

Letter to the Editor

Publication performance in the field of physical medicine and rehabilitation in Turkey: A missed field in TUBITAK Field Based Competency Analysis Report 2020

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The Scientific and Technological Research Council of Turkey (TUBITAK) has recently published "Field Based Competency Analysis of Turkish Universities 2020" report, which evaluates research performances of universities.^[1] In the report announced by TUBITAK, 20 main research areas and 131 subresearch areas were identified. In the determination of research areas, field classification of the previous 2016 report was mainly considered for the continuity of the work. Subsequently, the following were also taken into consideration: global trends, national policies and strategies, opinions of expert members in advisory and group executive board, research centers and institutes of TUBITAK "All Science Journal Classification," and educational areas of universities. However, despite the existence of the rehabilitation subfield, evaluation of research performances in the physical medicine and rehabilitation (PMR) field could not be found in the report. In this letter, we would like to provide a brief report of publications from Turkey in the field of PMR.

Publications in the field of PMR were searched via the Web of Science database by applying search filters for publication years 2014-2019, similar to the search time filters of TUBITAK. The search strategy was as follows: "document type: articles; Web of Science index: Science Citation Index Expanded; affiliation address (AD=(physical medicine and rehabilitation OR physical and rehabilitation medicine)." We have identified a total of 14,000 research records all around the world. Turkey (1,741) had the second-highest number of publications after the United States (6,586) (Figure 1). The top 10 subject categories covered by all the papers around the world were rehabilitation, clinical neurology, neurosciences, sports sciences, orthopedics, internal medicine, surgery, engineering biomedical, rheumatology, and multidisciplinary sciences. The top 10 subject categories covered by papers from Turkey were rehabilitation, rheumatology, orthopedics, clinical neurology, internal medicine, surgery, neurosciences, sports sciences, medicine research experimental, and geriatrics gerontology. The publications among organizations can be found in Table 1.

American Board of Medical Specialties recognized PMR as a specialty of medicine in 1949. Since then, the specialty of PMR has grown steadily. Physical medicine and rehabilitation specialists, also known as physiatrists, typically treat patients with musculoskeletal or neurologic deficits. Unlike many medical specialties that focus on the acute management of impairments, the approach of PMR is holistic and patient-centered while also addressing

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Number of publication records of top 50 organizations in Turkey		
Organizations	Record count	% of 1,741
Hacettepe University	157	8.85
Ankara Physical Therapy Rehabilitation Hospital	155	8.73
Istanbul University	104	5.86
University of Health Sciences Turkey	93	5.24
Diskapi Yildirim Beyazit Training Research Hospital	90	5.07
Marmara University	89	5.01
Gulhane Military Medical Academy	82	4.62
Ankara Numune Training Research Hospital	80	4.51
Dicle University	80	4.51
Ankara University	79	4.45
Uludag University	74	4.17
Gazi University	73	4.11
Pamukkale University	67	3.77
Gaziler Physical Therapy Research Hospital	62	3.49
Ege University	57	3.21
Afyon Kocatepe University	56	3.15
Bezmialem Vakif University	56	3.15
Cukurova University	55	3.10
Baskent University	54	3.04
Yildirim Beyazit University	54	3.04
Necmettin Erbakan University	50	2.81
Akdeniz University	49	2.76
Ankara Training Research Hospital	46	2.59
Suleyman Demirel University	45	2.53
Erciyes University	44	2.48
Istanbul Haydarpasa Numune Training Research Hospital	44	2.48
Turkish Armed Forces Rehabilitation Maintenance Center	44	2.48
Istanbul University Cerrahpasa	43	2.42
Ministry of Health Turkey	43	2.42
Selcuk University	43	2.42
Antalya Training Research Hospital	42	2.36
Canakkale Onsekiz Mart University	41	2.31
Fatih Sultan Mehmet Training Research Hospital	41	2.31
Istanbul Physical Medicine Rehabilitation Training Research Hospital	41	2.31
Izmir Katip Celebi University	39	2.19
Sakarya University	39	2.19
Gaziantep University	38	2.14
Dokuz Eylul University	36	2.02
Ataturk University	34	1.91
Istanbul Bagcilar Training Research Hospital	33	1.86
Ondokuz Mayis University	33	1.86
Adnan Menderes University	31	1.74
Cumhuriyet University	31	1.74
Istanbul Haydarpasa Sultan Abdulhamid Training Research Hospital	31	1.74
Inonu University	30	1.69
Harran University	29	1.63
Istanbul Sisli Hamidiye Etfal Training Research Hospital	29	1.63
Izmir Ataturk Training Research Hospital	29	1.63
Koc University	29	1.63
Mustafa Kemal University	29 29	1.63

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Figure 1. Countries by number of publications.

social and environmental (presence of elevator in patient's apartment, the importance of doorway width for wheelchair use) issues and activities of daily living (e.g., feeding, dressing, toileting, walking skills). Physical medicine and rehabilitation specialists establish treatments considering these factors, and treatments often include medications, therapeutic exercises, injections, physical modalities, orthotics, and education.^[2] There is a significant human factor interfering with interventions making randomization and blinding difficult or impossible in the PMR field. Physical medicine and rehabilitation research has several other methodological challenges associated with the characteristics of the patient populations, such as heterogeneous clinical presentations and functional limitations of rehabilitation interventions (e.g., often involving individualized, person-centered elements that challenge easy standardization), and target outcomes (e.g., ideally with a focus on complex, individualized end-point at the level of social participation).^[3,4] Despite the challenges in the PMR research field, the Turkish PMR specialists have achieved considerable success, according to our analysis. This success is emphasized by the PMR fieldbased competency analysis reported in this article, which does not exist in TUBITAK's report.

In conclusion, PMR serves as a valuable medical specialty that provides holistic patient-centered and

interdisciplinary care by working in collaboration with various medical specialties. Research in this area should be examined, and field-based competency analyses should be reported to present the current contributions of universities in PMR research around the world as well as in Turkey.

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REFERENCES

- Üniversitelerin Alan Bazlı Yetkinlik Analizi. Ankara: Türkiye Bilimsel ve Teknolojik Araştırma Kurumu; 2020. Available at: https://tubitak.gov.tr/sites/default/files/18842/ universitelerin_alan_bazli_yetkinlik_analizi_raporu.pdf.
- 2. Atanelov L, Stiens SA, Young MA. History of physical medicine and rehabilitation and its ethical dimensions. AMA J Ethics 2015;17:568-74.
- Wade DT, Smeets RJ, Verbunt JA. Research in rehabilitation medicine: Methodological challenges. J Clin Epidemiol 2010;63:699-704.
- Levack WM, Malmivaara A, Meyer T, Negrini S. Methodological problems in rehabilitation research. Report from a cochrane rehabilitation methodology meeting. Eur J Phys Rehabil Med 2019;55:319-21.