CASE STUDY   Mater Sociomed. 2014 Dec; 26(6): 419-421

Publication on Health Policy Worldwide from 1898 to 2013: Identifying Position of Iran

Laleh R Kalankesh[1], Leila R Kalankesh[2]

School of Health, Kerman University of Medical Sciences, Kerman, Iran[1]
School of Management and Medical Informatics, Tabriz University of Medical Sciences, Tabriz, Iran[2]

Corresponding author: Leila R Kalankesh, PhD, School of Management and Medical Informatics, Tabriz University of Medical Sciences, Tabriz, Iran. Tel: +98 914 4051068, Email: Lrkalankesh@tbzmed.ac.ir

ABSTRACT

Background: As the field of health policy continues to evolve and grow, it is important to examine the trend of scientific output generated in this domain. Scientific outputs can also be used to evaluate academic progress of the field in each country or over a given period of time. **Objective:** Aim of this study is to depict trend of publication on topics of health policy world-wide and to highlight contribution of Iran in this field. **Methods:** The web of science database was used to identify all relevant published papers worldwide The search was conducted on documents published from January 1898 to December 2013. The criteria for retrieval were set to be "health policy" in topics. Then the retrieved papers were filtered in terms of distinct years, countries, source titles, and languages. **Results:** Findings revealed an increasing trend of publication on health policy over past decades. English was the first most dominant language of publication. USA had the highest number of publication with 5347 papers; however Switzerland ranked first after considering publication number in terms of countries' population. BMJ was the source title with highest number of publication on topics of health policy. Number of publication by Iranian authors was 87 from January 1898 to December 2013. **Conclusion:** It seems discipline of health policy has started its evolution worldwide long time ago while Iran is in its initial phases

Key words: Health Policy, Scientific Production, Scientometrics

1. INTRODUCTION

Health policies are defined as "decisions, plans and actions that are undertaken to achieve specific health goals within a society"[1].

Evidence shows the influence of historical milestones, political and economical changes on health policy[2, 3]. For instance, after the Second World War, rapid advances happened in medicine influencing development of health care in industrialized countries[4]. In essence, construction of health is not restricted to the health sector and as a matter of fact it goes beyond this domain[5]. Health policy has been the subject of political debates in many countries. As the field of health policy continues to evolve and grow, it is important to examine the trend of scientific output generated in this domain. Scientific outputs also can be used to evaluate academic progress of the field in each country or each academic centre. Scientific products published on health policy can provide evidence on different health policies and their impacts [6, 7] . Moreover scientific progress and evolution is critical for every discipline and it can be reflected in its publication trend. This trend has been explored in different domain of sciences; however the evolutionary pattern of publication on health policy has not been explored to date. This paper aims to depict the trend of publications on health policy topics worldwide from 1898 to 2013.

2. MATERIAL AND METHODS

The web of science database was used to identify all relevant published papers worldwide. Articles on topics of health policy originating from different countries across the world were used for examining their scientific production in this field. The search was conducted on documents published from January 1898 to December 2013. Data collection was conducted in April 2014.

The criteria for retrieval were set to be "health policy" in topics. Then the retrieved papers were filtered in terms of distinct years, countries, source titles, and languages.

3. RESULTS

3.1. Trend of publication by time

Figure 1 shows overall number of publication on topics of health policy worldwide by year. As it is evident there has been an increasing trend of publication on health policy over past decades.
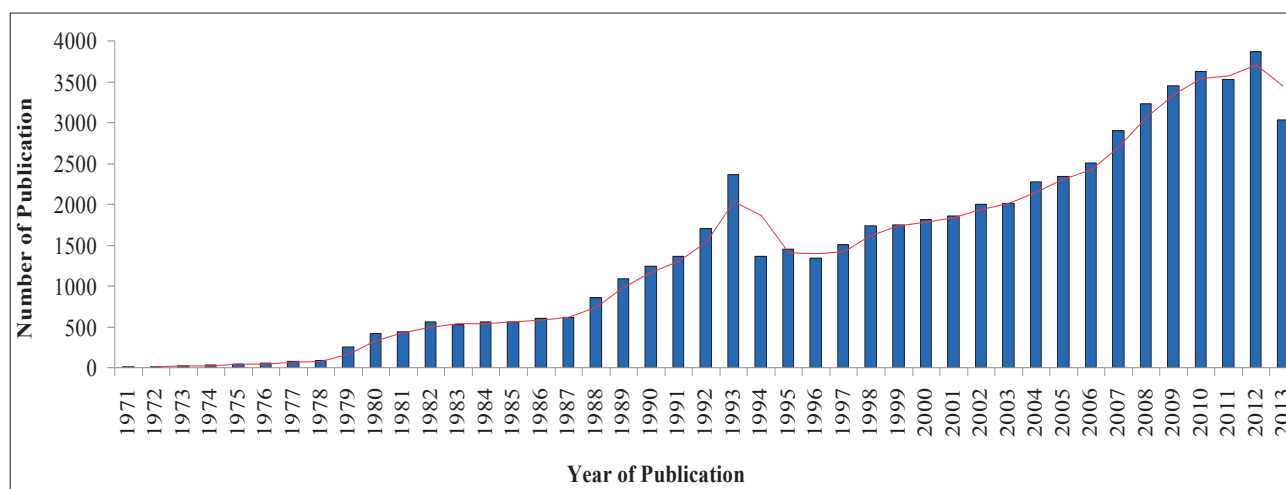
Figure 1. Trend of publications on Health Policy indexed in Web of Sciences by year (from 1898 to 2013)

3.2. Top ten leading language

Top ten leading languages used for publications on topics of health policy are English(63465), French(1306), German(934), Spanish(860), Portuguese(828), Swedish(701), Norwegian(447), Danish(262), Dutch(180), and Italian(161). As it can be seen English is the most dominant language among the top ten leading languages. Number of documents published in English language (as the one holding the first place) is about 49 times higher than in French (placing in second place).

3.3. Top ten productive countries

As the statistics in table 1 indicates the US is the most productive country in publication of documents on topics of health policy. United Kingdom ranked the second followed by Canada. However when it comes to the number of publication per number of country's population, Switzerland holds the first rank followed by Australia and UK.

3.4. Top ten productive journals

As it can be seen in table 2, highest number of publication belongs to the BMJ and Lancet.

3 out of 10 leading journals in publication on health policy are very prestigious journals. One of the journals appears to have no impact factor and one has very low impact factor.

Surprisingly most of the leading journals on topics of health policy are among those with long history of publication.

3.5. Trend of publication by Iranian authors by year

Overall 87 papers were published by Iranian authors on topics of Health Policy. As the figure 5 shows the relatively dramatic increase in the publication has happened in 2010 reaching its highest number in 2012.

Majority of papers authored by Iranians have been published in journals originated from Iran. The highest number

	Country	No of documents	Population	No of papers per 1k population	Economic rank	Optimized rank
1	USA	5347	309,975,000	17.25	High Income	6
2	UK	2161	62,041,708	34.83	High Income	3
3	Canada	1099	34,207,000	32.13	High Income	4
4	Australia	942	23,480970	40.12	High Income	2
5	Brazil	514	193,364,000	2.65	Upper Middle Income	10
6	Germany	514	81,757,600	6.29	High Income	7
7	Netherlands	455	16,609,518	27.39	High Income	5
8	France	340	65,447,374	5.20	High Income	9
9	Switzerland	318	7,782,900	40.86	High Income	1
10	Spain	261	46,951,532	5.56	High Income	8

Table 1. Top ten leading country in publication on health policy indexed in web of sciences (from 1898 to 2013)

	Journal	No of documents	5-year IF	Last IF	Beginning of Publication
1	British Journal of Medicine (Clinical Research Edition)	1474	N/A	17.2	1988
2	Lancet	1021	36.43	39.1	1820
3	Health Affairs	875	4.26	4.6	1981
4	Health Policy	859	1.73	1.6	1984
5	Social Science Medicine	820	3.69	2.7	1982
6	The Journal of American Medical Association	673	29.3	29.9	1883
7	Lakartidningen	668	0.08	0.1	1990
8	American Journal of Public Health	633	4.83	3.9	1911
9	Journal of Health Politics Policy and Law	623	1.27	1.2	1976
10	Modern Health Care	610	N/A	N/A	1980

Table 2. Top ten leading Journal in publication on topics of health policy indexed in web of sciences (from 1898 to 2013)

of these papers has been published in Iranian Journal of Public Health(10), Hepatitis Monthly(5), Archives of Iranian Medicine(4), Iranian Red Crescent Medical Journal(4), and Journal of Research in Medical Sciences(4).

Some of these journals have no impact factor and the highest impact factor among them is for Archives of Iranian Medicine with impact factor of is 1.44.

4. DISCUSSION

Trend of publication over time reflects the ascending growth of research in domain of Health Policy. As results show the number of publication has reached from 1 in 1919 to more than three thousands worldwide. This implies a great deal of progress happened in the field of health policy and its related publications.

There has been a considerable increase in number of publication in 1993. It can be as a result of some developments happened in health systems and health policy of countries with high contribution in the publication. In UK, legislation on the NHS community care was passed in 1990. Based on this act, health authorities got power to manage their own budgets and buy health care from hospitals and other health organization. This was followed by establishing the first 57 NHS trusts in 1991[8]. In the US, Medicare used a new scale namely the resource-based relative value scale (RBRVS) as a new method of payment for physicians[9]. In Canada, the economic recession pushed the health system to cut down health budgets and to implement some structural reforms[10]. In Australia, General Practice Strategy initiated as the major primary care initiative in 1991 [11].

As results reveals English is the dominant language of publication on topics of health policy as it is in many other topics [12-15]. This is in accordance with the fact that English is the dominant language of the scientific world[16]. French and German place in the second and third place respectively. These results are in line with that fact that English, French and German are the most dominant languages of sciences[17].

Nine out of 10 leading countries in publication of health policy papers belong to high income countries. Top 4 leading countries are USA, UK, Canada, and Australia that are among dominantly English speaking countries. This finding is consistent with results on dominant language of the publication in the studied field. Considering population size of countries, Switzerland has produced the highest number of papers while Australia and UK place in the second and third position in terms of papers per population size.

The highest number of documents on health topics across the world has been published in highly prestigious journals. This can reflect the high quality of papers published in health policy. Two most leading journal in publishing health policy papers have impact factors of 39 and 17 respectively. However most of the papers of Iranian authors have been published in journals with relatively low impact factors (journals originating from Iran rather than other countries).

Health policy as discipline has been started in developed and high income countries very long time ago and has evolved during this long period. However in Iran, it is in infancy period as an academic discipline and research. This might explain the great gap observed among research contribution of Iran and other countries in terms of quantity and quality of publication in this domain.
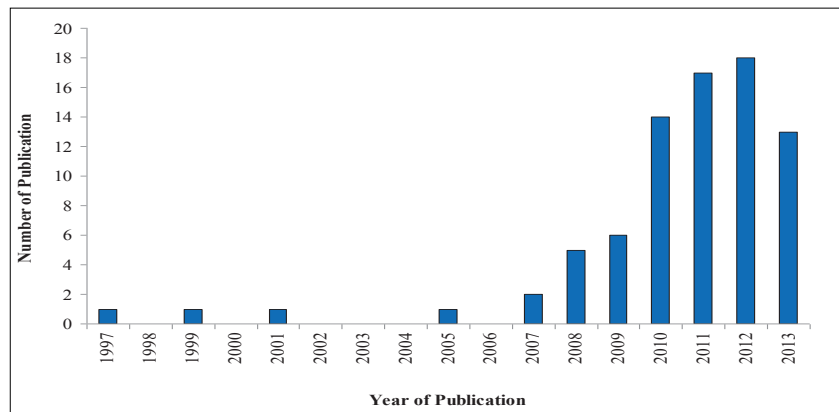
CONFLICT OF INTEREST: NONE DECLARED.

Figure 2. Trend of publications on Health Policy indexed in Web of Sciences by Iranians from 1898 to 2013

REFERENCES

1. WHO, Mpower: a policy package to reverse the tobacco epidemic. 2008, Geneva: WHO.
2. Coveney, J., Analyzing public health policy: three approaches. Health Promotion Practice, 2010. 11(4): p. 515-521.
3. Walt, G. and L. Gilson, Reforming the health sector in developing counteries: the central role of policy analysis. Health Policy and Planning, 1994. 9(4): p. 353-370.
4. Melkas, T., Health in all policies as a priority in Finnish health policy: A case study on national health policy development. Scandinavian Journal of Public Health, 2013. 41(Suppl 11): p. 3-28.
5. Ollila, E., Health in All Policies: From rhetoric to action. Scandinavian Journal of Public Health, 2011. 39(Suppl 6): p. 11-18.
6. Jiang, X., et al., Recent trends in biomedical informatics: a study based on JAMIA articles. Journal of American Medical Informatics Association, 2013. 20: p. e198-e205.
7. Macintyre, S., Evidence in the development of health policy. Public Health, 2012. 126: p. 217-219.
8. NHS. The history of the NHS in England. 2013 05/07/2013 [cited 16/07/2014]; Available from: http://www.nhs.uk/NHSEngland/thenhs/nhshistory/Pages/the-nhs%20history.aspx.
9. Hsiao, W., et al., An overview of the development and refinement of the Resource-Based Relative Value Scale. The foundation for reform of U.S. physician payment. Medical Care, 1992. 30(11 Suppl): p. NS1-12.
10. Thorlby, R., Managing health reform through an economic downturn. 2011.
11. Grant, R. and M. Geoffrey, Primary care reform view from Australia. Canadian Family Physician, 2002. 48: p. 440-443.
12. Hsieh, W., et al., Bibliometric analysis of Patent Ductus Arteriosus treatments. Scientometrics, 2014. 60 (2): p. 105-215.
13. Mund, M., Smoking and pregnancy – a scientometric analysis. 2013, Goethe-Universitä.
14. Moghimi, M., et al., A scientometric analysis of 20 years of research on breast reconstruction surgery: a guide for research design and journal selection. Archives of Plastic Surgery, 2013. 40(2): p. 109-115.
15. Valkimadi, P., et al., Increasing dominance of English in publications archived by Pubmed. Scientometrics, 2009 81(1): p. 219-223.
16. Ammon, U., ed. The dominance of English as a language of science. 2001, Walter de Gruyther.
17. Gross, A., J. Harmon, and M. Reidy, Communicating Science: The Scientific Article from the 17th Century to the Present. 2009: Oxford University Press.