



## Academic Impact Evaluation in National Health Research System: Toward Public Health Promotion

*Monir Baradaran Eftekhari<sup>1</sup>, Katayoun Falahat<sup>1</sup>, \*Asghar Ebadifar<sup>1,2</sup>*

1. Deputy for Research and Technology, Ministry of Health and Medical Education, Tehran, Iran
2. Dentofacial Deformities Research Center, Research Institute of Dental Sciences, Department of Orthodontics, Dental School, Shahid Beheshti University of Medical Sciences, Tehran, Iran

**\*Corresponding Author:** Email: a.ebadifar@sbmu.ac.ir

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### Dear Editor-in-Chief

Academic research impact evaluation is defined the assessment of any effect due to research in academic level (1). Different factors such as individual, institutional and international collaborations can effect on research impact. In this research, two main groups' indicators consist of citation and collaboration indicators have been used to evaluation (2). Citation indicators consist of highly cited paper (HCP), hot paper (HP), citation per item (C/I), total citation (TC), total citation without self-citation (TC without self) extracted from ISI web of Science in 2018 (3); and collaboration indicators included international (I) and national (N) collaborations (2015-2018) based on Cival reports (4). The scoring system consists of raw and normalized scores.

At first, the raw values of each index were calculated. Then based on number 100, normalized scores were estimated, i.e. the highest score in each indicator was received 100 and the others were adjusted on this number. The weighted score was calculated by multiplying weights by the normalized score (final score). Based on research team's opinion, the weights for HCP, HP, C/I, TC, TC without self, NC, IC was 2, 3, 2, 1, 1.5, 1 and 1.5 respectively (5).

Fifty three Iranian universities of medical sciences (IUMS) in three types (I: large size universities, II: medium size universities and III: small size universities) (6) were evaluated by these indicators. Based on academic impact evaluation results, 10 IUMS were situated in type one and the majority of knowledge production (62%) were related to these IUMSs. In this type, Tehran, Shaheed Beheshti and Mashhad; in type two, Bagiyatallh, Kermanshah and Golestan; and in type three, Alborz University of Medical Sciences had the highest scores. In national level, top five universities of medical sciences were Tehran, Shahid Beheshti, Mashhad, Tabriz and Alborz universities of medical sciences. Among these UMSs, five, three and two universities were related to type one, two and three respectively. Table 1 shows the results of academic impact evaluation in the first three IUMSs in each type -in 2018.

The result of this study showed that publication of high cited papers and development of international collaboration in research by faculty members of universities of medical sciences could increase impact scores in academic level.



**Table 1:** Results of academic impact evaluation in the first three IUMSs in each type -in 2018

Type of university	Name of IUMS	PA in ISI (N)	HCP	HCP*	HP (N)	HP*	C/I	C/I*	TC (N)	TC*	TC without	TC without	IC	IC*	NC (%)	NC*	Total score
Type I	Tehran	435	2	2	8	266	0.9	130.	43	100	346	150	1	134.	61.	91.	1073
		7	8	0		.7	9	3	10		4		9.	25	9	8	.02
				0									6				
Type I	Shaheed beheshti	295	2	1	9	300	0.8	106.	23	55.	179	77.5	1	115.	64.	95.	907.
		1	2	5		1	6	98	6	0			6.	07	4	55	49
				7									8				
Type I	Mashhad	144	1	1	6	200	1.5	200	21	50.	187	81.2	2	150	45.	67.	885.
		5	9	3			2	90	8	6			1.	8	95	71	
				6									9				
Type II	Baqiyatallah	576	9	1	5	250	1.6	173.	93	99.	859	150.	1	90.0	65.	82.	1024
				8				3	3	3		0	8.	4	1	.6	
				0									9				
Type II	Kermanshah	792	8	1	6	300	1.2	127.	94	100	745	130.	1	77.6	59.	74.	969.
				6				3	0	.0		1	6.	6	8	8	
				0									3				
Type II	Golestan	268	6	1	5	250	1.5	159.	39	42.	323	56.4	2	103.	58	72.	804.
				2				4	9	4			1.	8	8	8	
				0									8				
Type III	Alborz	283	9	2	6	300	1.9	155.	55	100	492	150.	2	150	72.	83.	1139
				0			8	9	9			00	3.	8	20	.1	
				0									6				
Type III	Maragheh	213	5	1	5	250	1.5	123.	33	59.	286	87.2	1	75	85.	98.	804.
				1			7	6	4	75		0	1.	8	06	73	
				1									8				
Type III	Qom	185	3	6	3	150	1.3	103.	24	43.	209	63.7	1	83.2	81.	93.	604.
				7			2	9	5	83		2	3.	6	5	14	56
													1				

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## Conflict of interest

The authors declare that there is no conflict of interest.

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