

The current study was conducted with a small study-group and exercises to understand the world of the adolescents, experience histories, discussions, videos, role plays, homework, question-answer, and didactic narrations were utilized. Due to the empathic-skills-education, nurses' awareness of themselves and the world of the adolescent diabetic patients increased and it was ensured that their use of empathic communications increased.

#### CONCLUSION

In the second phase of the study, a total of 136 verbal communications between adolescents and nurses were recorded before the training during the checkup of the patients in the hospital, during treatment, and during dinner. It was observed that 80.1% of these communications performed by the nurses before the education showed characteristics of "non-empathic approach," whereas 19.9% of them showed some characteristics of empathic approach, which indicate that the nurses were more inclined to use non-empathic approaches before the training. When communications after the training were observed, 15.8% of 82 communications showed non-empathic characteristics, whereas 84% of them show emphatic characteristics.

**Ethics Committee Approval:** Ethics committee approval was received for this study from the ethics committee of number 1 Kayseri (number 09/08, dated 06.08.2009).

**Informed Consent:** Verbal informed consent was obtained from patients and the parents of the patients who participated in this study.

Author contributions: Concept - İ.K.; Design - N.P.; Supervision - N.P.; Resource - N.P.; Materials - İ.K.; Data Collection and/or Processing - İ.K.; Analysis and/or Interpretation - İ.K., N.P.; Literature Search - İ.K.; Writing - İ.K., N.P.; Critical Reviews - N.P.

Conflict of Interest: The authors have no conflict of interest to declare.

**Financial Disclosure:** The authors declared that this study has received no financial support.

#### REFERENCES

- Göksel EY, Nurses Observed Behaviors Are Studied According To Their Dependent, Independent And Interdependent Decisions Behind Them. PhD Thesis, Hacettepe University Institute of Health Sciences. Ankara; 1995: 3-4.
- 2. Peplau HE. Interpersonal Relations in Nursing: A Conceptual Frame of Reference for Psychodynamic Nursing, Springer Pub. Co. New York; 1991: 3-43.
- Tomey AM, Alligood MR. Nursing Theorists and Their Work, (4th Ed.) Mosby, St. Louis; 1998: 335-50.
- 4. Mc Queen, A. Nurse-patient relationships and partnership in hospital care. Journal of Clinical Nursing 2000; 9 (5): 723-31. [CrossRef]
- 5. Peitchirus JA. Therapeutic effectiveness of counselling by nursing personnel review of the literatüre. Nursing Research 1972; 21(2): 138-14.
- 6. Ponte PR. Distress in cancer patients and primary nurses' empathy skills. Cancer Nursing. 1992; 15: 283-92. [CrossRef]
- Wilkinson S, Bailey K, Aldridge, J, Roberts, A. A longitudinal evaluation of a communication skills programme. Palliative Medicine 1999; 13(4): 341–8. [CrossRef]
- Reynolds W, Scott B. Do nurses and other professional helpers normally display much empathy. Journal of Advanced Nursing 2000; 31(1):226-34. http://dx.doi.org/ 10,1046/j.1365-2648.2000.01242.x. [CrossRef]
- 9. Ançel G. Developing empathy in nurses: An inservice training program. Archives of Psychiatric Nursing 2006; 20(6): 249-257. [CrossRef]
- Hewison A. Nurses' power in interactions with patients. Journal of Advanced Nursing 1995; 21(1): 75–82. http://dx.doi.org/10,146/j.1365-2648.1995.21010075.x. [CrossRef]
- Tutuk A, Al D, Doğan S. Determining communication skills and emphatic levels of nursing students. Journal of Cumhuriyet University School of Nursing. 2002; 6: 36-41.
- 12. Wilkinson S. Shering Plough clinical lecture communication: It makes a difference. Cancer Nursing 1999; 22: 17– 20. [CrossRef]
- 13. Carol MD. What is empathy? Empathy be taught? Journal of Education. 2005; 6: 77-88.
- Maatta SM. Closeness and distance in the nurse-patient relation. The relevance of Edith Stein's process of empathy. Nursing Philosophy 2006; 7(1): 3-10. [CrossRef]
- Maguire P, Booth K, Elliot C, Jones B. Helping health profesionals involved in cancer care acquire key interviewing skills-the impact of workshops, European Journal of Cancer. 1996; 32: 1486-1489. [CrossRef]
- 16. Wilkinson S. Factors which influence how nurses communicate with cancer patients. Journal of Advenced Nursing 1991; 16 (6): 677-68. [CrossRef]
- Lucio LG, Lopez FCG, Lopez MTM. Training programme in techniques of self-control and communication skills to improve nurses' relationships with relatives of seriously ill patients: a randomized controlled study. Journal of Advanced Nursing 2000; 32(2): 425-431. http://dx.doi.org/10,1046/j.1365-2648.2000.01493.x. [CrossRef]
- Fallowfield L, Saul J, Gilligan B. Teaching senior nurses how to teach communication skills in oncology, Cancer Nursing. 2001; 24: 185-191. [CrossRef]
- 19. La Monica LE, Karshmer FJ. Empathy: Educating nurses in professional practice. Journal of Nursing Education. 1978; 17: 3-11.
- Öz F. Impact of Training on Empathic Communication Skills and Trends of nurses. PhD Thesis, Hacettepe University Institute of Health Sciences, Ankara, 1992; 26,34.
- Ünal S, Öz F. Communication skills training programme to improve oncology nurses' relationships with patients: an observational study. Journal of Hacettepe University Faculty of Nursing. 2008; 15: 52–67.