DOI

# CONTRIBUTION OF CLINICAL GUIDELINES TO PATIENT CARE PRACTICES

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This study was conducted to determine the knowledge and attitudes of health professionals about the contribution of clinical guidelines in patient care practices and their views on clinical guidelines and the factors affecting them.

Research has a descriptive, cross-sectional research feature. The survey sample consisted of 100 health workers of Bursa Özel Medicabil Hospital. The data were collected through the questionnaire form between 1-15 February 2017. Calculations were made by giving 1 point for each correct or positive response, 0 for wrong or negative, and no answer. The descriptive statistics were assessed by t-test, one-way analysis of variance and correlation analysis in independent groups, and p <0.05 was considered significant.

In the study, a positive and moderate correlation was found between healthcare professionals' knowledge of clinical guidelines and their attitudes to clinical guidelines (r = 0.35, p < 0.01). Healthcare workers who were willing to take part in clinical researches were found to have higher knowledge and attitude scores related to clinical guidelines (p < 0.05).

As a result, opening up basic training programs and encouraging participation of health professionals in these programs in relation to clinical guidelines will play a role in increasing the quality of patient care practices carried out in our country.

Keywords: Clinical guidelines, Health worker, Attitude of health workers, Knowledge of health workers.

## KLİNİK KILAVUZLARIN HASTA BAKIM UYGULAMALARINA KATKISI

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Bu araştırma sağlık çalışanlarının hasta bakım uygulamalarında klinik kılavuzların katkısı hakkındaki bilgi ve tutumları ile klinik kılavuzlara dair görüşleri ve bunlara etki eden faktörlerin ortaya konulması amacıyla gerçekleştirilmiştir.

Araştırma tanımlayıcı, kesitsel bir araştırma özelliği taşımaktadır. Araştırmanın örneklemini, Bursa Özel Medicabil Hastanesinin 100 sağlık çalışanı oluşturmuştur. Veriler, 1-15 Şubat 2017 tarihleri arasında anket formu aracılığı ile toplanmıştır. Her doğru veya olumlu yanıt için 1 puan, yanlış veya olumsuz ve fikrim yok cevapları için ise 0 puan verilerek hesaplamalar yapılmıştır. Veriler tanımlayıcı istatistikler, bağımsız gruplarda t–testi, tek yönlü varyans analizi ve korelasyon analizi ile değerlendirilmiş, p<0.05 düzeyi anlamlı kabul edilmiştir.

Araştırmada sağlık çalışanlarının klinik kılavuzlar ile ilgili bilgi düzeyleri ile klinik kılavuzlara ilişkin tutumları arasında pozitif ve orta düzeyde bir ilişki gösterilmiştir (r =0.35, p<0.01). Klinik araştırmalarda görev almak için isteklilik gösteren sağlık çalışanlarının klinik kılavuzlar ile ilgili bilgi ve tutum puanlarının daha yüksek olduğu bulunmuştur (p<0.05).

Sonuç olarak, klinik kılavuzlar ile ilgili olarak temel eğitim programlarının açılması ve sağlık çalışanlarının bu programlara katılımlarının teşvik edilmesi, ülkemizde yürütülen nitelikli hasta bakım uygulamalarının artmasında rol oynayacaktır.

**Anahtar kelimeler:** Klinik kılavuzlar, Sağlık çalışanı, Sağlık çalışanlarının tutumu, Sağlık çalışanlarının bilgi düzeyi.

#### INTRODUCTION

Clinical trials carried out with great care and in accordance with ethical and legal regulations play an important role in the development of health services and in the

quality of patient care. (http://www.ttb.org.tr/images/stories/file/2013/helsinki.pdf (20.02.2017).

The availability of new treatment options or the improvement of existing treatments can only be achieved through clinical trials. Clinical trials require that a long process, knowledge and experience are not required, but that individuals, institutions or organizations work together and in harmony in many disciplines (Efil, 2014: 12).

The success of a clinical trial depends on the educational levels of the team members and the effective team work. Nurses, who are members of this multidisciplinary team, can undertake increasingly more roles and responsibilities in the field, from planning to conducting research within the clinical research to reporting it as a result (Kenkre, Chatfield, 2004: 5).

Service nurses who are not in the clinical research team can also communicate with research volunteers (Grady, Edgerly, 2009: 471).

Volunteers can feel more at ease sharing their feelings and complaints with their nurses than other members of the clinical research team. In addition, patients seeking help in the decision to participate or not in the clinical trial (although informed by the clinical research team) may request information from service nurses about the benefits and risks of the clinical trial and their decisions may be influenced by the nurses' attitudes toward clinical research (Matsumoto, Nagamura, Ogami, Yamashita, 2011: 369)

While nurses 'attitudes towards clinical research can affect patients' decisions, patients 'concerns about clinical research or experiences they experience may be effective in nurses' attitudes toward clinical research. Despite the fact that nurses have such a critical role, few are known about their attitudes towards clinical trials (Burnett, Koczwara, Pixley, Blumenson LE, 2001: 1187).

The nurses will be able to provide information to the patient about the clinical trial that they may be fit to work with in the clinic, to direct the patient to the right person or units in the clinical trial, to consult the research team, patient advice, patient treatment / care and patient self- they can cooperate (Hiçdurmaz, Öz, 2007: 82).

Nurses can assume roles in finding solutions to the needs of spontaneously developing volunteers. In addition, nurses play an important role in the ethical conduct of clinical research, whether they are research nurses, research co-ordinators, or clinician nurses who care for volunteers (Grady, Edgerly, 2009: 472).

The best way for the research volunteer to receive health care is the common point of coordination between the clinical research team and clinician nurses in the service. A nurse responsible for the care of the volunteer in the clinical trial; it must have knowledge about the issues that affect the care conditions and rights of the patient in order to make the nursing effective and give the best care. It has been pointed out in many studies that nurses about clinical investigations closely related to their patients are lacking in knowledge and that they have problems related to this (ZhangJ, Zhang, Yu, Li, 2011: 649).

These issues include coordination with the clinical research team, communication with the clinical research team, difficulty in consulting the patient, and planning of care. Elimination of such problems should be considered as one of the identification and remediation of nurses' lack of information about clinical trials.

The level of awareness, opinion, attitude and knowledge of clinical professionals, especially from nurses in the first communication step with the patient;

- Patients' participation in clinical trials,
- Ensuring that patients are adequately informed,
- The standard of protection of the rights and well-being of volunteers,
- Patient care quality,

- Collaborate with the clinical research team,
- The public's awareness of clinical investigations,
- The reliability of research data,

and thus indirectly increase the success of the clinical trial and the quality standards. (Yanagawa, Takai, Yoshimaru, Miyamoto, 2014: 85).

For these reasons, there is a need for national data on the knowledge, attitudes and views of nurses related to clinical trials. This need becomes even more important when we consider the "human needs in clinical research, the social outlook of clinical research, and the problems caused by lack of information and information in the approach" in our country. (Ministry of Health, Clinical Researches Workshop Report, 2015: 2).

## **Clinical Research and Nursing**

Nurses have been in clinical investigations for many years. Although nurses have a long history of being involved in clinical trials, the definition of roles officially in clinical trials is new (Reverby, 1999: 7).

The involvement of nurses in clinical research is very important in terms of the advancement of nursing science and the development of patient care quality (Ooi, Lee, Soh, 2012: 264).

The initial expectation from the service nurse involved in the clinical trial is usually the patient's direct care. This maintenance requires communication and communication with many disciplines. In order for the nursing staff to be able to perform the care of the working patient, he must be informed of the factors that may affect the planned treatment and care conditions, in other words, to be able to access the information about the study (Parreco, Ness, 2012: 7).

In general, nurses are employed by university hospitals, educational and research hospitals, research centers and health care institutions. Nurses working in clinical research conducted in these institutions and organizations can be defined by different titles such as clinical research nurse, research coordinator nurse, manager research nurse, and study nurse. Rickard et al. According to the results of the study conducted by the Coordinators of the Research Coordinators Group of the Australian and New Zealand Intensive Care Unit, It has been determined that 1% of the registered nurses in Australia work as research coordinator in particular (Rickard, Roberts, Foote, McGrail, 2007: 1640).

The intensive care unit found that 94% of the coordinators participating in the study co-ordinators' participation in the study included 21 different titles in their research for the 49 participants who participated in the study as a nurse, among them the most used title research coordinator (Rickard, Roberts, Foote, McGrail, 2006: 234).

#### MATERIALS AND METHODS

## Type of Study

It is a descriptive and cross-sectional study.

## **Location and Time of the Study**

The research was conducted by Bursa Özel Medicabil Hospital between 1-15 February 2017 through a questionnaire.

#### Purpose of the research

The purpose of this research; knowledge and attitudes about the contribution of clinical guidelines to health care providers in patient care practices, and opinions on clinical guidelines and factors affecting them.

#### The Universe and Sampling of the Study

The sample of the research was composed of 100 health workers of Bursa Özel Medicabil Hospital.

#### **Data Collection Tools and Data Collection Method**

#### **Data Collection Tools**

The data were collected through the prepared questionnaire. In the preparation of the questionnaire form, a similar work was used. Consultation on the creation of the questionnaire was conducted by specialists (medical pharmacologist, nurse, experienced researcher, public health specialist, medical specialist). Then, in order to evaluate the expressions in the questionnaire in terms of language and concept validity, the questionnaire was sent to the faculty members who were experienced in clinical research and opinions were taken and necessary arrangements were made according to the received feedbacks. Three types of question types, open ended, closed ended and multiple choice, were used in the questionnaire form.

#### **Data Collection Method**

Nurses working in Bursa Private Medicabil Hospital work as two shifts. Volunteers working in the units were reached in both shifts. The researcher visited each of them at least 3 times. The volunteers emphasized that the purpose of the research by the researcher is to explain and volunteer. During the preliminary study, the average time of filling a questionnaire was  $15 \pm 2.5$  min. respectively. Data collected with questionnaire forms were recorded and analyzed using IBM SPSS-23 software.

## **Evaluation and Analysis of Data**

The descriptive statistics were assessed by t-test, one-way ANOVA and correlation analysis in independent groups, p <0.05 was considered significant. 0.05 was considered significant

# **FINDINGS**

In the study, the table showing the age, gender, marital status, department of work, total time worked as nurse, education level is given below.

Table 1. Distribution of nurses according to demographic characteristics (n = 100)

	n	%
Gender		
Woman	66	64,7
Male	36	35,3
Age		
20-29	79	77,5
30-39	19	18,6
40-49	4	3,9
Your education level		
Health vocational high school	67	65,7
School of Nursing	26	25,5
Health Officer	2	2,0
Associate Degree	7	6,9
How long have you been working		
1-5 years	67	67,0
6-10 years	21	21,0
11-16 years	9	9,0
17 and over	5	5,0
Department you work for		
Policlinic	68	68,0
Intensive care	16	16,0
Emergency service and other	16	16,0
Average number of patients per		
day you are obliged to look after		
1-5	49	49,0
6-10	14	14,0
11-19	19	19,0
20 and over	18	18,0
You are in hospital at work		
Head nurse assistant	5	5,0
Responsible nurse	41	41,0
Service Nursery	33	33,0
Policlinic nurse	4	4,0
Operating room nursery	4	4,0
Intensive care unit	13	13,0

According to Table 1, 64.7% (n = 66) of the nurses participating in the survey were female, 35.3% (n = 36) were male and 77.5% (n = 79) (n = 19) were between 30-39 years of age and 3.9% (n = 4) were between 40-49 years of age

and 65.7% (n = 67) of Health Professions High school graduates had 25% (n = 26) nursing graduates, 2,0% (n = 2) health nurses and 6.9% (n = 7) 16.0% (n = 16), 16.0% (n = 16) Emergency and other services were performed in the outpatient clinic, 68.0% (n = 68) (n = 49) 1-5% of the patients, 14% (n = 14) 6-10 persons, 19% (n = 19) nurse (n = 18) 20 or more, nursing assistant 5,0% (n = 5) in the hospital where they worked, responsible nurse 41,0% (n = 41) 33) Service Nurses, 4,0% (n = 4) Polycles (n = 4), and 13.0% (n = 13) of intensive care unit nurses.

Table 2. Knowledge levels of clinical research according to socio-demographic characteristics of participants (n = 100)

	Level of Knowledge Related to Clinical Investigations Mean Score ± standard change	P
Gender		
Male	$11.5 \pm 2.1$	0.404
Woman	$10.1 \pm 4.1$	
Age		
35 years and over	$10.3 \pm 4.2$	0.375
<35 years	$9.9 \pm 4.0$	
Marital status		
The married	$9.9 \pm 4.1$	0.185
Single	$10.6 \pm 4.2$	

When the average scores of the knowledge about the clinical researches according to the socio-demographic characteristics of the participants were compared; The mean score of participants aged 35 years and over was found to be higher than the average of participants below 35 years, but this difference between the averages was not significant (t (285) = -0.89, p> 0.05). Although the average of male participants was higher than the average of female participants, the difference between these means was not significant (t (289) = -0.84, p> 0.05). In addition, there was no significant difference between the mean scores of married and single participants (t (289) = -1.34, p> 0.05).

Table 3. Knowledge levels of clinical research according to study characteristics of participants (n = 100)

	Level of Knowledge Related to Clinical Investigations Mean Score ± standard change	P
Part they work		
Internal	$10.0 \pm 4.3$	0.724
Surgical	$10.2 \pm 4.0$	0.724
Level of Education		
Master and Doctorate	$11.2 \pm 3.9$	0.21
License	$10.1 \pm 4.1$	
Health vocational high school and	$9.8 \pm 4.4$	
Associate degree		
Nursing Experience		
0-4yıl	$10.2 \pm 3.5$	0.853
5-9 years	$9.8 \pm 4.3$	
10-14 years	$10.0 \pm 3.9$	
15-19 years	$10.4 \pm 3.9$	
20-33 years	$10.5 \pm 4.8$	

As can be seen in Table 3, there was no significant difference between participants' scores ( $10.0 \pm 4.3$ ) on the level of knowledge about clinical investigations and  $10.2 \pm 4.0$  ( $10.2 \pm 4.0$ ) on participants working in internal departments (t (289) = -0.35, p> 0.05). When we compared participants' mean scores according to their level of education, the average of participants in the "master and doctorate" level was  $11.2 \pm 3.9$  and there was no significant difference between the average scores of the groups (F (2, 288) = 1.57, p & gt; 0.05). When we evaluated the participants' average by dividing the 5 groups according to the total nursing experience, there was no significant difference between the averages (F (4, 288) = 0.33, p> 0.05). In addition, although the average score of English-speaking participants was higher than the average of non-English-speaking participants, this difference between the averages was not significant (t (289) = 0.23, p> 0.05).

Table 3. Levels of knowledge about clinical trials according to the presence of the client in order to obtain training, experience and information about the participants' clinical investigations

	Level of Knowledge Related to Clinical Investigations Mean Score ± standard change	P
Clinical trial study status		

Fields of study	$14.6 \pm 3.0$	p<0.001
Non-trained	$9.9 \pm 4.1$	
Status of clinical appointment		
Assignees	$12.5 \pm 4.4$	0.002
Non-employed	$9.9 \pm 4.0$	
Status of consultant patient		
Those with consultation	$12.2 \pm 4.5$	
Those who do not have a	$9.9 \pm 4.0$	0.004
consultant or do not remember		

Participants who received clinical research training were found to have significantly higher scores on the level of knowledge about clinical research (14.6  $\pm$  3.0) than those who did not receive clinical research (9.9  $\pm$  4.1) (t (289) = 3.73, p <0.05). At the same time, the mean score of the participants in the clinical study was  $12.5 \pm 4.4$ , and the mean score of the participants who did not take part in the clinical study was found to be  $9.9 \pm 4.0$  (t (289) = 3.06, p <0.05). In order to obtain general information about the clinical trial, the average of the participants who were client patients was found to be significantly higher than the average of non-client participants (t (289) = 2.9, p <0.05).

#### **RESULTS**

As a result of the answers given in 19 expressions to evaluate the knowledge levels of the nurses participating in the research, the average knowledge level of nurses was found to be  $10.1 \pm 4.1$  out of 19 points. It has been found that knowledge of the nurses' knowledge of the ethical aspects of clinical investigations, clinical research in susceptible groups, and design of clinical trials is limited.

- Factors that positively affect nurses' knowledge scores:
  - Taking part in clinical research,
  - To receive training in clinical research,
  - Being a consultant patient related to clinical research.

The mean of the responses positively given to the 8 expressions presented to evaluate the attitudes of the nurses participating in the research to the clinical researches was found to be  $5.8 \pm 1.7$  out of 8 points.

- Factors that positively affect nurses' attitude scores:
  - Knowledge levels of clinical research

Opinions of Nurses about Clinical Research Nursing

- Nurses participating in the study:
  - A large majority thinks that clinical research nursing should be a separate specialty,
  - A large majority thinks that clinical trials should be part of nursing education,
  - In more than half of the clinical trials,
- Knowledge and attitude scores have a positive influence on their views.

It has been observed that the vast majority of nurses working in the Bursa Private Medicabil Hospital participating in this study know the concepts related to voluntary and safety in clinical trials but limited information on the design of clinical trials and clinical trials in clinical trials. It is another important result of this study that very few of the nurses (8.6%) are involved in various duties in clinical research, most of these nurses working in clinical research have not been trained in clinical researches, and that the education they receive is non-standard education. Although there are fewer nurses working in the clinical trial, the majority of other nurses are in a positive attitude towards clinical research, almost half of them are in clinical research.

#### **REFERENCES**

Dünya Tıp Birliği Helsinki Bildirgesi, Fortaleza, 2013. Erişim: http://www.ttb.org.tr/images/stories/file/2013/helsinki.pdf Erişim tarihi: 20 Nisan 2016.

Efil S, Enç N. Klinik araştırmalarda hemşirenin rolü ve önemi. Türk Kardiyoloji Derneği Kardiyovasküler Hemşirelik Dergisi, 2014; 5(7): 12-21.

Kenkre JE, Chatfield D. Study site co-ordinator / clinical research nurse. A career for nurses in the pharmaceutical industry? Clinical Research Focus, 2004; 15(8): 5-9.

Grady C, Edgerly M. Science, technology, and innovation: Nursing responsibilities in clinical research. The Nursing clinics of North America, 2009; 44(4): 471-481.

Matsumoto K, Nagamura F, Ogami Y, Yamashita N ve ark. Difficulties of nursing staff involved in phase 1 oncology trials in Japan. Cancer Nursing, 2011; 4(5): 369–375.

Burnett CB, Koczwara B, Pixley L, Blumenson LE ve ark. Nurses' attitudes toward clinical trials at a comprehensive cancer center. Oncology Nursing Forum, 2001; 28(7): 1187-1192.

Hiçdurmaz D, Öz F. Bir etik problem: Psikiyatride ilaç araştırmaları ve hemşirelik. Hacettepe Üniversitesi Hemşirelik Yüksekokulu Dergisi 2007; 14(2): 82-91.

Zhang J, Zhang H, Yu C, Li J ve ark. The attitudes of oncology physicians and nurses toward phase I, II, and III cancer clinical trials. Contemporary Clinical Trials, 2011; 32(5): 649–653.

Yanagawa H, Takai S, Yoshimaru M, Miyamoto T, ve ark. Nurse awareness of clinical research: A survey in a Japanese university hospital. Biomedical Chromatography (Chichester) Medical Research Methodology, 2014; 14(1): 85.

Türkiye Cumhuriyeti Sağlık Bakanlığı, Türkiye İlaç ve Tıbbi Cihaz Kurumu, Klinik Araştırmalar Daire Başkalığı. Klinik Araştırmalar Çalıştayı Raporu, Seferihisar-İzmir, Türkiye, 2015.

Reverby SM. Rethinking the Tuskegee Syphilis study: Nurse Rivers, silence and the meaning of treatment. Nursing History Review, 1999; 7:3-28.

Ooi C-C, Lee S. H-E, Soh BP. A survey on the research awareness and readiness among radiographers in Singapore General Hospital (SGH). Radiography, 2012;18(4): 264-269.

Parreco KL, Ness E. Care of clinical trial participants: What nurses need to know. American Nurse Today, 2012: 7(6). https://americannursetoday.com/care-of-clinical-trial-participants-what-nurses-need-to-know/ Erişim tarihi:1 Şubat 2017

Rickard CM, Roberts BL, Foote J, McGrail MR. Job satisfaction and importance for intensive care unit research coordinators: results from binational survey. Journal of Clinical Nursing, 2007; 16(9): 1640-1650.