### Letter to Editor

### H-Index Anxiety Among Health Researchers: A Commentary

#### Introduction

Appropriate methods are needed to evaluate the scientific excellence of individuals and research teams, especially in the field of health, to foster rich opportunities and distribute research grants with higher efficiency.[1] However, sometimes researchers and higher education authorities encounter problems due to the wrong choice of some evaluation methods. Therefore, the tendency to publish article in high impact journals and international citation databases can affect on citation, increasing the visibility of article and self-citation. But, all factors indicate the inappropriate choice of researcher's evaluation methods, the consequences of which will be evident at the individual, organizational, and national levels over time. One of these inappropriate choices could be the use of H-index in researchers' evaluations. Efforts to increase the researchers' and higher education institutions' H-index can have both positive and negative effects on the personal and professional life of researchers, including their mental health. In effect, comparing the researchers' academic and professional performance according to this index provides the basis for increasing their anxiety level. Thus, today we face a new concept called H-index anxiety; just as researchers may experience library anxiety, information-seeking behavior anxiety, and research anxiety. Accordingly, the researchers' feelings of fear and uncertainty about how to increase the H-index and achieve the necessary points were called H-index anxiety. This anxiety can affect researchers' mental health; it can disrupt the effective performance of faculty members and health researchers, to be more specific. As for the creation and increasing the H-index anxiety level among researchers and paving the way for establishing appropriate strategies to reduce this type of anxiety level, it seems important is to recognize the effective factors.

#### The nature of H-index

This index allows comparing the research performance of researchers in different disciplines; however, the nature of different disciplines is different in terms of number of journals, number of citations, and type of articles.<sup>[2]</sup> In particular, researchers' efforts to place the full text of their articles in digital libraries<sup>[3]</sup> as well as social networks all demonstrate the importance of the H-index. Thus, the comparison of H-index creates anxiety in some researchers who have a lower H-index.

#### Research policies and regulations

Research policies and regulations, such as faculty promotion regulations, faculty recruitment regulations and rules, admission requirements for research doctoral students, and postdoctoral researchers, have given rise to too much attention to this index and therefore have been a factor in spreading (increasing) the level of anxiety among faculty members and health researchers.

## Insufficient literacy associated with publishing research results

Insufficient familiarity with the research-oriented social network capabilities in increasing visibility and article citation receiving and also insufficient ability to use citation databases can dispose the H-index anxiety.

#### **Individual factors**

It seems that low research background, young researchers, lower academic ranks (such as lecturer and assistant professor), type of employment (temporary to permanent, contractual), and experience of other anxieties such as information-seeking behavior anxiety, research anxiety, and so on are the individual factors affecting increasing H-index anxiety level.

#### **Conclusions**

Nowadays, the evaluation of research performance cannot be considered one-dimensional. Research policies and regulations emphasize on the H-index. This emphasis has become a factor of creation and spreading H-index anxiety among researchers. As you know, receiving citations and increasing the H-index is just one quality assessment of researchers' scientific works, not all of them. Consequently, considering the H-index as the only indicator of the research performance quality or overemphasis on it can lead to the deviation of the scientific development path of the country, misleading researchers and increasing their anxiety level given that researchers are sometimes have to violate ethical issues, especially research ethics. Along these lines, to reduce the H- index anxiety, in addition to reforming research rules and regulations and highlighting the multidimensional criteria in evaluating the health researchers, scientometrics-related workshops should be purposefully held for health researchers. Meanwhile, multidimensional scientometrics indicators should be designed and localized. Additionally, anxiety management skills training should be included in special training programs for researchers.

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There are no conflicts of interest.

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# Hasan Ashrafi-rizi, Zahra Kazempour<sup>1</sup>, Saeed Khazaie<sup>2</sup>

Department of Medical Library and Information Science, Health Information Technology Research Center, Isfahan University of Medical Sciences, 'Department of Library and Information Science, Faculty of Media, Payame Noor University, Tehran, Iran, 'Department of English Language, School of Management and Medical Information Sciences, Isfahan University of Medical Sciences, Isfahan, Iran

#### Address for correspondence:

Prof. Hasan Ashrafi-rizi,

Department of Medical Library and Information Science, Health Information Technology Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.

E-mail: hassanashrafi@mng.mui.ac.ir

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