

Nurdan AKÇAY DİDİŞEN¹
Orcid: 0000-0002-4371-6020
Zehra Bahire BOLIŞIK¹
Orcid: 0000-0002-4832-8350

¹ Ege Üniversitesi Hemşirelik Fakültesi, Çocuk Sağlığı ve Hastalıkları Hemşireliği A.D, İzmir, Türkiye.

Sorumlu Yazar (Corresponding Author):
NURDAN AKÇAY DİDİŞEN
nurdan.akcay@ege.edu.tr

Anahtar Sözcükler:

Preterm; baba; web tabanlı; rol algısı; eğitim.

Keywords:

Preterm; father; web-based; role perception; education.

Investigation of The Effect of Planned Education Made on The Web Environment for Fathers with Preterm Children on The Perception of The Role of Fathers and Care Skills

Preterm Çocuğu Olan Babalara Web Ortamında Yapılan Planlı Eğitimin Babalık Rolü Algısı ve Bakım Becerilerine Etkisinin İncelenmesi

Gönderilme Tarihi:10 Mayıs 2022

Kabul Tarihi: 12 Nisan 2023

* A part of this research article was presented as an oral presentation 4 th Pediatric Nursing Congress with International Participation held in Adıyaman on May 22-25, 2013.

ABSTRACT

Objective: This study aims to determine the effect of planned education made on the web environment for fathers with preterm children on the perception of the role of fathers and care skills

Methods: This research, planned in a quasi-experimental type, involved 30 study-30 control groups of fathers. The data were collected web-based using the introductory fact sheet; marriage fit scale, fatherhood role perception scale, and successful test for prematurely born baby care. In the analysis of the data, descriptive statistics, chi-square, t-test in independent groups, and analysis of variance were used in repeated measurements.

Results: The mean age of fathers was 29.46±4.52 for working group fathers and 31.6±4.78 for control group fathers. After web-based education, it was found that the average score for marital compliance was higher in working group fathers than fathers in the control group. It was determined that the perceptions of the fatherhood role were high after education, especially among fathers in the study group. Positive perceptions of fatherhood role from the lower dimensions of the scale and perceptions of fatherhood role in child sexuality were found to be high in the lower dimension of the scoring average, and negative perceptions of fatherhood role were low in the lower dimension score average.

Conclusion: According to the research results, the web-based education-oriented initiative was found to be effective in fathers' marital harmony, fatherhood role perception, and success tests. This study is a good indicator that an innovative approach can be effective in education. It is recommended that this topic be examined in a qualitative dimension with different research designs with more widely attended samples.

ÖZ

Amaç: Bu araştırmanın amacı preterm çocuğu olan babalara web ortamında yapılan planlı eğitimin babalık rolü algısı ve bakım becerilerine etkisini belirlemektir.

Yöntem: Yarı deneysel tipte planlanan bu araştırmaya 30 çalışma-30 kontrol grubu baba katılmıştır. Veriler web tabanlı olarak Tanıtıcı bilgi formu, evlilik uyum ölçeği, babalık rolü algı ölçeği ve erken doğan bebek bakımına yönelik başarı testi kullanılarak toplanmıştır. Verilerin analizinde tanımlayıcı istatistikler ki-kare, bağımsız gruplarda t- testi ile tekrarlanan ölçümlerde varyans analizi kullanılmıştır.

Bulgular: Babaların yaş ortalaması çalışma grubu babalarda 29.46±4.52, kontrol grubu babalarda ise 31.6±4.78'dir. Web tabanlı eğitim sonrasında evlilik uyumları puan ortalamalarının çalışma grubu babalarda kontrol grubundaki babalara göre daha yüksek olduğu saptanmıştır. Babalık rolü algılarının ise eğitim sonrasında özellikle çalışma grubundaki babalarda yüksek olduğu belirlenmiştir. Ölçeğin alt boyutlarından babalık rolüne ilişkin olumlu algılar ile çocuk cinselliğinde babalık rolüne ilişkin algılar alt boyutunda puan ortalamalarının yüksek olduğu, babalık rolüne ilişkin olumsuz algılar alt boyutu puan ortalamasında ise düşük olduğu saptanmıştır.

Sonuç: Araştırma sonuçlarına göre web tabanlı eğitim odaklı girişimin babaların evlilik uyumları, babalık rolü algısı ve başarı testlerinde etkili olduğu belirlenmiştir. Bu çalışma eğitimde yenilikçi yaklaşımın etkin olabileceğinin iyi bir göstergesidir. Bu konunun daha geniş katılımlı örneklerle farklı araştırma tasarımları ile nitel boyutta da incelenmesi önerilmektedir.

How to cite: Akçay Didişen, N., Bolışık, Z.B. (2023). Investigation of The Effect of Planned Education Made on The Web Environment for Fathers with Preterm Children on The Perception of The Role of Fathers and Care Skills. *JEUNF*, 39(2), 225-233. Doi:10.53490/egehemsire.1114913

Kaynak Gösterimi: Akçay Didişen, N., Bolışık, Z.B. (2023). Preterm Çocuğu Olan Babalara Web Ortamında Yapılan Planlı Eğitimin Babalık Rolü Algısı ve Bakım Becerilerine Etkisinin İncelenmesi. *EGEHFD*, 39(2), 225-233. Doi:10.53490/egehemsire.1114913

INTRODUCTION

Intensive care units with life-saving equipment are defined as areas of treatment and care that are used to be beneficial in the best sense to infants in danger of life (Terzi and Kaya 2011). Babies born before the thirty-seventh week of pregnancy are referred to as preterm (Altay et al., 2020; Dođru and Topan, 2021). Preterm births are newborns born during 20-36 gestation weeks, and the frequency is increasing in many countries around the world (Dođru and Topan, 2021; Türkyılmaz, Türkyılmaz, Polat, Özkaya and Api, 2019).

The concept of a father is defined as male, first-degree male relative, child-having male, protective and guardianship, which is a factor in the birth of a child. The role of fatherhood is explained as the duties and responsibilities of the man towards his child, which are shaped later by the society in which he is located (Belli, Didişen and Yılmaz, 2021; Kırađ and Çakır, 2019; Koçatepe and Bilgi, 2018). The postpartum period is an important transition period that sees significant psychological and social changes as well as physical changes (Döner et al., 2021). Admitting the baby to the neonatal intensive care unit for any reason is often unexpected for parents and is a source of intense stress (Balacan, Karaçam and Öztürk, 2020; Batman and Şeker 2019; Özbey, Efe and Erdem, 2020; Zengin, Tiryaki and Çınar, 2021). In addition to changes in the family, stress factors for parents are that the hospital environment is foreign, different, encounter tools they do not know, and their role in the care of their children changes. These stressors cause fathers as well as mothers to experience anxiety and concern (Dođru and Topan, 2021; Yayan, Özdemir, Düken and Dađ, 2019).

It is stated that parents who have strong parent-infant attachment in the prenatal period are also strong in the postnatal period. Increasing the father's involvement in infant care increases father-infant attachment, as well as reduces the mother's burden of infant care, relieves the mother, creates the opportunity for the mother to participate in different activities, supports the career advancement of the working mother, and reduces the risk of the mother to experience postpartum depression (Bal and Koç, 2020; Kıraç, Altuntaş, Hançar and Akman, 2021).

Pediatric nurses have very important roles in this sense, but parents should take initiative knowing that baby bonding is a socio-cognitive process that develops as a result of positive experiences (Kara and Çetinkaya, 2019; Özbey et al., 2020).

Therefore, parents whose baby is monitored in the neonatal intensive care unit have important roles in identifying, evaluating, and regulating compliance in domestic relations during the end-of-birth period. Making parents feel ready to be discharged as well as facilitating participation in the process is an important responsibility for health workers.

It is important that the discharged preterm babies can receive adequate care outside the hospital and that the family can take care of their baby independently and distinguish between adverse or unusual situations to maintain their health (Zengin et al., 2021; Kara and Çetinkaya, 2019).

Healthcare workers today have begun to fulfill different types of training and counseling roles through changes and advances in information technology. With the development of technology, there are changes in the field of education as well as in many areas. Especially because of the change in teaching methods and techniques, learning becomes independent of time and space. The benefits of sharing information on the web with the development of internet technology have allowed this environment to be used in the field of education (Özdemir, 2017). Our studies on the subject have determined that there is no web page prepared for fathers with premature babies. This study aims to determine the effect of planned education made on the web environment for fathers with preterm children on the perception of the role of fathers and care skills.

Research question

What are the effect planned education made on the web environment for fathers with preterm children on the perception of the role of fathers and care skills?

METHODS

Research Design

With this study, it was planned semi-experimentally to determine the effect of planned education on the web on role perception and care skills for fathers with preterm children.

Population and Sample

The semi-experimental type of research was conducted in the Neonatal Intensive Care Unit of a University Hospital in Izmir between June 15, 2010, and January 15, 2012.

The population of the study consisted of the fathers of preterm infants who were diagnosed as preterm infants in Ege University Children's Hospital Neonatology Department between June 2010 and January 2012 and were followed up in the 1st and 2nd units of the Ege University Children's Hospital Neonatal Intensive Care Unit.

Power analysis has been done to determine the number of fathers to sample. For the power analysis, a pre-application study was carried out with 10 fathers before the study, and when the effect size is accepted as 0.8 in line with the calculations made in the G-Power 3.1 Demo package program, it was determined that at least 30 fathers in each group would be sufficient for 80% power. As a result of the analysis, a total of 60 fathers were assigned to the study group (n = 30) and control group (n = 30). As criteria for inclusion in research; at least primary school graduates, who know how to use computers, who can connect to the internet and track information through web pages, who can come to visit their baby at least once 1 a day to squawk, and who agree to participate in research are included in the study.

Data Collection

The web page was also created through the World Wide Web and received support from a private design company. In the development of the software, Microsoft Visual Studio.NET 2005 was used as a tool, C# as the programming language, Microsoft SQL SERVER 2005 as the database, Microsoft Silverlight and Ajax technologies were used to provide ease of use in the interface. The site supports Microsoft Internet Explorer, Mozilla Firefox, and major web browsers used worldwide. The web page also includes an early-born baby care training booklet that working group fathers can follow. In this booklet, the definition of preterm baby, gestational week, types, reasons, reasons for being followed in intensive care, premature baby characteristics, possible health problems, nutrition, breastfeeding, discharge, first examination after discharge, growth and developmental evaluation, post-discharge procedures, flatulence, baby holding positions, clothing selection and dressing, bottom cleaning, room arrangements, prevention of home accidents are included and is a training book prepared by the researcher.

DISCERN (the list used in decision-making on the suitability and quality of written materials) was used to test the intelligibility and reading eligibility of the training booklet to be applied to the study group. DISCERN is a tool developed by a project team and supported by the Library of Britain and the National Health Service Research Development Program. It is used to test the intelligibility and use of written educational materials prepared for healthcare recipients to be informed on health-related issues in terms of quality characteristics (Charnock 1998). The obtained scores were analyzed with Kendall's coefficient of concordance test. Expert opinions were statistically consistent ($p=0,304, p>0.05$). The application flow chart of the research is given in Figure-1 below.

Data Collection Tools

As data collection tools, introductory information form, Marital Adjustment Scale, Young-Parents Dispute Measurement, and Success Test for Premature Baby Care were used.

The Introductory Information Form was prepared by the researchers and includes total (n=18) sociodemographic data including age, educational status, income level, work status, occupation, year of marriage, etc.

The Marriage Adjustment Scale was developed by Locke and Wallace (1959). The scale created to measure marriage harmony is made up of 15 items. One of these clauses measures general compliance, eight measures areas of agreement, and six measures conflict resolution, commitment, and communication. Scores on the scale are increasing from mismatch to compliance. The highest compliance score to be obtained from the scale is 158 and the lowest compliance score is 2. It was translated into Turkish by Tutarel-Kışlak (1999).

Fatherhood Role Perception Scale was developed by Kuzucu in 1999. This scale is a 5-degree Likert-type scale that can be applied both individually and in groups. The perception of fatherhood role in the scale is measured with 25 expressions, 14 of which are positive and 11 of which are negative. Positive items were scored from 1 to 5, and negative items were scored from 5 to 1. The negative substances of the scale are, respectively: 2, 4, 8, 11, 12, 16, 20, 22, 23, 24, 25. Other items are positive. The success test for premature infant care, the study, and the control group were developed to determine the level of knowledge of fathers' care skills in premature infant care. In deciding the scope validity of the test, expert opinions were taken from ten people, including eight faculty members specializing in their field (Child Health and Disease Nursing, Hospital for Child Health and Diseases Neonatology Branch, Faculty of Educational Sciences) and two Neonatal Intensive Care responsible nurses. The obtained scores were analyzed with Kendall's coefficient of concordance test. Expert opinions were statistically consistent ($p=0.499, p>0.05$).

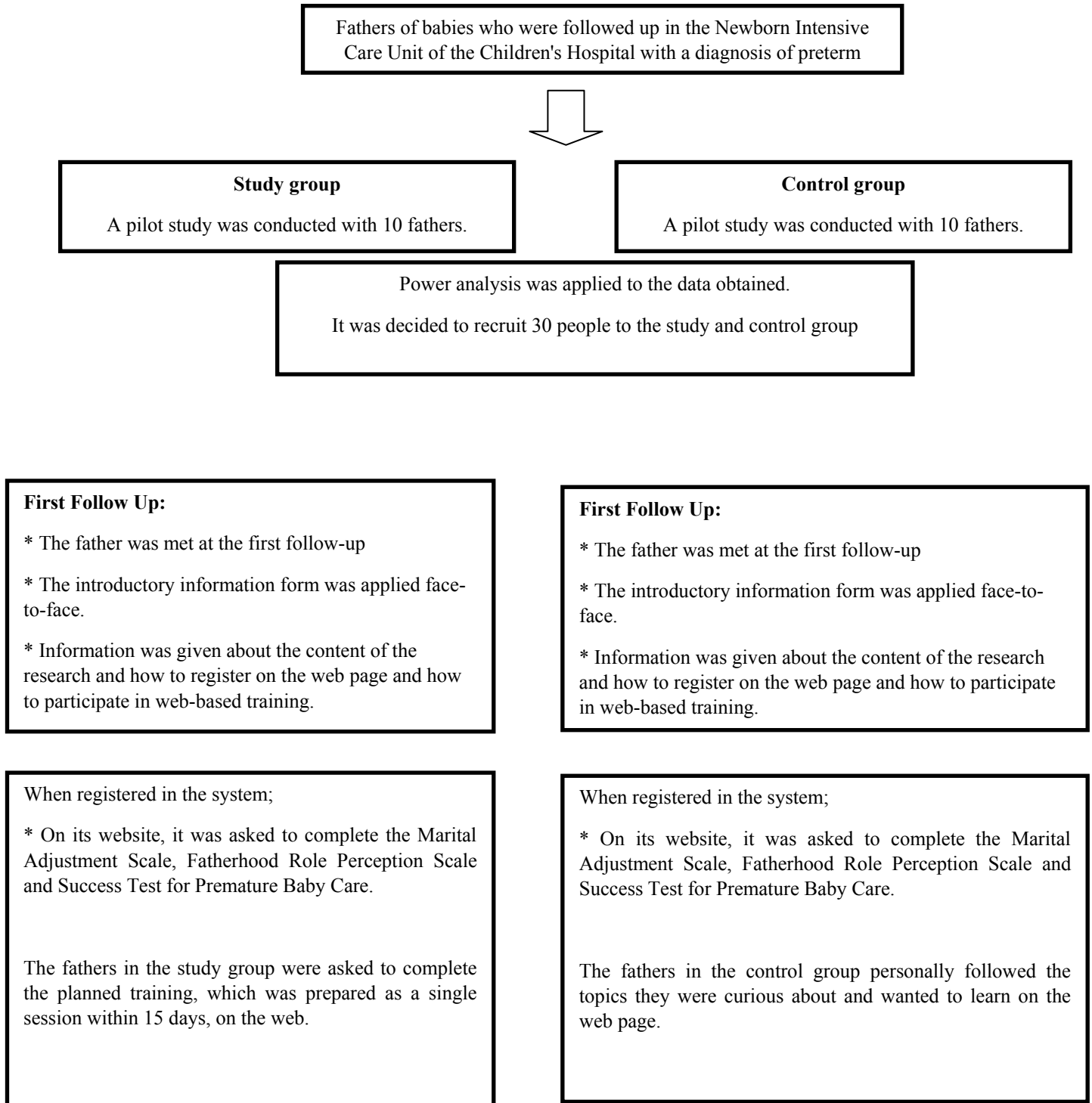


Figure 1. Application flowchart of research

Data Analysis

The analysis of data from the research was done using the Statistical Package for Social Science (SPSS) 18.0 package program. The data obtained were evaluated by percentage (%), χ^2 analysis and t-test (independent samples t-test) in independent groups, and variance analysis in repeated measurements.

Ethical Considerations

For the implementation of the research, the necessary permissions were obtained from the Scientific Ethics Committee of the Ege University's School of Nursing (July 14, 2009- 2009/86), the Department of Neonatology of the Children's Hospital, and the scale holders used in the research. In addition, the fathers covered by the research were given written consent to their participation by the researcher about the research.

RESULTS

The mean age of the fathers in the study group was 29.46 ± 4.52 . It was determined that 56.7% of the fathers were between the ages of 30-and 35, 96.7% had a profession, 50% had an income level equal to their expenses, and 63.3% had read material about baby care.

It was determined that the average age of the fathers in the control group is 31.60 ± 4.78 , 60% of the fathers are high school graduates, 41.4% are self-employed, and 63.3% are between 1-5 years of marriage year and 61.5% read about baby care materials from the internet.

The average score of the first follow-up of the fathers in the study group on the Marital Adjustment Scale in the study was 22.76 ± 3.35 , and that of the fathers in the control group was 21.36 ± 2.07 . The second follow-up score average on the scale was 45.10 ± 2.42 for fathers in the study group and 43.20 ± 2.84 for fathers in the control group. There was no statistically significant difference between the study and control groups in terms of both first and second follow-up and score averages ($p > 0.05$) (Table 1).

Table 1. Distribution of Fathers the Marital Adjustment Scale Score Averages

| | First | Study group | Control group | t | p |
|------------------------------|------------------|------------------|------------------|-------|-------|
| The Marital Adjustment Scale | follow-up | X \pm SS | X \pm SS | 1.942 | 0.058 |
| | | | | | |
| | | 22.76 ± 3.35 | 21.36 ± 2.07 | | |
| | Second follow-up | 45.10 ± 2.42 | 43.20 ± 2.84 | 2.783 | 0.007 |

In the study, it was determined that the first follow-up score averages of the fatherhood role perception scale were 91.06 ± 13.00 in working group fathers and 98.96 ± 9.24 in control group fathers. The mean score of the sub-dimension of positive perceptions about the role of fatherhood was 44.66 ± 9.17 in the study group fathers and 47.00 ± 6.64 in the control group fathers. The mean score of the negative perceptions sub-dimension related to fatherhood role was 28.13 ± 5.20 in the study group fathers and 30.96 ± 5.79 in the control group fathers. The mean score of the sub-dimension of perceptions about the role of fatherhood in child sexuality was determined as 11.63 ± 1.73 and in the control group fathers as 12.30 ± 1.98 . The mean score of the positive perceptions sub-dimension of the scale on fatherhood role in the second follow-up was 52.10 ± 2.61 in the study group fathers and 44.23 ± 3.29 in the control group fathers. The mean score of the negative perceptions sub-dimension related to fatherhood role was 30.70 ± 1.95 in the study group fathers and 31.10 ± 2.00 in the control group fathers. The mean score of the sub-dimension of perceptions about the role of fatherhood in child sexuality was 13.60 ± 1.24 in the study group fathers and 11.93 ± 1.65 in the control group fathers.

As a result of the t-test analysis, there was no statistically significant difference between the study and control groups in terms of initial follow-up and sub-dimensions of the scale ($p > 0.05$), and positive perceptions of the second follow-up fatherhood role of the scale of the difference between the average score and the perceptions of the role of fatherhood in child sexuality are significant ($p < 0.05$), and the difference between the negative perceptions of the fatherhood role and the mean of the score of the lower dimension does not make sense ($p > 0.05$).

When we look at the relationship between the mean scores of the fatherhood role perception scale at the first follow-up and socio-demographic variables, the study group included fathers aged between 30-35 (92.58 ± 13.82), those who graduated from a faculty/college (92.91 ± 13.00), and those whose income was equivalent to expenditure

(91.46±14.75). and working fathers (91.17±13.22) Fatherhood role perception scale mean scores were higher. Scale second follow-up point averages were found among fathers in the control group, fathers aged 30-35 (95.33±4.41) and those who graduated from faculty/school (97.33±3.60) It was found that the second follow-up means the score was higher in those whose income was equal to their expenditure (96.58±3.52) and working fathers (94.72±3.99).

In our study, the scores obtained from the success test for premature baby care were compared and the average success test score of the study group fathers was 42.53±10.94 before training and 33.46±9.00 in the fathers in the control group. The average score of the successful test was 77.46±9.82 in the study group and 45.06±8.26 in the control group after the training. The pre-post test score average of the chart of the research is given in Figure-2 below.

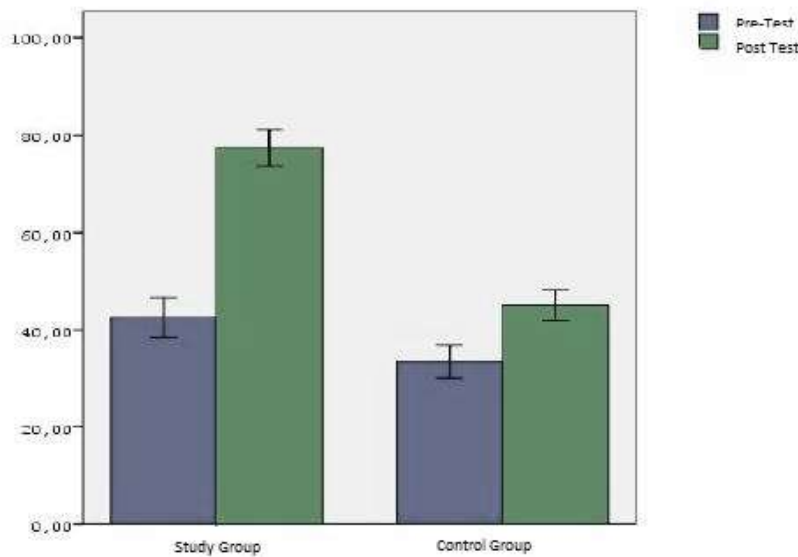


Figure 2. Comparing Pretest and Posttest Score in The Research of Study and Control Group

DISCUSSION

Society imposes different characteristics, behaviors, roles, and responsibilities on men and women (Erdoğan and Akin, 2021). The role of fatherhood constitutes one of the most important roles and responsibilities a man takes on in the life process (Bilge and Avcı, 2021). In the literature, the involvement of the father in care from the time the baby was born was found to be important both in terms of the support of the mother and the healthy development of the father-infant relationship (Çıldır et al., 2014). There are studies on the acceptance of fatherhood roles in educational and educational situations. Our research also found that working group fathers had higher perception scale score averages than those who graduated from college/faculty, while fathers in the control group had a higher perception of fatherhood role among those who graduated from secondary school. Coverman and Sheley's study also found that fathers' participation in infant care increased as the level of education increased, similarly to Ahmeduzzaman and Roopnarine's study, which predicted higher levels of education and higher father participation in raising children in democratic families (Biber, 2012) The study of Seler, Celiköz and Songül (2007) in Turkey also stated that fathers are more qualified to do fatherhood work as education levels increase and that the interest of university graduates in fatherhood is more positive than that of elementary fathers. It is stated in a publication that the education factor is a variable that appears to be related to marital harmony (Yalçın, 2014). Therefore, the educational situation increases the level of knowledge of the individuals and improves their problem-solving skills. In this way, it can be conceived that fathers' behavior becomes more conscious and contributes positively to their interpersonal relationships. In the publications, it is emphasized that couples who receive sufficient support from their spouses have higher marital satisfaction, and fathers with good marital relations are also more attached to their babies after birth (Özkan et al., 2016).

In our research, it was determined that the marriage compliance score averages were low in both groups during the pre-education period and high after the education. This adherence was determined to be higher in fathers in the study group. Therefore, web-based education was determined to cause a change in parents' matrimonial cohesion.

Counseling, education, and training also play a major role in the development of fatherhood role and perception (Kuruçırak, 2010). The aim here is to form the basis of the relationship between father and baby, to improve the relationship between father and baby, and to contribute to the protection of the baby's health by supporting the father's participation in baby care (Alpöge and Gündüz, 2001).

Nurses should provide regular and systematic information that will make fathers feel that they are part of the process of adapting to their roles, initiating and properly coping with the positive relationship between father and baby, and providing regular and systematic information to participate in decisions related to baby care, and applying the training and counseling roles, which are one of the most important roles of our nursing profession, for this purpose (Doğru and Topan, 2021; Kuruçırak, 2010; Özgürsoy and Durmaz Akyol, 2008). Today, different training methods are preferred in this process in health education. The internet, which is used extensively in the field of health by health workers, has started to take its place in our lives, especially to provide interactive training related to health. It has been determined in an international publication that a web-based education intended for parents often logs into this site and updates their information, specifically to address and relax the situation (Marsac et al., 2013). However, it has also been stated that fathers can care for the newborn as effectively as mothers and become master babysitters (Bal, 2014). In our research, it was determined that these needs are listed as the need for information, need for care and emotional needs, etc., especially in a study that supports our educational needs (Adama et al., 2022). Distance education, which develops as an alternative to the face-to-face training model, can be defined as organizations where information and resources can be shared to expand/improve education through the effective use of technology. Web-based education, which is a distance education method, is defined as an educational program created by using the features of the internet and computer technologies. It is emphasized that these programs are effective both because they can be reached a wide audience in a short time and because they save time (Bölüktaş et al., 2019).

In our study, it was determined that the average score of the successful test for infant care after the web-based training prepared for fathers was higher in the study group (77.46±9.82). The information provided through web-based training is also important in terms of contributing to the realization of desired care skills after discharge. Today, information requested through electronic access resources is very easily accessible. But the accuracy of these sources may be controversial. Therefore, the training and counseling of parents from web-based training tools that nurses and other health care members will prepare in these units may play a more effective role in improving health-promotion behaviors.

CONCLUSION

According to our research results, the web-based education-focused initiative was determined to be effective in fathers' marriage fits, perception of fatherhood role and success tests. This study is a good indication that an innovative approach can be effective in education. First of all, in line with these results the fathers providing professional health care paternity from the pregnancy process to the candidates will support them to realize their role perceptions giving education in the process of becoming a father holistic evaluation of the family education and training aimed specifically at fathers' dissemination of counseling programs is very important.

It is recommended that this topic be examined in a qualitative dimension with different research designs with more widely attended samples.

Author Contributions

Concept and design: N.A.D, Z.B.B. Data collection: N.A.D. Data analysis and interpretation: N.A.D., Z.B.B. Writing manuscript: N.A.D. Critical review: N.A.D., Z.B.B.

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

Funding: This research was supported by Ege University Scientific Research Branch Directorate as BAP Project 2010-HYO-04 project number.

REFERENCES

- Adama, E. A., Adua, E., Bayes, S., Mörelius, E. (2022). Support needs of parents in neonatal intensive care unit: An integrative review. *Journal of Clinical Nursing*, 31(5-6), 532-547.
- Kıraç, A., Altuntaş, D., Hançar, D., Akman, G. (2021). The role of the nurse in supporting father-baby attachment period. *Journal of Samsun Health Sciences*, 6(1), 33-40.
- Alpöge, G., Gündüz, E. (2001) The place and importance of the father in the child's life, December 2000 Symposium Report. Mother-Child Education Foundation. Istanbul: Kansu Matbaacılık. Publication no: 12.

- Altay, M., Bayram, M., Biri, A., Büyükbayrak, E.E., Deren, Ö., Ercan, F., Yanık, F.F. (2020). Perinatology specialists association preterm labor and birth guide. Access address: <http://puder.org.tr/wp-content/uploads/2020/11/PUDER-Preterm-Eylen-ve-Dogum-Kilavuzu.pdf> Access date:01.04.2022
- Bal, S. (2014). *İlk kez babalık deneyimi yaşayan erkeklerin bebek bakımına katılmaya ilişkin görüşleri ve bakıma katılma durumları (Opinions of men who have experienced fatherhood for the first time regarding their participation in infant care and status of care)*. (Master Thesis) Hacettepe University Institute of Health Sciences, Obstetrics and Gynecology Nursing Program, Ankara.
- Balacan, Z., Karaçam Z., Öztürk, G. G. (2020). Parents' experience and needs regarding having a premature baby. *Journal of Ege University Nursing Faculty*, 36 (3), 133-144.
- Batman, D., Şeker, S. (2019). The effect of web based education on the level of self-confidence and anxiety in care of parents of premature infants. *E-Journal of Dokuz Eylul University Nursing Faculty*, 12 (2), 107-115.
- Belli, M., Didişen, N.A., Yılmaz, H.B. (2021). The role of fatherhood changing from past to present and its contributions to child development. *Celal Bayar Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, 8(2), 366-371.
- Biber, K. (2012). *Portage erken eğitim programının aile ve kurum ortamında yaşayan 5-6 yaş çocuklarının gelişimleri ile aile katılım düzeyleri üzerindeki etkisi (The effect of the Portage early education program on the development and family involvement levels of 5-6 year old children living in family and corporate environments)*. (Doctora Thesis) Marmara University Institute of Social Sciences, İstanbul.
- Bilge, M., Avcı, A., Kale, M. (2021). The relationship between the resilience level of fathers and the level of participation in child care practices: Adana example. *Turkish Journal of Family Medicine and Primary Care*, 15(2), 375-382.
- Bölüktaş, R.P., Özer, Z., Yıldırım, D. (2019). Web based training usability in health. *Journal of International Management and Social Researches*, 6(11), 197-207.
- Charnock, D. (1998). *The discern handbook*. University of Oxford and The British Library. Abingdon, Oxon: Radcliffe Medical Press Ltd. Access address: http://www.discern.org.uk/discern_instrument.php. Access Date: 27.04.2022.
- Çıldır, G., Karakoç, A., Karaca, S. (2014). Evaluation of father's participation at infant care. *International Refereed Journal of Academic Sports Health and Medical Sciences*, 10(4), 1-15.
- Doğru, S., Topan, A. (2021) The effect of hospitalization education given to the parents of premature babies in intensive care unit on their stress levels. *J Pediatr Emerg Intensive Care Med*, 8, 26-36.
- Döner, Ş.İ., Baş, Z.T., Duran, B., Mevhibe, E.R., Karakoç, H. (2021). Fatherhood role perception in Turkey: Attitudes and behaviors of father. *Journal of Current Nursing Research*, 1(2), 59-67.
- Erdoğan, G., Akın, A. (2021). Medical interventions on female body in terms of social sexual equality. *Health and Society*, 31(2), 14-20.
- Kara, M., Çetinkaya, Ş. (2019). The concept of paternity and nursing in father-infant attachment in Turkish society. *Turkey Clinics Nursing Sciences*, 11(2), 200-210.
- Kırağ, N., Çakır, İ. (2019). The perception of father's role and related factors of 0-6-year-old. *Balikesir Health Sciences Journal*, 8(3), 117-122.
- Kocatepe, B., Bilgi, S. (2018). Fatherhood as a social construction: the image of father in mothers' life storie. *Fe Dergi*, 10(2), 42-59.
- Kuruçirak, Ş. (2010). *4-12 aylık bebeği olan babaların, babalık rolü algısı ile bebek bakımına katılımı arasındaki ilişki*. (Master Thesis). Akdeniz University Institute of Health Sciences, Antalya.
- Kuzucu, Y. (1999). *Babalarıyla çatışma düzeyi yüksek ve düşük olan ergenlerin ve babaların babalık rolüne ilişkin algılarının karşılaştırılması. (Comparison of the perceptions of fathers and adolescents with high and low conflict with their fathers regarding the role of fatherhood)*. (Master Thesis). Ankara University Institute of Education Sciences, Ankara.
- Marsac, M.L., Hildenbrand, A.K., Kohser, K.L., Winston, F.K., Li, Y., Kassam-Adams, N. (2013). Preventing posttraumatic stress following pediatric injury: a randomized controlled trial of a web-based psycho-educational intervention for parents. *Journal of Pediatric Psychology*, 38(10), 1101-1111.
- Özbey, H., Efe, Y. S., Erdem, E. (2020). Families with preterm infants and nursing approach, *Journal of Hacettepe University Faculty of Nursing*, 7(3), 292-298.
- Özdemir, A., Alaybeyoğlu, A., Balbal, K. F. (2017). A design of web based learning environment. *Science Education Art and Technology Journal*, 1(1), 10-18.
- Özgürsoy, B.N., Durmaz, Akyol, A. (2008). Needs of family members of patients in intensive care unit. *Journal of Intensive Care Nursing*, 12, 33-8.
- Özkan, H., Çelebioğlu, A., Üst, Z. D., Kurudirek, F. (2016). Investigation of the parenting behaviors of fathers in the postpartum period, *The journal of Dr. Behcet Uz Children's Hospital*, 6(3), 191-196.

- Seçer, Z., Çeliköz, N., Yaşa, S. (2007). Bazı kişisel özelliklerine göre okul öncesi eğitim kurumlarına devam eden çocukların babalarının babalığa yönelik tutumları. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 18, 425-438
- Terzi, B., Kaya, N. (2011). Nursing care of critically ill patients. *Journal of Intensive Care*, 1, 21-25.
- Tutarel-Kışlak, Ş. (1997). Relationships between marital adjustment and attributions of causality and responsibility, *Turkish Journal of Psychology*, 12(40), 55-65.
- Türkyılmaz, G., Türkyılmaz, Ş. E., Polat, M., Özkaya, E., Api, M. (2019). The influence of spontaneous and induced labor in maternal and fetal outcomes in preterm premature rupture of membranes, *Zeynep Kamil Medical Bulletin*, 50(2), 19-23.
- Yalçın, H. (2014). Relationship between adaptation of the marriage and demographic characteristics, *Journal of Research in Education and Teaching*, 3(1), 250-261.
- Yayan, E. H., Özdemir, M., Düken, M. E., Dağ, Y.S. (2019). Determination of stress levels of parents in newborn intensive care unit of baby, *Gumushane University Journal of Health Sciences*, 8(1), 82-89.
- Zengin, H., Tiryaki, Ö., Çınar, N. (2021). Transition to home: Turkish validity and reliability study of the preterm parental scale. *Online Turkish Journal of Health Sciences*, 6(1), 31-43.