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Original research article

From idea to publication: Publication rates of theses in neurosurgery from Turkey



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ABSTRACT

Objectives: Thesis at the end of residency is considered as the complementary component of postgraduate training. In this respect, thesis helps the residents learn how to ask structured questions, set up the most appropriate study design, conduct the study, retrieve study results and write conclusions with clinical implications. To the best of our knowledge, the publication rates of theses in the field of neurosurgery have not been reported before. Our aim was to find out publication rates of theses in neurosurgery specialty, in this descriptive study.

Methods: The database of Higher Education Council of Turkey, which includes the theses of residents in only university hospitals, was screened between years 2004 and 2013. After retrieving the theses from the database; we used search engines to find out the theses published in any SCI/SCI-E-indexed journals. For this purpose, the title of the theses and the author names were used as keywords for searching. Data was presented in a descriptive form as absolute numbers and percentages.

Results: We retrieved 164 theses written by former residents in neurosurgery using the database. Among 164 theses, 18% (national journals: 9; international journals: 21) were published in SCI/SCI-E indexed journals.

Conclusion: Publication rates of theses in neurosurgery are low as they are in the other specialties of medicine. Our study is a descriptive research, to give an idea about publication rates of theses in neurosurgery. Further studies are required to understand the underlying factors, which are responsible for the limited success in publication of theses in neurosurgery.

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1. Introduction

Postgraduate training in medicine aims to help the trainee become a scientist besides a clinician. Thesis at the end of

residency is considered as the complementary component of postgraduate training. In this respect, thesis helps the residents learn how to ask structured questions, set up the most appropriate study design, conduct the study, retrieve study results and write conclusions with clinical implications

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[1,2]. Thesis is sine qua non of becoming a specialist in neurosurgery in Turkey. Even though it is not a must to retrieve a scientific article from thesis, publication of a thesis as a scientific article makes the thesis scientifically more valuable and more accessible [1,3,4]. Publication of a thesis as a scientific article in a peer-reviewed journal makes the study results more usable, since the study has been investigated and approved by an editorial team [1,5].

Publication rates of theses were reported in a few studies [1-10]. To the best of our knowledge, the publication rates of theses in the field of neurosurgery have not been reported before. Our aim was to find out publication rates of theses in neurosurgery specialty, in this descriptive study.

2. Materials and methods

The database of Higher Education Council of Turkey, which includes the theses of residents in only university hospitals, was screened between the years 2004 and 2013. There is no database storing the theses of residents in education and research hospitals in Turkey. After retrieving the theses from the database; we used Pubmed/Medline, Ulakbim (Turkish National Academic Network and Information Center) and search engines to find out the theses published in any SCI/SCI-E-indexed journals. For this purpose, the title of the theses (both in English and Turkish) and the author names were used as keywords for searching. Data was presented in a descriptive form as absolute numbers and percentages.

3. Results

We retrieved 164 theses written by former residents in neurosurgery using the database. Among 164 theses, 18% (national journals: 9; international journals: 21) were published in SCI/SCI-E indexed journals. In the sub-analysis of 164 theses based on the study design, we realized that 51% (n: 84) of theses were laboratory (animal, embryo, cadaver models), whereas the others were clinical studies (n: 80). The publication rates of the theses in SCI/SCI-E journals were 24% (n: 20) and 13% (n: 10) for the laboratory and clinical studies, respectively. The publication rates in international journals were 17.85% (n: 15) and 7.5% (n: 6) for the laboratory and clinical studies, respectively (Table 1). Finally, rate of publication in national and international SCI/SCI-E indexed journals were 5% and 13%.

Table 1 – Publication rate of theses in the field of neurosurgery in SCI-SCI-E indexed journals.

Type of theses	Publication in national journals	Publication in international journals	Total
Laboratory	5	15	84
Clinical	4	6	80
Total	9	21	164

4. Discussion

Theses are scientific materials consisted of research steps including; idea set up, questioning, protocol set up, data collection, conduction, results, conclusion and clinical implication. Despite the nature of pure science, the accessibility of theses is limited to local university libraries. The best way to increase the accessibility of theses is to publish them in internationally indexed journals [1,3].

In the literature, only a limited number of studies reported the publication rates of theses [1-10]. To the best of our knowledge, none of the previous studies reported the publication rates of theses in neurosurgery. In this study, we observed that publication rates of theses in SCI/SCI-E-indexed national and international journals were 5% and 13%, respectively. Sipahi et al. [1], reported publication rates of theses in public health as 18% and 11.9% in national and international journals. However, they accepted the journals that were published in Turkey and indexed in SCI/SCI-E as international journals. Similarly the publication rates of theses in our study are very low (18%), yet were still within the range of publication rates reported in the current literature (17-60.5%) [1-3,5-10].

We included theses published only in SCI/SCI-E indexed journals, since they had the highest international recognition. Besides, publications in SCI/SCI-E-indexed journals are accepted as having higher scientific quality [2,5]. Inclusion of all publications not indexed in SCI/SCI-E would probably increase the publication rates of theses. The lack of motivation in neurosurgery residents could be one of the causes for low publication rate of theses, since they need to publish their theses in SCI/SCI-E-indexed journals only for the purpose of academic career, and clinical promotions for a limited time period of their profession [1,2]. In a study presented by Hollmann et al., reasons for not publishing theses were work load, bias for negative results, insufficient tutor support, insufficient motivation/personal interest, and family burdens [2]. It is also possible that some other theses might have reached publication status after time-point of retrieval of the dataset in this study.

5. Conclusion

Publication rates of theses in neurosurgery are low as they are in the other specialties of medicine. Our study is only a descriptive research, to give an idea about only publication rates of theses in neurosurgery. Further studies are required to understand the underlying factors, which are responsible for the limited success in publication of theses in neurosurgery.

Conflict of interest

All the authors declare that there is no conflict of interest.

Financial disclosure

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Ethics

The work described in this article has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans; Uniform Requirements for manuscripts submitted to Biomedical journals.

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