

A bibliometric Study of Scientific Output in Tabriz University of Medical Science 1988-96

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Introduction

There should be an evaluation mechanism to assess the quality and quantity of scientific output of scientists and researchers of universities. Bibliometry is a well-known method to evaluate the scientific outputs of academic members. This paper involves itself to evaluate the quantitative of scientific output of researchers and academic members of a medical science university and illustrates the trend of scientific output in this university during 1978-1984; it also intends to determine the most productive area amongst the fields and the least productive one. The raw data was collected by distributing a questionnaire among all researchers and academic members of the university.

Methodology

A questionnaire was used to collect the initial data. All the researchers and academic members of the university were chosen as the survey population. Inferential statistic (one-way Anova) was used to determine the difference between and among demographic characteristic of the study population. Pearson's correlation coefficient was used to test the correspondence between academic status and form of productivity.

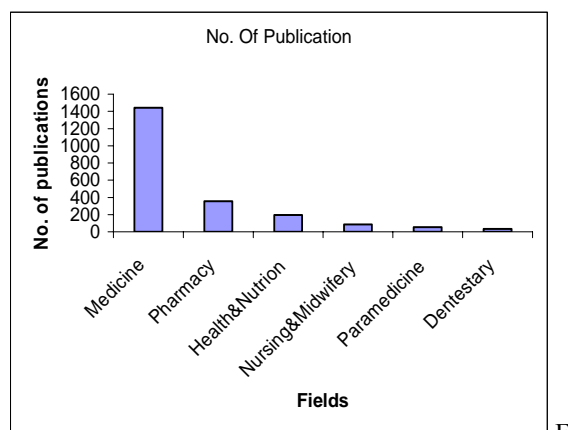


Fig.1. Distribution of publications in different fields

As it can be seen the most majority of publication has been done in medicine field and dentistry was the least one.

Fig.2 represents the publication productivity according to his/her status in the department, as it can be seen the most majority of publication (%35,6) achieved by professor assistants at this university but with regard to the relationship between the number of department prestige status and their productivity, the most productive group was the Associate professors because they with %10 in number of the population, produces %23,5 of all produced publications.

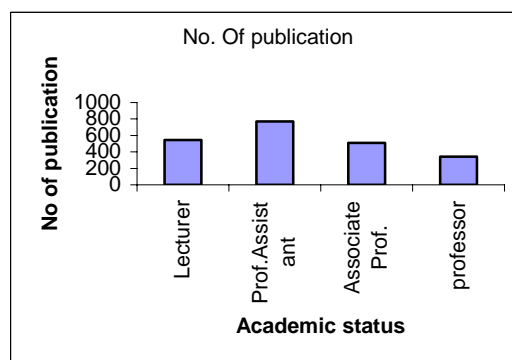


Fig.2. Distribution of publication according department prestige status.

The result obtained in this study showed that there is a significant difference between the number papers published by the academic member with department prestige status of associate professor as compared to others. With reference to the publication of papers in both national as well as international journals, the F Value is <.0001. This indicates that academic members with associate professor status are concerned with an increased incentive towards research and publishing than the three other groups (Professor, Assistant Professor and lecturer). Promotion in department status may be the driving force behind Associate Professors trying to get Professor status at department.

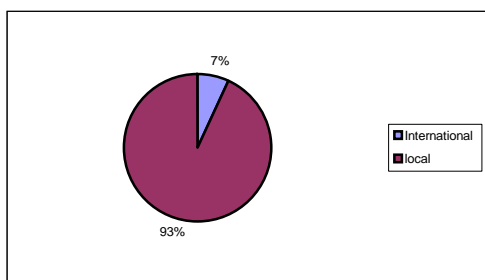


Fig.3. Distribution of publications in local and international journals.

As Fig.3 shows a lot of publication at this university are published in local journals and the proportion of international journals is very low and dispensable. A possible explanation for this behaviour may be that a lot of academic members at this university are not familiar with foreign languages.

As the Fig.4 illustrates a lot of publication (%69,3) at this university have been achieved individual, it seems the cooperation authority at this university is low or in other word a lot of academic members at this university prefer to work individual than cooperation.

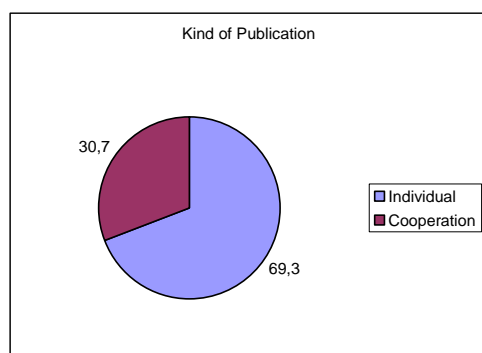


Fig.4 Distribution of publication according individual and cooperation.

Table 1 Distribution of publication according to Sex.

Sex	No. of Persons	% persons	No. of Publication	%Publication
Male	275	%76	1750	%81
Female	89	%24	416	%19

The Table 1 illustrates that the most majority of academic members at this university are men and they have produced %81 of all publications. Women produced only %19 of all publication. Apparently it seems the men have published profusely than the women but the fact is that they got the same Rank in analyzing of data, in other words the productivity among the academic members doesn't related to the sex.

Conclusion

This study showed that the population under study produced about 2166 scientific publications in the form of books, periodical article (56%) and research reports (37%) while the book formed only 7% of the output, and 69.3% of researches were carried out by individual researcher; and the frequency of group research was only 30.7%.

The majority of papers and research reports (93.3%) appeared in local journals and only 6.7% of them were published in international journals. The result showed that those with a higher degree like PhD and postdoctoral qualification published and presented a lot more papers, compared to those who had lesser degree of qualifications.

Observation from the analysis highlighted the following points:

Medicine is the most productive area amongst the six subject fields (66.5) and Dentistry is the least productive one (1.5%). The number of publications during the period under study witnessed a sharp continuous growth. Distribution of scientific output in the main fields of study in Tabriz University of Medical Sciences was as follows: Hygiene and Nutrition (9.1%), Nursing and Midwifery (3.9%), Medicine (66.5), Para medicine (2.5%), and Dentistry (1.5%).

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