

COVID-19 SÜRECİNDE UYGULAMA DERSLERİ İÇİN ALTERNATİF BİR UYGULAMA: VIDEO GÖSTERİLERİ

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Öz

Bu çalışma ile çocuklarda invaziv işlemlerin uygulanmasına yönelik hazırlanan video sunumun hemşirelik öğrencilerinin yeterliklerine ve uygulama bilgilerine katkısının değerlendirilmesi amaçlanmıştır. Araştırmanın evrenini hemşirelik 3. sınıf öğrencileri oluşturmuştur. Örnekleme bu öğrenciler arasından rastgele seçilen 30 öğrenci oluşturmuştur. İnvaziv işlem uygulaması için hazırlanan video sunumu sosyal medya taraması ile öğrencilerle paylaşılmış ve bu gösterimin öğrencilerin yeterlilik ve uygulama bilgisine katkısı değerlendirilmiştir. Sonuç olarak öğrenciler uzaktan eğitimi yüz yüze eğitim kadar etkili bulmamaktadır. Ancak uygulanan video gösterimi hemşirelik öğrencilerinin yeterlilik ve uygulama bilgisine katkı sağlamıştır. Pandemi süreci geleceğin hemşirelerinin uygulama alanını sınırlamıştır. Ancak videolu eğitim bu açığı kapatabilir ve hemşirelik öğrencilerinin yetkinliklerini artırabilir.

Anahtar Kelimeler: Covid-19, hemşirelik öğrencileri, çocuklarda invaziv prosedürler

AN ALTERNATIVE APPLICATION FOR PRACTICE LESSONS DURING THE COVID-19 PROCESS: VIDEO DEMONSTRATIONS

Abstract

With this study, it was aimed to evaluate the contribution of the video presentation prepared for the application of invasive procedures in children to the competencies and application knowledge of nursing students. The universe of the study was composed of nursing 3rd grade students. The sample consisted of 30 students randomly selected among these students. The video presentation prepared for the invasive procedure application was shared with the students through social media searching, and the contribution of this demonstration to the competence and application knowledge of the students was evaluated. As a result, students do not find distance education as effective as face-to-face education. However, the video screening applied contributed to the competence and application knowledge of nursing students. The pandemic process has limited the application area of future nurses. However, training with video can close this gap and increase the competencies of nursing students.

Keywords: Covid-19, nursing students, invasive procedure in children

1. GİRİŞ

Covid-19, which emerges in China and causes pandemics by spreading all over the world, causes severe acute respiratory infections, asymptomatic, mild or severe symptomatic. It is also spreading very rapidly (1,2,3). For this reason, in many countries, it has been decided that university students will continue their education from home with the distance education model. Although the importance of practicing for nursing is known, unfortunately, due to the covid-19 outbreak, both classes and practices have been interrupted (4,5,6). For this reason, students have started to express that they are far from application skills with distance education, that they cannot acquire sufficient knowledge, and that they have lost their self-efficacy (6,7). Individuals should be provided with the necessary environment for the development of self-efficacy, which is defined as knowledge, interpersonal relationships, decision-making and applying psychomotor skills in nursing practices (8). Unfortunately, the covid-19 epidemic process has limited students' field practices and their right to receive face-to-face education (4,7)

With the technology, which is indispensable in our age, the applications that will solve this problem are increasing. Virtual reality programs and web-based clinical simulation applications have become very popular today (9). However, considering the fee, it is very difficult for students to obtain these programs. Using these applications in schools also requires high costs. The use of video in the distance education model, which is low cost and uses many areas to support students, can be a solution to this issue. Many universities do not find web-based clinical simulation laboratories due to economic resource constraints (10,11). For this reason, it will be very beneficial in the pandemic period to deliver the applications made on models with scenarios designed by expert lecturers in the form of video shooting. With these videos, which will include the hospital environment, patient communication, and nursing practices, the student's adaptation to the hospital environment, communication with the patient will be easier, and their competence in nursing practices will increase. These videos, which will be both a visual and an auditory resource, will accelerate students' understanding of the applications. The aim of this study is to evaluate the application knowledge and competencies of the students after the video showing the invasive intervention application prepared for the pediatric nursing course.

Questions of the research

1. Has there been an increase in the knowledge of the students after the video show?
2. Has the competence of the students increased after the video show?

Method

It is written according to the guideline used for reporting parallel group randomized studies(12).

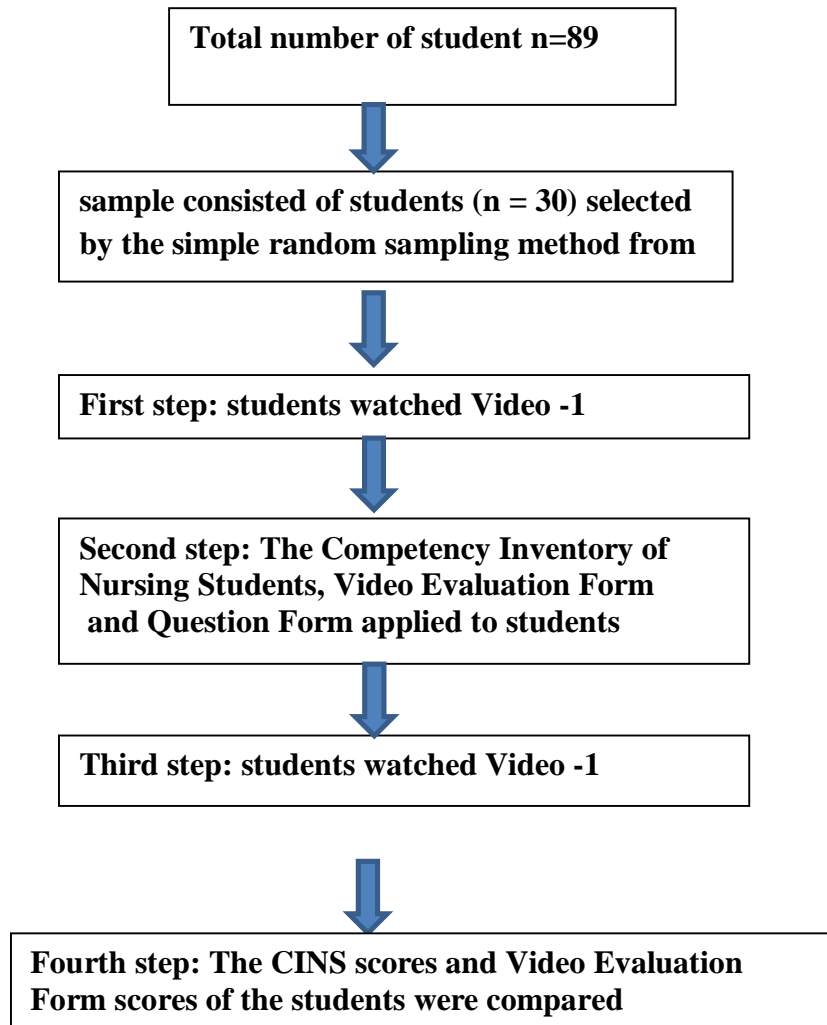
Research Type

The research was applied semi-experimentally.

Sample of Research

The sample consisted of students (n = 30) selected by the simple random sampling method from 3rd grade nursing students (n = 89) who have not taken the Child Health and Diseases course yet but have the capacity to take the Child Health and Diseases course (other applied courses).

Consort List



Collection of Data

Question Form

Question form; It consists of students' demographic data and questions about covid-19.

Video Evaluation Form

In this form, there are questions used in the evaluation of the students after the students watch the videos (These videos include communication with pediatric patients and their relatives and invasive procedures in pediatric patients) prepared within the scope of the child health and diseases course to be watched by the student. This form has been prepared according to the information in the Child Nursing Clinical Practice Skills Book and Child Health and Diseases Books (13,14,15).

The Competency Inventory of Nursing Students (CINS)

The Competency Inventory of Nursing Students was developed by Hsu and Hsieh (Hsu & Hsieh, 2013) in 2013. The scale consists of 43 items in total. The vehicle containing 7-Likert type answer options clinical biomedical science (5 items), general clinical skills (7 items), critical thinking and reasoning (4 items), care (6 items), ethics and responsibility (15 items), and lifelong learning (6 items) It consists of 6 subsections.

The total score obtained from the scale ranges from 43-301 points. The Cronbach Alpha Reliability Coefficient of the original scale was determined to be between 0.91-0.98. A high score on

the scale indicates that the student's competence is at a good level, while a low score indicates that his / her competence is not at a good level (16).

Application Videos

These videos; Prepared according to the information in Pediatric Nursing Clinical Practice Skills Book and Child Health and Diseases Books (Bindler & Ball, 2012; Çavuşoğlu, 2004; Conk et al., 2013).(Additional Files 1)

Video -1

It is a false video prepared by the researcher that includes a scenario for the communication with pediatric patients and their relatives and for invasive intervention in pediatric patients in the pediatric health and diseases lesson of the students and includes wrong practices. This video has been prepared to determine whether the student can distinguish between correct application and incorrect application.

Video-2

It is a correct video prepared by the researcher, which includes the correct practices scenario for communication with pediatric patients and their relatives and invasive intervention in pediatric patients in the child health and diseases course of the students. This video has been prepared for the student to gain correct application skills.

Application of Research

Students were contacted through social media searches. Information was given about the study and a research group of 30 people who volunteered to participate in the study was formed. First of all, the students were made to fill out a questionnaire and CINS. Later, the researcher showed the students a video-1 containing the scenario of wrong practices. Later, the students were asked to fill in the Video Evaluation Form. After the students completed the form, a 30-day pause was given for the students to forget the procedures in the first video. After this break, the students watched a video-2 with the right practices. After this video screening, the Video Assessment Form and CINS have applied to the students again.

Analysis of the Research

SPSS program was used in the analysis of the research. Frequency analysis was used in the interpretation of demographic data, and the dependent group t test was used to compare the scale scores of the dependent groups and the scores given to the student assessment form.

Ethical considerations

Ethics Committee's Approval was received prior to initiating this study (2020/29). All participants received an information sheet outlining the purpose of the study and a statement that responses were anonymous. Written informed consent was obtained from each participant. Contact details of the researchers were also given to allow participants to gain further details about the study. The study was administered in accordance with the Principles of the Helsinki Declaration.

Results

Half of the students are 19-20 years old, the other half are 21-23 years old. 76.7% of the students live in a nuclear family. 70% of students have 4 or more siblings. 53.3% of the mothers of the students are illiterate and have a primary school education. 43.3% of the fathers of the students have received secondary school and high school education. The mother of 93.3% of the students is a housewife. Fathers of 50% of the students work in any job. 50% of the students cannot work due to covid-19. The economic situation of 76.7% of the students is medium. It was determined that 63.3% of the students stated that they were not satisfied with distance education. When we asked the students

whether they were distance education or normal education, it was determined that 93.3% of the students preferred normal education. It was seen that 63.3% of the students had covid-19 positivity in one around them. In addition, it was seen that 13.3% of the students had covid-19 positivity (Table 1).

Table 1. Students' demographic information and their answers to questions about COVID-19

| | n | % |
|---|-----------|------------|
| Family | | |
| Nuclear family | 23 | 76.7 |
| Extended family | 7 | 23.3 |
| Age | | |
| 19- 20 age | 15 | 50.0 |
| 21- 23 age | 15 | 50.0 |
| Number of siblings | | |
| 2 siblings | 2 | 6.7 |
| 3 siblings | 7 | 23.3 |
| 4 and more siblings | 21 | 70.0 |
| Sex | | |
| Women | 21 | 70.0 |
| Man | 9 | 30.0 |
| Education of mother | | |
| Illiterate and primary school graduate | 16 | 53.3 |
| Middle school and high school graduate | 13 | 46.6 |
| Education of father | | |
| Illiterate and primary school graduate | 12 | 40.0 |
| Middle school and high school graduate | 13 | 43.3 |
| University graduate and above | 5 | 16.7 |
| Occupation of mother | | |
| Housewife | 28 | 93.3 |
| Working | 2 | 6.7 |
| Occupation of father | | |
| Working | 15 | 50.0 |
| Cannot work due to Covid-19 | 15 | 50.0 |
| Economical situation | | |
| Bad | 3 | 10.0 |
| Middle | 23 | 76.7 |
| Good | 4 | 13.3 |
| Satisfaction with distance education | | |
| Satisfied | 11 | 36.7 |
| Not Satisfied | 16 | 63.3 |
| Distance education or normal education | | |
| Distance education | 2 | 6.7 |
| Normal education | 28 | 93.3 |
| Covid-19 positivity in the surrounding persons | | |
| Yes | 19 | 63.3 |
| No | 11 | 36.7 |
| Covid-19 positive status | | |
| Yes | 4 | 13.3 |
| No | 26 | 86.7 |
| Total | 30 | 100 |

Significance was determined between the total CINS score average of the students before and after the video screening ($p < 0.05$). In addition, the Critical Thinking and Reasoning and Clinical Biomedical Science sub-dimensions of the scale were found to be significant in terms of the mean score ($p < 0.05$). It was determined that the CINS scores of the students increased after the video screening (Table 2).

Table 2. Comparison of students' CINS mean scores

| Sacale and Item | First test (n=30) X±S.D | End test (n=30) X±S.D | t | p |
|---------------------------------|----------------------------|--------------------------|-------|--------------|
| Clinical Biomedical Science | 9.06±1.01 | 30.10±3.80 | 28,17 | 0,01 |
| General Clinical Skills | 41.70±5.22 | 44.26±4.29 | 1,74 | 0,09 |
| Critical Thinking and reasoning | 22.76±3.63 | 25.50±2.33 | 3,32 | 0,002 |
| Caring | 36.60±5.70 | 38.83±3.88 | 1,77 | 0,08 |
| Ethics and Accountability | 95.93±11.58 | 99.26±10.80 | 1,15 | 0,25 |
| Lifelong Learning | 36.93±5.50 | 39.03±4.20 | 1,63 | 0,11 |
| Total Scales CINS | 260.23±30.02 | 277.00±23.69 | 2,16 | 0,039 |

When the scores of the students' responses to the video evaluation form were compared, it was observed that the students' scores increased after the video screening, and it was found that there was a statistically significant difference between the two ratings ($p < 0.05$) (Table 3).

Table 3. Comparison of the scores of the students' responses to the Video Evaluation Form

| Total Question Score* | First test (n=30) X±S.D | End test (n=30) X±S.D | t | p |
|-------------------------|----------------------------|--------------------------|------|--------------|
| Mean of Questions Score | 74.33±19.77 | 96.33±7.18 | 5.54 | 0.001 |

(* Each question is 10 points. In total, the students answered 10 questions).

Discussion

When we look at the demographic data of the participants; half of the students are 19-20 years old, the other half are 21-23 years old. 76.7% of the students live in a nuclear family. 70% of students have 4 or more siblings. 53.3% of the mothers of the students are illiterate and have a primary school education. 43.3% of the fathers of the students have received secondary school and high school education. The mothers of 93.3% of the students are housewives. Fathers of 50% of the students work in any job. The economic status of 76.7% of the students is medium (Table 1).

When we look at the answers of the participants regarding distance education; It was determined that 63.3% of the students stated that they were not satisfied with distance education. When we asked the students whether they were distance education or normal education, it was determined that 93.3% of the students preferred normal education (Table 1). Studies on this subject are limited, but in the study conducted by Kurtüncü and Kurt (2020), it was determined that university students were not satisfied with distance education (7). This shows us that although there is a tendency towards distance education to reduce virus spread, education in applied departments such as nursing is insufficient.

The fathers of 50% of the students cannot work due to covid-19. The Covid-19 pandemic not only threatened our lives but also caused economic problems. The economies of many countries around the world have been turned upside down. Of course, this situation affected the public, many employees experienced disruptions in their working life due to pandemic constraints (17,18). It was seen that 63.3% of the students had covid-19 positivity in one around them. In addition, it was seen that 13.3% of the students had covid-19 positivity (Table 1). Covid-19 spread from China to the whole world in a very short time and its contagiousness is increasing day by day (1,3). In addition, in a study conducted with 271 nursing students, it was determined that one of 111 (41%) of the students had

covid-19 positivity (4). The fact that students and their relatives experienced covid-19 positivity in the results of the study supports this situation.

In many studies, the effectiveness of web-based clinical simulation applications has been tested and positive results have been obtained. In addition, in these studies, it was found that web-based clinical simulation training provided students' adaptation to the real clinical environment and at the same time increased their clinical skills and professional competence (19,20,21). Unfortunately, web-based clinical simulation applications cannot be performed in many developing universities due to high costs (10,11). Instead, I think it would be beneficial to reach our students with the videos that we took using the mannequin simulation applications we use in our applied lessons, which are found in most of our universities during this pandemic period. This study also supports this hypothesis. According to the results of the study; Significance was determined between the students' total CINS score average before and after the video screening ($p < 0.05$).

In addition, the Critical Thinking and Reasoning and Clinical Biomedical Science sub-dimensions of the scale were found to be significant in terms of the mean score ($p < 0.05$). It was determined that the CINS scores of the students increased after the video screening (Table 2). The constitution of these sub-dimensions of the scale is also an important result. Because, in the video display, there are contents for students to gain these professional skills. This ultimately showed us the effectiveness of our practice. In addition, when we compared the scores of the students' responses to the video evaluation form, it was observed that the students' scores increased after the video screening, and it was found that there was a statistically significant difference between the two scorings ($p < 0.05$) (Table 3).

Conclusions

As a result, students do not find distance education as effective as normal education. However, the video screening applied contributed to the competence and application knowledge of nursing students. In addition, the presence of covid-19 positivity in 13.3% of the students and the covid-19 positivity around 63.3% of the students also showed us that covid-19 was common even in the summer months when the study was conducted. Nurses should be able to evaluate the patient correctly and make an effective intervention in order to provide effective health care. For this, good education and high self-confidence levels are required (21). For this reason, we should provide our students with the support we can and ensure that they gain skills and self-confidence in this profession during these pandemic days.

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Financial Resource

During this study, no financial support was received from institutions or organizations.

Conflict of Interest

There is no conflict of interest of the authors regarding this study.

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