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Letter to Editor

Academic contribution to the scientific productivity: a case study

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Iran has experienced considerable development in all branches of science especially in medical science during the recent decades.[1] Iranian universities as the main sources of scientific productivity have a major role in this development. Continuous evaluation of research performance is a basic prerequisite for financial and human resource management of research in the universities. Scientific effectiveness of university faculties can be evaluated through research activities including publication and citation rates. Many studies have focused on the research productivity of universities and faculties.[2-4] The purpose of the current study was to evaluate research activities of Isfahan University of Medical Sciences faculties to determine their contribution to the total score of university's scientific productivity in 2008, reported by Iranian Ministry of Health and Medical Education.

The data on research activities of faculties including published journal articles, patents, citations, books and proceedings were gathered by reviewing official documents and retrieving the university affiliated records in the reputable information databases and academic websites. The retrieved information was precisely reviewed to exclude the scientific works of other university affiliated centers and departments. In the next step, research activities of seven affiliated faculties were scored according to the Iranian medical universities official research evaluation protocol of 2008 released by Iranian Ministry of Health and Medical Education, Deputy of Research.[5] Using scientometric methods, the faculties contribution to the total university scientific productivity score of 2008 were measured. Finally, seven faculties ranked based on their total and faculty staff adjusted scientific productivity scores.

The findings showed that Faculty of Medicine, by producing more than half of university science production of 2008 ranked first based on the total scientific productivity score, while ranked third based on the adjusted scientific productivity score after Faculty of Health and Faculty of Pharmacy. Faculty of Rehabilitation stood at the lowest level based on the total and adjusted scientific productivity scores (Table 1 and 2).

According to the current study, in 2008 academic contributions to scientific productivity at Isfahan University of Medical Sciences was not normally distributed, neither among the faculties nor among the academic staff of each faculty (Figure 1). For example, in the Faculty of Pharmacy the mean scientific productivity score for each academic member was 27.11 while it was 9.61 in the Faculty of Dentistry. Moreover, in some faculties like Faculty of Health, a few academic staff produced the majority of scientific works of their affiliated faculty. It seems that special interventions should be developed to promote research in some faculties of Isfahan University of Medical Sciences. To improve scientific productivity of faculties, we suggest that research policymakers of the university develop more effective approaches to increase research capacities and to encourage research performance. While offering research facilities and financial supports, they should determine the annual minimum research expectations of the affiliated academic staff of each faculty. Furthermore, the role of research activities should be more emphasized in a way that academic staff consider research as a major part of their professional workflow.

Table 1. Ranking of faculties based on the total scientific productivity score.

Rank	Faculty	Journal Article										Patents		Citations		Books		Proceedings				Total Score
		ISI		Medline		Scopus, Embase, Chemical Abstracts		Other Databases		Not Indexed								International Congress		National Congress		
		No	Score	No	Score	No	Score	No	Score	No	Score	No	Score	No	Score	No	Score	No	Score	No	Score	
1	Medicine	131	2944	41	861	36	413	183	1663	12	52	0	0	4	60	5	47	214	406	147	74	6520
2	Health	26	749	5	103	11	161	16	151	5	22	0	0	0	0	0	0	37	49	35	18	1253
3	Pharmacy	21	545	7	178	7	96	9	87	1	5	0	0	0	0	0	0	53	44	42	21	976
4	Dentistry	3	60	16	363	2	26	23	224	4	19	1	10	0	0	0	0	14	10	17	9	721
5	Nursing and Midwifery	0	0	0	0	0	0	41	389	2	9	0	0	0	0	1	10	18	27	205	103	538
6	Management and medical Informatics	1	25	0	0	0	0	11	107	1	5	0	0	0	0	0	0	12	34	58	29	200
7	Rehabilitation	1	21	0	0	0	0	1	10	0	0	0	0	0	0	1	3	6	6	2	1	41

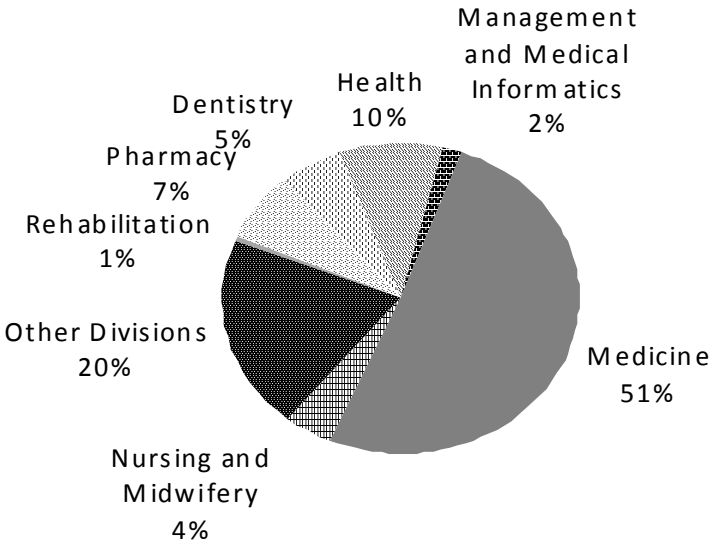

Figure 1. Faculties contribution to the university scientific productivity

Table 2. Ranking of faculties based on the adjusted scientific productivity score.

Rank	Faculty	Total Score	Number of Faculty Staff	Adjusted Score
1	Health	1253	26	48.19
2	Pharmacy	976	36	27.11
3	Medicine	6520	350	18.63
4	Dentistry	721	75	9.61
5	Nursing and Midwifery	538	59	9.12
6	Management and Medical Informatics	200	27	7.41
7	Rehabilitation	41	19	2.16

Conflict of Interests
Authors have no conflict of interests.

Authors' Contributions
FA designed and coordinated the study, and prepared the manuscript. PK provided assistance in the design of the study and participated in manuscript preparation. MH participated in data gathering. All authors have read and approved the content of the manuscript.

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