DOI: 10.4274/anatoljmed.2024.88597
Anatol J Gen Med Res 2024;34(2):201-6

CLINICAL RESEARCH / KLİNİK ARAŞTIRMA

ANATOLIAN JOURNAL of GENERAL MEDICAL RESEARCH

Ethical Perspective on Planned Clinical Trials; Non-interventional Local Ethics Committee Observation

Planlanan Klinik Araştırmalara Etik Bir Bakış Açısı; Girişimsel Olmayan Yerel Etik Kurulu Gözlemi

İlkay Akbulut[1], Şükran Köse[2], Başak Göl Serin[3], Ferhat Demirci[4]

[1]University of Health Sciences Turkey, İzmir Tepecik Education and Research Hospital, Clinic of Infectious Diseases and Clinical Microbiology, İzmir, Turkey
[2]Dokuz Eylül University Faculty of Medicine, Department of Infectious Diseases and Clinical Microbiology, İzmir, Turkey
[3]Balıkesir Atatürk Training and Research Hospital, Clinic of Infectious Diseases and Clinical Microbiology, Balıkesir, Turkey
[4]University of Health Sciences Turkey, İzmir Chest Diseases and Surgery Hospital, Clinical of Medical Biochemistry, İzmir, Turkey

Cite as: Akbulut İ, Köse Ş, Göl Serin B, Demirci F. Ethical Perspective on Planned Clinical Trials; Non-interventional Local Ethics Committee Observation. Anatol J Gen Med Res. 2024;34(2):201-6

Abstract

Objective: Clinical trials are an important tool for determining the efficacy and safety of medical treatments. They are scientific studies involving human volunteers and are conducted under the supervision of ethics committees. In recent years, many regulations and guidelines have been published to regulate clinical trials and set ethical standards for research.

Methods: In this study, the applications made to the Ethics Committee for Non-drug Clinical Research of University of Health Sciences Turkey, İzmir Tepecik Education and Research Hospital were retrospectively analyzed. The general characteristics of the applications made to the Ethics Committee, approval and rejection rates, problems and criticisms frequently encountered during the review of the applications were evaluated and the data were analyzed using SPSS.

Results: It was found that most of the files reviewed were approved, but were subject to significant criticism. During the 4 years studied, it was found that the number of files submitted to the ethics committee and the rate of approved files increased each year. It was noted that most of the applications were single-center studies, but the budget requests were low and the scientific basis of the investigators was inadequate.

Conclusion: The findings suggest that investigators should pay more attention to methodology and improve the informed consent process. By addressing these deficiencies, clinical trials can be conducted according to ethical and scientific standards.

Keywords: Ethics committees, informed consent, research

Address for Correspondence/Yazışma Adresi: İlkay Akbulut MD, University of Health Sciences Turkey, İzmir Tepecik Education and Research Hospital, Clinic of Infectious Diseases and Clinical Microbiology, İzmir, Turkey
Phone: +90 232 469 69 69 **E-mail:** ilkayakbulutdr@gmail.com
ORCID ID: orcid.org/0000-0002-4840-6865

Received/Geliş tarihi: 06.05.2024
Accepted/Kabul tarihi: 16.05.2024

Öz

Amaç: Klinik araştırmalar, tıbbi tedavilerin etkinliği ve güvenilirliğinin belirlenmesi için önemli bir araçtır. Bu çalışmalar, gönüllü katılımcıların dahil olduğu bilimsel çalışmaları kapsar ve etik kurulların denetimi altında yürütülür. Son yıllarda, klinik araştırmaları düzenleyen birçok yönetmelik ve kılavuz yayımlanmıştır, bu da araştırmaların etik standartlarını belirlemiştir.

Yöntem: Bu çalışmada, Sağlık Bilimleri Üniversitesi, İzmir Tepecik Eğitim ve Araştırma Hastanesi İlaç Dışı Klinik Araştırmaları Etik Kurulu tarafından yapılan başvurular retrospektif olarak incelenmiştir. Etik kurula yapılan başvuruların genel özelliklerini, onaylanma ve reddedilme oranlarını, başvuruların incelenmesi sırasında sıkça karşılaşılan sorunları ve eleştirileri değerlendirilmiş ve veriler SPSS kullanılarak analiz edilmiştir.

Bulgular: İncelenen dosyaların çoğunun onay aldığı ancak önemli eleştirilere maruz kaldığı tespit edilmiştir. İncelenen 4 yıl boyunca etik kurula başvuran dosya sayısında ve onay alan dosya oranında her yıl artış olduğu belirlenmiştir. Başvuruların çoğunun tek merkezli çalışmalar olduğu, ancak bütçe taleplerinin az olduğu ve araştırmacıların bilimsel dayanaklarının yetersiz olduğu belirlenmiştir.

Sonuç: Bulgular, araştırmacıların metodolojiye daha fazla önem vermesi ve aydınlatılmış onam sürecini iyileştirmesi gerektiğini göstermektedir. Bu eksikliklerin giderilmesiyle, klinik araştırmaların etik ve bilimsel standartlara uygun olarak yürütülmesi sağlanabilir.

Anahtar Kelimeler: Etik kurullar, aydınlatılmış onam, araştırma

Introduction

Clinical trials are scientific studies involving voluntary participants to obtain medical knowledge and determine the safety and efficacy of new drugs, medical devices, and treatment methods[1-3]. These studies are conducted to develop potential new treatment methods and understand the effects and side effects of existing treatments. Participants can participate in clinical trials with their personal or legal permission. These trials are usually conducted with the permission of the Ministry of Health and the approval of institutional ethics committees in Turkey[4].

Recently, many guidelines and regulations on clinical trials have been published. In particular, the "Regulation on Pharmaceutical Research" published in 1993 and the "Good Clinical Practice Guide" published by the Ministry of Health in 1995 have been important guidelines for ethics committees[5,6]. Regulations issued in subsequent years have clarified the procedures for conducting and supervising clinical trials.

The main purpose of ethics committees is to protect the rights, safety, and welfare of clinical trial participants. According to the Declaration of Helsinki, these committees review the submitted research from an ethical and scientific perspective, follow the standards, and ensure compliance with the relevant legislation[7].

The "Ethics Committee for Non-drug Clinical Research" at the University of Health Sciences Turkey, İzmir Tepecik Education and Research Hospital has been operating effectively since 2009. The committee acts in accordance with international ethical principles to support researchers and increase the speed of scientific studies[8-10].

In this study, a retrospective evaluation of applications to the ethics committee, determination of research tendencies of hospital staff, and presentation of relevant statistical data will be performed. This evaluation is intended to provide feedback to researchers and the international scientific community.

Materials and Methods

In this retrospective study, the University of Health Sciences Turkey, İzmir Tepecik Education and Research Hospital Non-drug Clinical Research Ethics Committee retrospectively evaluated 652 studies with a final decision between May 2014 and December 2017. The "file screening information form", which inquiries about the characteristics of the application files, was used as the data collection tool. The conduct and ethical aspects of the study were approved by the Ethics Committee of University of Health Sciences Turkey, İzmir Tepecik Education and Research Hospital on September 17, 2018, with decision number 2018/08-14.

Statistical Analysis

SPSS 22 software (IBM Corporation, Armonk, New York, USA) was used for data analysis. Descriptive statistical measures, such as frequency and percentage distribution, were used to analyze the data. The authors' demographic information was categorized by specialty and the purpose of referral. All studies were classified and statistically evaluated according to eligibility, revision, unapproved, or refusal rates.

The data obtained from these methods were evaluated and statistically interpreted using number and percentage calculations. The results obtained in this manner were used to test the aim and hypotheses of the study.

Results

This study reviewed 652 files that met our ethics committee's criteria for file requests. All criteria were detailed by year (2014-2017) (Table 1). It was determined that 71.1% of the files did not have a budget request, 78.6% were single-center studies, 42.5% were retrospective file studies, and 23.1% were academic studies with survey content. When the distribution of the files submitted to the committee was analyzed according to the characteristics of the results, 74.3% of the files were accepted with approval (approval in the first application or approval after revision), while 22.1% were rejected. The rates of approval, rejection, revision, and unapproved applications by years are shown in Figure 1.

When the approved files were examined, it was found that 60.5% (395 files) of all files were approved in the first application and 90 (13.8%) of the 112 files that went to revision received re-revision or direct approval (Table 2). When the reasons for rejection were examined, it was observed that the method of the planned study was not appropriate due to the application of out-of-scope studies to the ethics committee and there was an inconsistency between the method and informed consent.

The analysis of the criticisms resolved by the ethics committee is presented in Table 3, and 79.5% of the criticisms were method-related. Among the method-related criticisms, 27% were related to inadequate statistical analyses, 19.6% to sampling errors, 15.9% to inadequate explanations in the conduct of the study, 11.6% to insufficient information about data collection tools (e.g., assessment of validity and reliability of scales), and 10.2% to insufficient understanding of the method. In the same table, 68.4% of the criticisms were related to the content of the informed consent. It was observed that 13.9% of the criticisms related to the content of the informed consent included incorrect explanations, 12% excluded sufficient explanations about the surveys, applications, and procedures to be performed, 11.3% included explanations that were in the informed consent given to the participants but were not related to the study, and 9.2% used too many medical terms in the information. It was found that 15.9% of the files did not clearly explain the contribution of the study to science, its purpose, scientific basis, originality, and significance. When evaluated under some technical deficiencies, 10.6% of the files did not properly collect and submit the training approved forms, data collection forms, and commitment and consent control forms of the research unit (Table 3).

Table 1. Characteristics of the files submitted to the committee

		2014			2015			2016			2017			Total	
		n	%	Year %	n	%	Year %	n	%	Year %	n	%	Year %	n	%
Research levels (center/ discipline)	Single center-single discipline	**30**	37.5	17.1	**48**	44.4	27.4	**42**	31.3	24	**55**	33.7	31.4	**175**	**36.1**
	Single center-multidisciplinary	**46**	57.5	22.2	**41**	38	19.8	**68**	50.7	32.9	**52**	31.9	25.1	**207**	**42.7**
	Multi-centered-single discipline	**3**	3.7	7.9	**11**	10.1	28.9	**10**	7.5	26.3	**14**	8.6	36.8	**38**	**7.8**
	Multicenter-multidisciplinary	**1**	1.3	1.8	**8**	7.4	14.5	**14**	10.4	25.5	**32**	19.6	58.1	**55**	**11.3**
Research technique	Survey	**24**	30	21.4	**30**	27.7	26.8	**18**	13.4	16.1	**40**	24.5	35.7	**112**	**23.1**
	Scanning files	**41**	51.3	19.9	**51**	47.2	24.8	**67**	50	32.6	**47**	28.8	22.8	**206**	**42.5**
	Sample collection (Blood-urine-tissue, etc.)	**9**	11.3	6.5	**22**	20.4	15.8	**43**	32.1	30.9	**65**	39.9	46.8	**139**	**28.7**
	Nursing practices	**6**	7.5	21.4	**5**	4.6	17.9	**6**	4.5	21.4	**11**	6.7	39.3	**28**	**5.8**
Type of research	Academic	**71**	88.8	16.4	**97**	89.8	22.4	**124**	92.5	28.6	**141**	86.5	32.6	**433**	**89.3**
	Postgraduate	**9**	11.3	17.3	**11**	10.1	21.1	**10**	7.5	19.2	**22**	13.5	42.3	**52**	**10.8**
Research budget	Demanding	**21**	26.3	15	**30**	27.7	21.4	**47**	35.1	33.6	**42**	25.8	30	**140**	**28.9**
	No demand	**59**	73.8	17.1	**78**	72.2	22.6	**87**	65	25.2	**121**	74.2	35.1	**345**	**71.1**
	Total	**80**	100	16.5	**108**	100	22.3	**134**	100	27.6	**163**	100	33.6	**485**	**100**

Discussion

This study presents a retrospective evaluation of 652 applications submitted to the Ethics Committee for Non-drug Clinical Research of University of Health Sciences Turkey, İzmir Tepecik Education and Research Hospital between 2014 and 2017. The results include the general characteristics of the applications submitted to the Ethics Committee, approval and rejection rates, problems frequently encountered during the review of the applications, and criticisms.

According to the results of our study, most files reviewed were single-center, retrospective, or survey-based academic studies without budget requests. This result shows that researchers reveal their preferences in terms of easier academic work in our country. In addition, it may be related to the fact that academics in our country have to provide health services during most of their daily working hours and that academic budget support is insufficient[11,12].

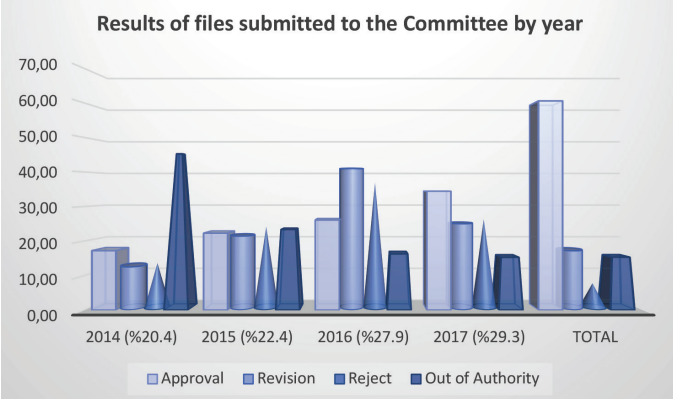

Figure 1. Results of files submitted to the committee by year

Table 2. Follow-up of files with revision decision

	n	%
Re-revision	32	28.8
Reject	22	19.2
Approval	58	51.7
Total	112	100

The majority of applications submitted to the ethics committee were accepted, but the number of rejected applications was also significant. Among the reasons for rejected applications, ethical and methodological problems, such as inappropriate methodology of the study and inconsistency between informed consent and methodology, come to the fore. In addition, an examination of the criticisms resolved by the ethics committee showed that methodological criticisms were in the majority, and a significant proportion of these criticisms included issues such as inadequacy of statistical analyses, faulty sampling, and inadequate explanations in the conduct of the research. These findings underscore the need to increase the level of methodological and statistical knowledge among researchers[9,13].

The study found that a significant proportion of the files had an inadequate scientific basis and that the importance of the study was not clearly indicated by its title and content. In addition, technical deficiencies such as the lack/inadequacy of the study's data collection forms should also be addressed. This suggests that researchers did not sufficiently prepare and review scientific resources during the planning stages of their studies. The difficulty of free access to scientific resources for conducting research may have led to these results[14,15].

The informed consent process is also an important part of the study and has often been criticized. In particular, problems such as inadequate explanations in the informed consent documents and lack of accurate information to participants

Table 3. Classification of file review

Reviews	Prominent review*	n	%
Respect for the field of expertise	Lack of expert involvement in data interpretation	32	26.2
Purpose	The purpose statement does not reflect the study	25	20.5
Budget	Inadequate budget disclosure, lack of funding	21	17.2
Study title	Unintentional, long title	16	13.1
Survey	Lack of clarity of the questionnaires, inadequacy in filling time	14	11.5
Research timeline plan	Inconsistency in study start and end dates, insufficient time	8	6.6
Study group plan	Lack of randomization, bias	6	4.9
Total		122	100

*: Files received multiple review

have come to the fore. The importance of this issue has been emphasized in many similar studies and sources[16,17].

The strength of this study is that evaluating the activities of the ethics committee for non-drug clinical trials is an important step to ensure that clinical trials comply with ethical and methodological standards. Our findings suggest that more attention should be paid to the training needs of investigators and ethical regulations. Thus, clinical trials can be conducted by ethical and scientific standards.

Study Limitations

A limitation of our study was that the reasons for criticism of the studies could not be evaluated from the investigators' perspectives. The research motivations and reasons for criticism/shortcomings could not be detailed. In addition, the lack of similar studies in our country limits our ability to make local comparisons.

Conclusion

Most of the files reviewed by the ethics committee were accepted, but there were some important criticisms. Researchers should pay more attention to the methodology and manage the informed consent process more carefully.

Ethics

Ethics Committee Approval: In this retrospective study, the University of Health Sciences Turkey, İzmir Tepecik Education and Research Hospital Non-drug Clinical Research Ethics Committee retrospectively evaluated 652 studies with a final decision between May 2014 and December 2017. The "file screening information form", which inquiries about the characteristics of the application files, was used as the data collection tool. The conduct and ethical aspects of the study were approved by the Ethics Committee of University of Health Sciences Turkey, İzmir Tepecik Education and Research Hospital on September 17, 2018, with decision number 2018/08-14.

Informed Consent: Retrospective study.

Authorship Contributions

Surgical and Medical Practices: İ.A., Concept: İ.A., B.G.S., F.D., Design: İ.A., Ş.K., Data Collection or Processing: İ.A., F.D., Analysis or Interpretation: İ.A., Ş.K., B.G.S., Literature Search: İ.A., Ş.K., B.G.S., F.D., Writing: İ.A., Ş.K., B.G.S., F.D.

Conflict of Interest: No conflict of interest was declared by the authors.

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

References

1. Beauchamp TL, Childress JF. Principles of Biomedical Ethics. 8th ed. Oxford, UK: Oxford University Press; 2019., Bilimsel araştırma etik kurulları. Turkiye Klinikleri J Med Ethics Law Hist-Special Topics. 2015;1.
2. Orvis AK, Dellavalle RP. Institutional Review Board approval for surveys: why it is necessary. J Am Acad Dermatol. 2008;59:718-9.
3. Panda M, Heath GW, Desbiens NA, Moffitt B. Research status of case reports for medical school Institutional Review Boards. JAMA. 2007;298:1277-8.
4. T.C. Sağlık Bakanlığı Geleneksel ve tamamlayıcı tıp uygulamalarının klinik araştırmaları hakkında yönetmelik [Republic of Turkey Ministry of Health. Regulation on Clinical Trials of Traditional and Complementary Medicine Practices]. Available at https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=31312&MevzuatTur=7&MevzuatTertip=5 Accessed 16 January 2024. (Turkish)
5. T.C. Sağlık Bakanlığı. İlaç Araştırmaları Hakkında Yönetmelik. 29 Ocak 1993 tarih ve 21480 sayılı Resmi Gazete. [Republic of Turkey Ministry of Health. Regulation on Pharmaceutical Research. January 29, 1993 dated and 21480 numbered Official Gazette]. Available at http://www.resmigazete.gov.tr/default.aspx# Accessed 16 January 2024. (Turkish)
6. T.C. Sağlık Bakanlığı İlaç ve Eczacılık Genel Müdürlüğü. İyi Klinik Uygulamalar Kılavuzu. [Republic of Turkey Ministry of Health General Directorate of Pharmaceuticals and Pharmacy. Good Clinical Practice Guide]. Number: 51748, Date: 29 Aralık 1995. Accessed 16 January 2024. (Turkish)
7. World Medical Association Declaration of Helsinki, Ethical Principles on Medical Research on Humans] Available at https://www.ttb.org.tr/haberarsiv_goster.php?Guid=67329bf4-9232-11e7-b66d-1540034f819c Accessed 16 January 2024.
8. Moon M; Committee on bioethics. Institutional Ethics Committees. Pediatrics. 2019;143:e20190659.
9. Wege-Rost T. Medizinisch-ethische Entscheidungsfindung – Beitrag des Klinischen Ethik-Komitees durch Ethikberatung und Erstellung ethischer Leitlinien [Medical-ethical decision-making-contribution of the clinical ethics committee by ethics consultation and development of ethical guidelines]. Med Klin Intensivmed Notfmed. 2023;118:175-9. German.
10. Karagöz, Y. SPSS and AMOS Applied Scientific Research Methods and Publication Ethics. Ankara, Nobel Yayın Dağıtım (2017).
11. Kaya A, Bostan S, Kaya Y. Motivations of Faculty Members in Turkey to Conduct Scientific Studies, Inadequacies and Competency Problems: A Field Study. Higher Education Research/Review (TÜBA-HER). 2023;13:331-42.
12. Güler D, Altın Y, Durmaz E, Tuncel S. [A Case Study on Ethical Violations in Multi-authored Scientific Studies and Their Causes]. Spormetre The Journal of Physical Education and Sport Sciences. 2023;21:129-44. (Turkish)
13. Harnett JD. Research Ethics for Clinical Researchers. Methods Mol Biol. 2021;2249:53-64.
14. Manolova Yalçın O, Kılıç H. [Evaluating the Relationship between Academicians' Teaching Performance and Motivation] Journal of Educational Theory and Practice Research. 2018;4:122-35. (Turkish)
15. Şen CA, Tekindal MA. [Validity and Reliability Study of the Scale for the Evaluation of Clinicians› Opinions and Expectations on Academicianship and Academic Productivity Process] Journal of Higher Education and Science 2021;11:575-80. (Turkish)

16. Shiju R, Thankachan S, Akhil A, Sharma P, Bennakhi A. A Survey Study on Knowledge and Attitude Toward the Ethics Committee and Research Ethical Practices Among Researchers From Kuwait. Sci Eng Ethics. 2023;29:37.

17. Borovecki A, Mlinaric A, Horvat M, Supak Smolcic V. Informed consent and ethics committee approval in laboratory medicine. Biochem Med (Zagreb). 2018;28:030201.