

# Bibliometric Analysis of Abstracts Presented at the National Medical Education Congresses

## Ulusal Tıp Eğitimi Kongrelerinde Sunulan Bildirilerinin Bibliyometrik Analizi

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## Abstract

**Background:** This study aims to systematically review oral and poster presentations delivered at National Medical Education Congresses held between 2001 and 2024 to identify trends in medical education research in Turkey.

**Method:** The research is a descriptive study based on document review. All papers included in the congress booklets between 2001 and 2024 and available to the general public were included in the study without sample selection. The data examined in the study were collected through the "Abstract Review Form," developed by the researchers and encompassing parameters such as author characteristics, methodology, and content, and were summarized using descriptive statistics (frequency and percentage).

**Results:** Of the 1078 abstracts examined, 79.7% were poster presentations. It was determined that 52.8% of the studies had a quantitative design, the descriptive method was used most frequently (65.4%), and surveys were used as the data collection tool (41.6%). Ege University presented the most papers (10.9%), and it was found that 25.2% of the studies had 6 or more authors. In terms of topic selection, "pre-graduation

medical education” ranked first with a rate of 27.2%, while artificial intelligence was the most studied topic in 2024.

**Conclusion:** The findings indicate that research abstracts presented at National Medical Education Congresses in Türkiye are predominantly descriptive and quantitative in design. Studies in the field of undergraduate medical education continue to dominate, and the increase in studies related to artificial intelligence as of 2024 is similar to the international literature. This study has presented a general overview of the bibliometric characteristics of the papers presented at the National Medical Education Congress.

## Özet

**Amaç:** Bu çalışma, Türkiye’de tıp eğitimi araştırmalarındaki eğilimleri belirlemek amacıyla 2001 ile 2024 yılları arasında düzenlenen Ulusal Tıp Eğitimi Kongrelerinde sunulan sözlü ve poster bildirilerini sistematik olarak gözden geçirmeyi amaçlamaktadır.

**Gereç ve Yöntem:** Araştırma, doküman incelemesine dayalı tanımlayıcı bir çalışmadır. 2001 ile 2024 yılları arasında kongre kitapçıklarında yer alan ve genel erişime açık olan tüm bildiriler, örneklem seçimi yapılmaksızın çalışmaya dahil edilmiştir. Araştırmada incelenen veriler, araştırmacılar tarafından geliştirilen ve yazar özellikleri, metodoloji ve içerik gibi parametreleri kapsayan “Bildiri İnceleme Formu” aracılığıyla toplanmış ve tanımlayıcı istatistikler (frekans ve yüzde) kullanılarak özetlenmiştir.

**Bulgular:** İncelenen 1078 bildirinin %79,7’si poster sunumuydu. Çalışmaların %52,8’inin nicel desene sahip olduğu, tanımlayıcı yöntemin en sık kullanıldığı (%65,4) ve veri toplama aracı olarak anketlerin kullanıldığı (%41,6) belirlendi. En fazla bildiri Ege Üniversitesi tarafından sunulmuştu (%10,9) ve çalışmaların %25,2’sinin 6 veya daha fazla yazara sahip olduğu bulundu. Konu seçimi açısından, “mezuniyet öncesi tıp eğitimi” %27,2 oranıyla ilk sırada yer alırken, yapay zekâ 2024 yılında en çok çalışılan konu olmuştur.

**Sonuç:** Bulgular, Türkiye’de Ulusal Tıp Eğitimi Kongrelerinde sunulan araştırma özetlerinin

ağırlıklı olarak tanımlayıcı ve nicel desende olduğunu göstermektedir. Mezuniyet öncesi tıp eğitimi alanındaki çalışmalar baskınlığını sürdürmektedir ve 2024 yılı itibarıyla yapay zekâ ile ilişkili çalışmalardaki artış uluslararası literatür ile benzerdir. Bu çalışma, Ulusal Tıp Eğitimi Kongresi’nde sunulan bildirilerin bibliyometrik özelliklerine ilişkin genel bir görünüm sunmuştur.

## INTRODUCTION

Scientific congresses are defined as scientific meetings that last for one or several days within the framework of a specific theme, are held with the participation of experts from different geographical regions, and aim to share knowledge (1). These events increase professional interaction, encourage interdisciplinary collaboration, and provide an environment for the dissemination of new research. Studies presented at congresses constitute an important source of scientific data in that they reflect current trends in the field and contribute to academic communication (2).

Previous research plays a crucial role in generating scientific knowledge, as monitoring, evaluating, and—even if not identically—replicating prior studies are essential components of the scientific research process (3). The periodic review of scientific studies is of critical importance in terms of revealing the quantitative and qualitative development of research activities (4-6). In this context, one of the methods used in the examination and evaluation of scientific studies is considered to be bibliometric research (7, 8). Bibliometric analysis can be defined as analyzing the literature in a specific field using mathematical and statistical techniques (9-12). With bibliometric research, researchers can both evaluate the development process of a scientific field and make inferences for the future (13,14). Furthermore, periodically revisiting bibliometric data and enriching it with contemporary findings is essential for identifying gaps in the literature and tracking changing academic paradigms.

Medical education is a field that is continuously evaluated and improved with the aim of strengthening the quality of education conducted in medical schools, enhancing physician competencies, and increasing the effectiveness of health services. The Edinburgh Declaration (15) and the World Summit Recommendations on Medical Education (16), published by the World Federation for Medical

Education, defined the aim of medical education as “training physicians who will protect the health of all people” and pioneered the initiation of a significant transformation process at the international level. These developments laid the groundwork for strengthening the academic structure of the field of medical education in Türkiye; they accelerated the process of establishing the Departments of Medical Education, restructuring curricula, and increasing research activities (17). This increase in scientific production necessitates a qualitative and quantitative reassessment of existing studies at regular intervals and a revision of the literature with up-to-date analyses.

One of the most important steps in the institutionalization of medical education in Türkiye was the first National Medical Education Congress, organized by Ankara University Faculty of Medicine on November 12–15, 1998 (18). Following this call, in 1999, Türkiye’s first Department of Medical Education was established at Ege University Faculty of Medicine, and the field of medical education began to take shape as an academic discipline (19). The National Medical Education Congresses are an important scientific communication platform in Türkiye where scientific production in the field of medical education is shared regularly, developments over the years can be monitored, and the academic orientations of the field become visible.

However, a comprehensive, long-term analysis encompassing nearly a quarter-century of this scholarly output is currently missing from the literature. This study addresses this significant gap by providing a longitudinal bibliometric analysis that includes the most recent data. By documenting the evolution from past research designs to current trends, this work serves as a critical tool for understanding the present state of the field and guiding future research in Türkiye.

The aim of this study is to analyze abstracts of oral and poster presentations from the National Medical Education Congresses held between 2001 and 2024, with a focus on identifying trends in research topics, study designs, and methodological characteristics.

## METHODS

### Study Design

This study is a descriptive study conducted through

document analysis, in which the abstracts presented at the National Medical Education Congresses held between 2001 (the year of the first National Medical Education Congress) and 2024 were examined in terms of specific parameters.

### Population and Sample

The population of the study consisted of all oral and poster abstracts presented at the National Medical Education Congresses organized between 2001 and 2024. No sampling was performed; all abstracts that were included as abstract texts in the congress abstract books within the specified date range and were publicly accessible were included in the analysis.

### Data Collection

A “Abstract Review Form” authors, institution(s) of the author(s).

**Research Methodology:** Study type (quantitative, developed by the researchers through a literature review was used to categorize and analyze the data. The congress abstract books were reviewed electronically, and the data obtained were recorded in this form. For each abstract, the following parameters were recorded:

**Abstract Identification:** Year, abstract type (oral/poster).

**Author Characteristics:** Number of qualitative, mixed, program introduction), research method (descriptive, experimental, etc.), and data collection instruments (questionnaire, scale, interview, etc.).

**Content:** Topic headings studied (undergraduate, postgraduate, program evaluation, etc.) and keywords used.

In the classification of topic headings, core areas (20) in the medical education literature were taken as a basis. To ensure data reliability, abstracts for which uncertainty was experienced during the classification process were evaluated jointly by the researchers, and consensus was reached. For abstracts covering more than one core area, a multiple coding strategy was employed, whereby each abstract was categorized and analyzed under all relevant topic headings.

The abstract assessment process was conducted independently by three researchers specializing in medical education. To ensure the rigor and consistency of the classification, each abstract was reviewed separately. In cases where uncertainty or

disagreement arose regarding the categorization of an abstract, a consensus-based strategy was employed. These cases were resolved through joint discussions among all three researchers until a final agreement was reached.

Data Analysis

The obtained data were transferred to Microsoft Excel (Microsoft) and analyzed. Descriptive statistical methods were used to evaluate the data; variables were expressed as numbers (n) and

percentages (%).

RESULTS

General Characteristics of Abstracts

There were a total of 1078 abstracts presented at the congresses, including 219 (20.32%) oral and 859 (79.68%) poster presentations. The study period began in 2001, coinciding with the first National Medical Education Congress, and extended through 2024. The annual distribution of the 1078 abstracts and their presentation types is illustrated in Figure 1.

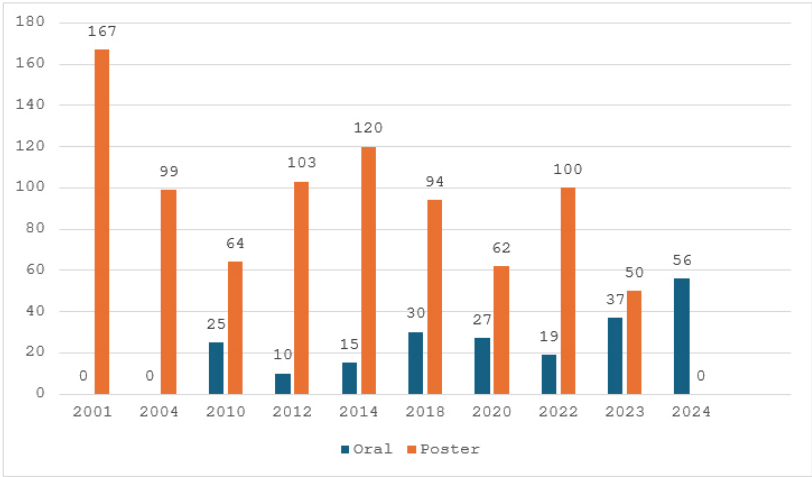


Figure 1. Distribution of Oral and Poster Presentations by Year (2001–2024).

\* n=1078. Data labels represent the total number of abstracts for each congress year.

Author and Institutional Characteristics

Regarding authorship, there were 69 abstracts (6.4%) with 1 author, 180 (16.7%) with 2 authors, 218 (20.2%) with 3 authors, 196 (18.2%) with 4 authors, 126 (11.7%) with 5 authors, and 272 (25.2%) with 6 or more authors (Table 1).

In the analysis of institutional distribution, the affiliations of all contributing authors were taken into account. For multi-center studies, each unique institution represented in the authorship was included in the frequency analysis to reflect the full scope of institutional collaboration. The distribution of abstracts by university was based on the affiliation of the first author. The universities with the highest numbers of abstracts, in descending order, were: Ege University 118 (10.9%), Akdeniz

University 94 (8.7%), Dokuz Eylül University 89 (8.3%), Hacettepe University 78 (7.2%), Pamukkale University 73 (6.8%), Gazi University 54 (5.0%), and Başkent University 51 (4.7%) (Table 1).

Methodological Features

Of the analyzed abstracts, 570 (52.8%) were quantitative, 181 (19.2%) qualitative, 84 (7.8%) mixed-methods studies, and 243 (22.5%) program introductions. The number of abstracts by the most preferred research methods was as follows: descriptive 705 (65.4%), program introduction/evaluation 267 (24.8%), experimental 78 (7.2%), comparative 20 (1.9%), and correlational 8 (0.7%) (Table 1).

Among the data collection methods used,

**Table 1. Analysis of Presentations**

| <b>Variables</b>                                                  | <b>Groups</b>                                 | <b>Number<br/>(n)</b> | <b>Percentage<br/>(%)</b> |
|-------------------------------------------------------------------|-----------------------------------------------|-----------------------|---------------------------|
| <b>Presentation Type</b>                                          | Poster Presentation                           | 859                   | 79,7                      |
|                                                                   | Oral Presentation                             | 219                   | 20,3                      |
| <b>Number of Authors</b>                                          | 1 Author                                      | 69                    | 6,4                       |
|                                                                   | 2 Authors                                     | 180                   | 16,7                      |
|                                                                   | 3 Authors                                     | 218                   | 20,2                      |
|                                                                   | 4 Authors                                     | 196                   | 18,2                      |
|                                                                   | 5 Authors                                     | 126                   | 11,7                      |
|                                                                   | 6 or More Authors                             | 272                   | 25,2                      |
| <b>Universities with the Highest<br/>Number of Presentations*</b> | Ege University                                | 118                   | 10,9                      |
|                                                                   | Akdeniz University                            | 94                    | 8,7                       |
|                                                                   | Dokuz Eylül University                        | 89                    | 8,3                       |
|                                                                   | Hacettepe University                          | 78                    | 7,2                       |
|                                                                   | Pamukkale University                          | 73                    | 6,8                       |
|                                                                   | Gazi University                               | 54                    | 5,0                       |
|                                                                   | Başkent University                            | 51                    | 4,7                       |
| <b>Study Type</b>                                                 | Quantitative                                  | 570                   | 52,8                      |
|                                                                   | Program Introduction                          | 243                   | 22,5                      |
|                                                                   | Qualitative                                   | 181                   | 19,2                      |
|                                                                   | Mixed Methods                                 | 84                    | 7,8                       |
| <b>Research Method</b>                                            | Descriptive                                   | 705                   | 65,4                      |
|                                                                   | Program<br>Introduction/Evaluation            | 267                   | 24,8                      |
|                                                                   | Experimental                                  | 78                    | 7,2                       |
|                                                                   | Comparative                                   | 20                    | 1,9                       |
|                                                                   | Correlational                                 | 8                     | 0,7                       |
| <b>Data Collection Methods**</b>                                  | Survey/Questionnaire                          | 449                   | 41,6                      |
|                                                                   | Scale                                         | 150                   | 13,9                      |
|                                                                   | Other Methods                                 | 129                   | 13,5                      |
|                                                                   | Test                                          | 111                   | 10,2                      |
|                                                                   | Document Analysis                             | 107                   | 8,8                       |
|                                                                   | Interview                                     | 100                   | 9,2                       |
|                                                                   | Observation                                   | 16                    | 1,4                       |
|                                                                   | Checklist                                     | 16                    | 1,4                       |
| <b>Study Topics</b>                                               | Undergraduate Medical<br>Education            | 293                   | 27,2                      |
|                                                                   | Program Evaluation                            | 191                   | 17,7                      |
|                                                                   | Learning and Teaching Methods                 | 167                   | 15,5                      |
|                                                                   | Program Development                           | 136                   | 12,6                      |
|                                                                   | Assessment and Evaluation                     | 94                    | 8,7                       |
|                                                                   | Other                                         | 77                    | 7,3                       |
|                                                                   | Postgraduate Medical Education                | 71                    | 6,5                       |
|                                                                   | Faculty Development / Train-<br>the- Trainers | 49                    | 4,5                       |
| <b>Prominent Keywords</b>                                         | Keywords Not Used                             | 416                   | 38,6                      |
|                                                                   | Medical Education                             | 158                   | 14,7                      |
|                                                                   | Program Evaluation                            | 72                    | 6,7                       |
|                                                                   | Program Development                           | 45                    | 4,2                       |
|                                                                   | Student Perspectives                          | 24                    | 2,2                       |
|                                                                   | Feedback                                      | 23                    | 2,1                       |

*\*Only the universities with the highest participation are listed. \*\*Total percentage may exceed 100% as multiple methods could be used.*

questionnaire was used in 449 abstracts (41.6%), followed by scale in 150 (13.9%), test in 111 (10.2%), document analysis in 107 (8.8%), interview in 100 (9.2%), observation in 16 (1.4%), and checklist in 16 (1.4%) (Table 1).

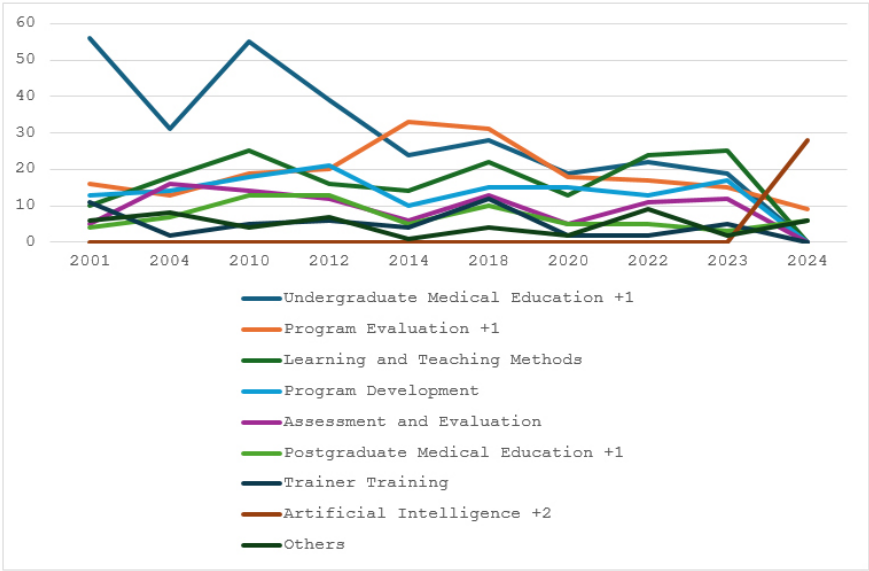
Thematic Distribution and Keywords

Regarding the topics studied, “undergraduate medical education” was addressed in 293 abstracts (27.2%), “program evaluation” in 191 (17.7%), “learning and teaching methods” in 167 (15.5%), “program development” in 136 (12.6%), “assessment and evaluation” in 94 (8.7%), “postgraduate medical education” in 71 (6.5%), and “trainer training” in 49 (4.5%) (Table 1). Among the 662 abstracts that included keywords, the most prominent and frequently utilized term was ‘Medical Education’ (n=158, 23.8%). This

was followed by core thematic areas such as ‘program evaluation’ (n=72, 10.8%) and ‘program development’ (n=45, 6.8%), which emerged as the leading keywords in the analyzed literature (Table 1).

Temporal Trends

Temporal analysis showed that “undergraduate medical education” was the most frequently studied topic in 2001, 2004, 2010, 2012, 2020, 2022, and 2023. However, the focus shifted to “program evaluation” in 2014 and 2018. Notably, in 2024, “artificial intelligence” emerged as the most frequently studied topic (n=8, 7%) (Table 2). The proportional change in major research themes over the years, highlighting the transition from traditional topics to emerging areas like artificial intelligence, is presented in Figure 2.



**Figure 2.** Temporal trends in primary research topics across National Medical Education Congresses (2001–2024).

\* The Y-axis represents the relative percentage (%) of each topic within the total number of abstracts for that specific year. This visualization highlights the shift from traditional subjects to emerging fields, such as the prominent rise of "Artificial Intelligence" in 2024.

**Table 2. Subject-Focus Studies by Year**

| Years                                    | Most Studied Topic / Focus      |
|------------------------------------------|---------------------------------|
| 2001, 2004, 2010, 2012, 2020, 2022, 2023 | Undergraduate Medical Education |
| 2014, 2018                               | Program Evaluation              |
| 2024                                     | Artificial Intelligence         |

## DISCUSSION

This study provides a comprehensive map of medical education research in Türkiye through the systematic examination of the abstracts presented at the National Medical Education Congresses held between 2001 and 2024.

Our study shows that the presented abstracts were predominantly posters. Similar to the result we found in our study, of the 10,055 abstracts presented at Emergency Medicine congresses between 2015 and 2021, 62.3% (6,261) were poster presentations and 37.7% (3,794) were oral presentations (21). At the 1st International Congress of Nephrology and Urology held in Iran, 70% (n=147) of the 210 accepted abstracts were poster presentations and 30% (n=63) were oral presentations (22). In the National Child and Adolescent Mental Health congresses (2005–2008), poster presentations were predominant, and very little space was allocated to oral presentations (23). The higher number of poster presentations may be explained by their being a flexible presentation format that allows more studies to be shared in many scientific meetings. In contrast, the relatively limited number of oral presentations may be associated with constraints in session capacity and their undergoing more selective evaluation processes. As a reflection of this selectivity, it is reported that the rates of publication as academic articles are higher for oral presentations compared with poster presentations (24). However, this finding should not be interpreted as suggesting that congresses should accept a greater number of oral presentations; rather, it may indicate the need to strengthen the selectivity and scientific quality criteria applied to all submissions. In our study, we found that most of the abstracts were written by six or more authors. In the Turkish Journal of Psychology, 43% (51 articles) of the published articles are single-authored. The article with the highest number of authors has seven authors. The average number of authors per article in Turkish Journal of Psychology is 1.8 (25). In the IX National Music Education Symposium, 73% of the

abstracts are single-authored. While two-authored abstracts account for 26%, three-authored abstracts account for only 1%. This indicates that individual production is still highly dominant in the fields of art and education (2). In contrast, it has been observed that a trend toward multi-authored publications has emerged in some scientific disciplines. Teamwork is more common in the fields of social sciences. In the abstracts of the Organizational Behavior Congresses between 2013 and 2019, studies with a maximum of two authors (50.4%) and then three authors are most frequent (20). The fact that the abstracts in our study mostly had 6 or more authors showed that the result was similar to studies in the social sciences. The increase in broader-scope studies or interdisciplinary research may suggest an increase in multi-authored publications. In addition, the fact that multi-authored multidisciplinary studies have been shown to significantly increase citation frequency compared with single-authored publications may suggest the emergence of studies with higher numbers of authors (26). Moreover, although it is seen that the number of authors in the abstracts is high, the contributions made by the authors to the studies are unclear. Therefore, it is recommended that the high number of authors be evaluated through more detailed studies.

The prominence of certain institutions in the distribution of abstracts across universities may be related to the presence of medical education departments at universities, the high number of faculty members and teaching staff, or the existence of educational facilities such as simulation centers. The literature shows that team-based work (27) and inter-institutional co-authorship (28) can be associated with higher impact and citation. As stated by Velez-Estevez et al. (29), publications produced through international collaboration tend to generate greater scientific impact than publications produced through national collaboration. Strengthening research networks in Türkiye, increasing inter-institutional and international collaborations, and supporting centers that are still developing may



contribute to a more balanced dissemination of research productivity.

It is seen that the methods used in our study included a high proportion of quantitative studies and that the descriptive method was predominant. In a study examining work conducted in the field of medical education in Türkiye (30), it was stated that 169 studies used quantitative methods. In the study of AMEE conference abstracts by Raes et al. (31), it was shown that the research was predominantly descriptive in nature (62.7%). In fields such as emergency medicine, a large proportion of the presented abstracts (76.9%) consist of case reports. Descriptive studies rank second at 13.2% (20). It is definitely thought that program introduction and descriptive studies conducted during the periods in which the field of medical education was developing in our country made serious contributions to the development of the field. At present, it is seen that experimental, mixed-method, hypothesis-driven, and theory-informed studies have not yet become widespread. It is thought that methodologically diversified studies will further strengthen the field. Survey instruments are widely used in medical education research. Our study demonstrated the predominance of surveys among data collection methods. A study examining original research articles published in the journal *Medical Teacher* in 2011 and 2012 showed that 37 articles (24%) included surveys as part of the research design. Likewise, over the two-year period (2011–2012), surveys were used in 75% of research articles published in the *Journal of Graduate Medical Education* (32). In the analysis of Organizational Behavior Congresses abstracts between 2013 and 2019, the survey method was used as a data collection tool in 558 of 690 abstracts (over 80%) (25). This may suggest that the survey method is preferred due to the advantage of accessibility and the ease of reaching a large sample size in a short time. In addition, another reason for this preference may be that ethics committee procedures are considered more manageable compared with some other study designs. Although the dominance of surveys in data collection methods can be explained by accessibility and ease of administration, the limitations of self-report-based measurements are frequently emphasized in the literature (32). Greater use of performance-based assessments, longitudinal study designs, and multi-source data

collection methods will strengthen the evidentiary value and increase the scientific depth of the national research ecosystem.

In our study, the abstracts focus on undergraduate medical education and program evaluation. In the study by Dimitroff and Davis (33), which included a content analysis of 773 selected articles published between 1975 and 1994, it was stated that the main topics in medical education research were curriculum, teaching, and student assessment. In the study by Özcan et al. (30), it was reported that most of the examined studies focused on undergraduate medical education, and that, in terms of themes, there was a focus on program development and evaluation studies. The high proportion of program evaluation studies indicates the need for medical schools to systematically review their curricula. Consistent with Harden's (34) approach defining the curriculum not as a static structure but as one that is continuously evaluated, the focus of research in Türkiye on program evaluation is a meaningful trend. In addition, the fact that the topics focus on undergraduate medical education and program evaluation suggests that these topics have contributed and continue to contribute to the development of the field of medical education in our country. The prominence of the “artificial intelligence” theme in 2024 suggests a reflection of a transformation observed not only nationally but also in the global literature. Publications on the use of artificial intelligence in the education of health professionals offer potential across a wide range, such as learning analytics, examination security, clinical decision support simulations, and faculty development (35–37). In their study, Xu et al. (38) emphasize that the integration of artificial intelligence into medical education has the potential to transform pedagogy; however, they also underscore that this integration should be conducted in accordance with ethical and legal principles due to ethical issues such as the risk of harmful outputs and privacy/security. In Türkiye, the growing interest in this field needs to be supported by application-oriented, outcome-focused, and impact-evaluating research that goes beyond studies of perception and awareness.

### **Limitations of the Study**

The preparation of congress abstracts with a limited word count may restrict the detailed presentation



of methods and findings. Therefore, structured abstract formats and checklists aimed at improving abstract quality are important. Since the evaluations in this study were made solely through the abstract texts, methodological components such as study design, sample characteristics, measurement tools, and analytical approach could not always be evaluated in detail. In addition, the absence or incomplete use of keywords in some abstracts limited the conduct of keyword-based evaluation with the same scope for all studies. In some abstracts, the limited presentation of information regarding the research question, method, data collection process, and analytical approach made methodological classification difficult. In addition, because rejected abstract submissions could not be accessed, the selectivity in the acceptance process could not be evaluated. Finally, the inability to examine in detail the number of studies published by year and the inaccessibility of data regarding the authors' fields of specialization and institutional distributions limited the comparison of oral and poster presentations and the publication rates of these studies according to the variables in question.

## CONCLUSION

This study systematically presented the main characteristics, recurring themes, and opportunities for development of medical education research in Türkiye as reflected in congress abstracts over a period of more than twenty years. Notable findings include the predominance of descriptive and quantitative studies, the continuity of undergraduate medical education and program evaluation themes, and the emergence of artificial intelligence as a rising research area in 2024.

For bibliometric studies to be conducted in the future to be carried out more soundly, it may be recommended that the congress organizing committee record variables such as the criteria for selecting oral and poster presentations, keywords, research type, and research methodology in a standardized manner. In addition, it may also be recommended that, after each congress, a short report including the basic bibliometric indicators related to the presented papers be published.

## References

1. Aymankuy Y. Kongre turizmi ve fuar organizasyonları. Ankara: Detay Yayıncılık; 2010.
2. Önal GF. Bildirilerin bibliyometrik profili: IX. Ulusal Müzik Eğitimi Sempozyumu. Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi. 2017;18(3):1079–97.
3. Yılmaz K. Sosyal bilimlerde ve eğitim bilimlerinde sistematik derleme, meta değerlendirme ve bibliyometrik analizler. Manas Sosyal Araştırmalar Dergisi. 2021;10(2):1457–90.
4. Kozak N. Türkiye'de turizm pazarlaması literatürünün gelişim süreci: 1972-1998 yılları arasında hazırlanmış lisansüstü tez çalışmaları üzerine biyo-bibliyografik bir inceleme. Anatolia: Turizm Araştırmaları Dergisi. 2001;12(1):26–33.
5. Law R, Cheung P. An analysis of publications in leading tourism journals and its implications. J China Tour Res. 2008;4(1):78–97.
6. Çiçek D, Kozak N. Anatolia: Turizm Araştırmaları Dergisi'nde yayımlanan hakem denetimli makalelerin bibliyometrik profili. Türk Kütüphaneciliği. 2012;26(4):734–56.
7. Raisig LM. Statistical bibliography in the health sciences. Bull Med Libr Assoc. 1962;50(3):450–61.
8. Garfield E. Citation analysis as a tool in journal evaluation. Science. 1972;178(4060):471–9.
9. Pritchard A. Statistical bibliography or bibliometrics? J Doc. 1969;25(4):348–9.
10. Diodato V. Dictionary of bibliometrics. New York: The Haworth Press; 1994.
11. Evren S, Kozak N. Türkiye'de 2000-2010 yılları arasında yayımlanan turizm konulu makalelerin bibliyometrik analizi. İçinde: VI. Lisansüstü Turizm Öğrencileri Araştırma Kongresi Bildiriler Kitabı. Ankara: Detay Yayıncılık; 2012. s. 250–67.
12. Xu Z, Ge Z, Wang X, Skare M. Bibliometric analysis of technology adoption literature published from 1997 to 2020. Technol Forecast Soc Change. 2021;170:120896.

13. Kozak N. Türkiye’de yayımlanan turizm konulu makaleler üzerine bir inceleme. *Anatolia: Turizm Araştırmaları Dergisi*. 1995;6(1):62–72.
14. Daim TU, Rueda G, Martin H, Gerdseri P. Forecasting emerging technologies: Use of bibliometrics and patent analysis. *Technol Forecast Soc Change*. 2006;73(8):981–1012.
15. World Federation for Medical Education. The Edinburgh Declaration [Internet]. 1988 [cited 2026 Feb 16]. Available from: <https://wfme.org/wp-content/uploads/1988/08/THE-EDINBURGH-DECLARATION-1.pdf>
16. World Summit on Medical Education. Proceedings. Edinburgh, 8-12 August 1993. *Med Educ*. 1994;28 Suppl 1:1-171.
17. Turan S. Geçmişten geleceğe Türkiye’de tıp eğitiminin gelişimi. *Tıp Eğitimi Dünyası*. 2016;45(Özel Sayı):11–4.
18. Kemahlı S. Türkiye’de tıp eğitimi çalışmaları ve “Tıp Eğitimi Dünyası” dergisi. *Tıp Eğitimi Dünyası*. 2016;45(Özel Sayı):4.
19. Başer A, Şahin H. Atatürk’ten günümüze tıp eğitimi. *Tıp Eğitimi Dünyası*. 2017;16(48):70–83.
20. Mücevher MH, Demirgil Z, Çetinceli K, Özdemir K. Örgütsel davranış alanındaki yönelimler: Örgütsel davranış kongrelerinde sunulan bildirilerin bibliyometrik analizi. *Kayseri Üniversitesi Sosyal Bilimler Dergisi*. 2020;2(2), 24-36.
21. Karacabey S, Sanrı E, Kudu E, Ünal E, Efeoğlu Saçak M, Korgan MB. Publication rates and features of abstracts presented at emergency medicine congresses in Türkiye: An analysis of 10,055 abstracts. *Türk J Emerg Med*. 2025;25(1):41-46.
22. Hosseini-Zijoud S, Barzi F, Lotfiazar A, Einollahi B. Fate of Abstracts Presented at the First International Congress of Nephrology and Urology, Tehran, Iran, 2015. *Nephro-Urol Mon*. 2017;9(3):e42541.
23. Mutlu C, Kaya Mutlu E, Kılıçoğlu AG, Yorbık Ö. Poster sunumundan yayına: Ulusal Çocuk ve Ergen Ruh Sağlığı ve Hastalıkları Kongresi. *Arch Neuropsychiatr* 2015; 52: 111-6
24. Grover S, Dalton N, Sarkar S. Publications after conference presentations: A systematic review of published studies. *Indian J Med Ethics*. 2021;6(1 NS):25-31.
25. Al U, Coştur R. Türk Psikoloji Dergisi’nin bibliyometrik profili. *Türk Kütüphaneciliği*. 2007;21(2):142-163.
26. Fan L, Guo L, Wang X, Xu L, Liu F. Does the author’s collaboration mode lead to papers’ different citation impacts? An empirical analysis based on propensity score matching. *J Informetrics*. 2022;16(4):101350.
27. Wuchty S, Jones BF, Uzzi B. The increasing dominance of teams in production of knowledge. *Science*. 2007;316(5827):1036-9.
28. Jones BF, Wuchty S, Uzzi B. Multi-university research teams: Shifting impact, geography, and stratification in science. *Science*. 2008;322(5905):1259-62.
29. Velez-Estevez A, García-Sánchez P, Moral-Munoz JA, Cobo MJ. Why do papers from international collaborations get more citations? A bibliometric analysis of Library and Information Science papers. *Scientometrics*. 2022;127(12):7517-55.
30. Özcan KV, Göksu İ, Göktaş Y. Tendencies of medical education researches in Turkey: Content analysis of 2000-2014 period. *Marmara Med J*. 2015;28(3):142–50.
31. Raes P, Bauer D, Schöppe F, Fischer MR. The active participation of German-speaking countries in conferences of the Association for Medical Education in Europe (AMEE) between 2005 and 2013: A reflection of the development of medical education research? *GMS Z Med Ausbild*. 2014;31(3):Doc28.
32. Artino AR Jr, La Rochelle JS, Dezee KJ, Gehlbach H. Developing questionnaires for educational research: AMEE Guide No. 87. *Med Teach*. 2014;36(6):463-474.
33. Dimitroff A, Davis WK. Content analysis of research in undergraduate medical education. *Acad Med*. 1996;71(1):60–7.
34. Harden RM. The learning environment and curriculum. *Med Teach*. 2001;23(4):335–36.

35. Masters K. Artificial intelligence in medical education. Med Teach. 2019;41(9):976–80.
36. Masters K, MacNeil H, Benjamin J, Carver T, Nemethy K, Valanci-Aroesty S, Taylor DCM, Thoma B, Thesen T. Artificial Intelligence in Health Professions Education assessment: AMEE Guide No. 178. Med Teach. 2025;47(9):1410-1424.
37. Masters K. Ethical use of Artificial Intelligence in Health Professions Education: AMEE Guide No. 158. Med Teach. 2023;45(6):574-584.
38. Xu Y, Jiang Z, Ting DSW, Kow AWC, Bello F, Car J, Tham YC, Wong TY. Medical education and physician training in the era of artificial intelligence. Singapore Med J. 2024;65(3):159-66.