

Evaluating the Affected the Factors of Research in Ilam University of Medical Sciences During 2006-2011

R. Jorvand¹, A. Khosravi², K. Saiehmiri³, K. Sadeghi Rad⁴ and Sara Faryadian⁵

¹Department of Health Education and Promotion, Faculty of Health, Ilam University of Medical Sciences, Ilam, Iran.

²Department of Immunology, Faculty of Medical, Ilam University of Medical Sciences, Ilam, Iran.

³Department of Biostatistics, Faculty of Medicine, Ilam University of Medical Sciences, Ilam, Iran.

^{4,5}Department of Clinical, Health and treatment center of Dehloran, Ilam University of Medical Sciences, Ilam, Iran.

dx.doi.org/10.13005/bbra/1269

(Received: 20 December 2013; accepted: 30 January 2014)

Research is one of the most important parameter in developing of each country, for this Universities are of most importance. The faculty members are more interested in education rather than research due to different factors. The current study aimed to evaluate such factors among the faculty members of Ilam university of Medical Sciences during 2006 until 2011. This is a retrospective cross-sectional study based on data collected by a questionnaire and interview. Data analyzed using descriptive statistics by SPSS package 18. Totally a research projects from researchers was enrolled in this study of which 74.6% men and 93.4 were married. 59.6% of researchers has BSc (51.1%), MSc and PhD (31.9%) and 16.6% worked of educational Deputy of this university. Accessing to scientific data banks, and lack of English language skills were among the most effective factors n research and satisfaction of researchers while good communication with staff of university research Department was in high importance.

Key words: Research Projects, Ilam, University of Medical Science, Researchers.

An important factor in the growth and prosperity of any country is the attention to the research in that country. Universities and higher education institutions mainly have three functions including the production of knowledge, manpower training and providing services to the community¹.

The universities as knowledge producers have a vital role in sustainable development of the country, and in this context, understanding their problems and do research on them is one of their most important tasks².

Now for various reasons, most faculty

members tend to have teaching activities, and prefer training activities on research.

As the universities are the center of knowledge production (research) and knowledge transfer (training), some believe that research is the primary responsibility of any scientific institution, because through research the production of knowledge can be gained, otherwise spent on teaching without any research the university values will be reduced³.

Considering the attraction created in research categories by developed countries, and the barriers and the lack of research in developing countries can lead to valuable results. Studies, especially in recent decades, reflects the fact that many obstacles always hindering the research⁴. The importance of research in each country would lead to development, and real independence of the

* To whom all correspondence should be addressed.
E-mail: afrakhosravi@yahoo.co.uk

country; in this way, the first step for organizing the research activities in the society is to achieve a true understanding of capabilities, facilities and to understand strengths and weaknesses of the research in such country.

It is also needed to identify the existing problems in the way of research and to find a solution to overcome the obstacles. Therefore, researchers have tried to do this research project to study the comments of researchers who had performed researches during the years 1385 to 1388 at the University of Medical Sciences of Ilam.

MATERIALS AND METHODS

The study was a descriptive, retrospective and cross-sectional study that the data were collected using questionnaires that was designed by the researchers for this purpose.

This questionnaire was completed through interview and contains 12 personal questions from the researchers (with closed answers) and two tables that contains 9 questions about satisfaction of attitudes and 13 questions about the view of the

researcher. The questionnaire contains 30 possible factors influencing adoption of the research project from the perspective of the implementers as well as the researcher's attitude and satisfaction of each of the above factors that were measured using a Likert scale. The validity of the Questionnaire was assessed based on the opinions of 20 experts and faculty members.

In this project, using census data, all researchers have approved researches during the period 1385 to 1388 were extracted and then, using a questionnaire, their information and views were collected, and the accuracy of the data was examined, and the data were analyzed by statistical software (SPSS18).

RESULTS

The data collection results indicated that during the years 1385 to 1388 a total of 91 research projects carried out after the approval of the Research Committee of the university; this means less than 23 research projects during a year. All of these initiatives have been undertaken by 47

Table 1. Frequency of opinions of the researchers in Ilam University of Medical Sciences, about the study the effects of some factors on the research

Attitude	Very Low		Low		Average		High	Very High		
Reading various scientific journals and research papers	0	0	0	0	2	4.3	14	29.7	31	66
Knowing English in the level of translation	0	0	0	0	3	6.4	19	40.4	25	53.2
Understanding proposal writing	0	0	2	4.3	10	21.3	16	34	19	40.4
Access to scientific adviser	0	0	3	6.4	8	17	23	48.9	13	27.7
Access to research conducted at the University	0	0	5	10.6	13	27.7	17	36.2	12	25.5
Participate in the research as partners, questioner, analysts etc.	1	2.1	6	12.8	17	36.2	16	34	7	14.9
Membership of the researcher at the University Research Council	2	4.3	2	4.3	12	25.5	13	27.7	18	38.3
Affiliate member of the Committees related to the Medical Research Council	3	6.3	2	4.3	10	21.3	17	36.2	15	31.9
Attending in the research methodology workshop	0	0	0	0	7	14.9	21	44.7	19	40.4
Attending in the SPSS and statistical methods workshop	0	0	1	2.1	18	38.3	14	29.8	14	29.8
Access to the library for literature study	1	2.1	2	4.3	7	14.9	21	44.7	16	34
Access to the INLM digital library for research	1	2.1	0	0	6	12.8	20	42.6	20	42.6
Familiarity with search	0	0	1	2.1	3	6.4	21	44.7	22	46.8
The total sum of frequencies	8	1.31	24	3.93	116	18.99	232	37.97	231	37.8

scholars (some of them had implemented 2 or more projects in the period time between years 85 to 88). From the total 47 researchers participating in the project, 35 people were single (74.47%) and 44 of them were married (93.6%). 28 people (59.6%) were faculty members; 24 (51.1%) people had master and 15 people (31.9%) had doctoral degrees;

among them, 36 people (76.6%) worked in the department of education, research and technology of university. The opinions of researchers on the factors influencing their attitudes towards research as well as their satisfaction with the study of processes are given in Table 1-2.

Table 2. Frequency of satisfaction with the research process by researchers at the Ilam University of Medical Sciences

Satisfaction factor	Very Low		Low		Average		High		Very High	
Cooperation of the Research Council of the university	4	8.5	4	8.5	24	51.1	12	25.5	3	6.4
The time between presentation of the proposal and its approval	14	29.8	12	25.5	10	21.3	6	12.8	5	10.6
Approved payment for the project	4	8.5	19	40.4	24	51.1	0	0	0	0
The interest of the university administrators in doing research activities	5	10.6	8	17	17	36.2	15	31.9	2	4.3
Cooperation of the administrations of workplace of the researcher to do the study	2	4.3	8	17	21	44.7	12	25.5	4	8.5
The interest of personal related to the research project	1	2.1	12	25.5	17	36.2	13	27.7	4	8.5
Proposal judgment	5	10.6	15	31.9	23	48.9	4	8.5	0	0
Timely payment of the plan's installments	8	17	14	29.8	19	40.4	6	12.8	0	0
Final report judgment	3	6.4	9	19.1	19	40.4	9	19.1	7	14.9
The total sum of frequencies	46	10.87	101	23.88	174	41.14	77	18.2	25	5.91

DISCUSSION

The data collection results indicated that during the years 1385 to 1388 a total of 91 research projects carried out after the approval of the University Research Council; this means less than 23 research projects during a year. All of these initiatives have been undertaken by 47 scholars (some of them had implemented 2 or more projects in the period time between years 85 to 88). 12 of these researchers were females and the rest were males.

Implementation of only 91 research projects in the considered duration of this study, was on a condition that Ilam University of Medical Sciences has had 60, 72, 63, 67 faculty members respectively during the years 1385 to 1388 (5). If any of these members have approved a completed project the results would be much better than this. Needless to mention that only 28 of researchers in this period were the faculty members.

In a similar study conducted in Iran University of Medical Sciences, of the 60 faculty members participating in the program 22 percent were PhD and the remaining had a master degree, and 58 percent of them had no research project over a period of 3 years, and the rest were involved just in 47 research projects during this time⁶. In another study in Qom University of Medical Sciences on the results of interference in research problems, 78 percent of participants were faculty members and 22 percent were non-faculty members⁴.

The results showed that the researchers with master's degree have attempted to research more than others; however, the researchers with PhD degree were ranked next. While clinicians in this period of time have had the lowest research activities, that this could be due to lack of time because this group in addition to training, are active in the treatment of patients in hospitals and also in private sectors.

In this period, only 28 of researchers were university faculty, and this can be because this group are so busy.

The results of the study by Talebi show that faculty members do not have enough time to complete the research and essay and usually spend a lot of time teaching and less to do research⁷. Similar results has been achieved from a research work done at the Medical College of Pennsylvania⁸. From a total of 61 projects (regardless of student researches) was conducted by researchers working in the field of Educational Affairs, and only 15 projects have been implemented in other areas of the university (other department, hospitals and networks); this represents that over years 85 to 88 a little attention was paid to the presence of a strong body of expertise in hospitals and health care networks in the province, and it can be said that the research was limited to the department of education and its related individuals. This occurs in the situation that in the study of international journals, most papers by Iranian researchers were presented in health, and to improve and optimize the results of these studies, a proper relationship can be made between experts working in the field of health and faculty members, and strengthen the health system researches (HSR)⁹.

As noted above, 28 of researchers were faculty members, and if we add the number of researchers in the field of education, 74.5 % of researchers are engaged in educational activities; this also confirms the above. Research projects conducted at the Ilam University of Medical Sciences are often implemented no later than one year that indicates the researchers have not shown much interest to long- term plans. Satisfaction of most researchers in activities related to research were mediate or less than that. For example, the order for cooperation of the Research Council of the university, time for plan approval, approval fees, the interest of scholar authorities to research activities, timely payment of installments, judging proposals, cooperation of scholar authorities and final judge report were 68.1 percent, 55.3 percent, 100 percent, 76 percent, 87.2 percent, 91.5 percent, 66 percent and 66 percent, respectively.

In this regard, the study by Zohur et al showed that about 85 percent of people who have sent their proposals for approval to the Office of Research over the last three years, have called

the review process so long, and half of them have been mentioned this matter as the reason that undermined their motivation; while about 89 percent of faculty who referred to the accountant department for receiving the research fees have called the payment process so long and were unhappy about it⁵.

As explained above, the satisfaction of the researchers from the relevant research processes were low; a problem that could indicate structural problems in the field of research and its associated processes, which in turn could be one of the reasons for this situation (low number of research projects carried out). 95.8% of researchers have considered the impact of research journals and scientific papers on research projects as an important issue; this amount about the English language knowledge was 93.6 percent.

74.4 percent of scientists have determined the familiarity with the research project proposal writing as more and most. Meanwhile, respectively 76.6 percent, 61.7 percent, 66 percent, 68.1 percent, 59.6 percent and 78.7 percent of researchers have determined the impact of access to a proper advisor, access to carried out researches, membership of researcher in the University Research Council, membership of researcher in the committees related to the University Research Council, joining the SPSS workshops, and having access to the library and proper written sources for studying as the more and most important factors in implementation of research projects.

The researchers involved in the project believe that, access to INLM digital library, knowing the ways to search the articles and attending in the research workshops has high or very high impact on research, while, just under half of the participants were estimated the association in the projects of other researchers, as questioner, analysts and so on, as high or very high effective.

In a study it has been found that, although the notion of participants from the researching activities is acceptable, and often have a positive attitude towards research, but in practice, they are not able to develop a standard research design¹⁰. However, according to some reports, from the years 1365 to 1382, more than 300 workshops have been held for more than 7000 faculty members and research residents to improve their research capacity¹¹.

Responses to attitudinal questions by investigators show that most people know very well what the researchers are required to promote and strengthen the research, but many of them believe that the membership in Council and its committees has a positive impact on research at the university; this indicates a kind of distrust by the researchers to research administrative departments of the university.

The data demonstrated that the exploitation of research results for publication of books is also very low (only 10.6%) and the authorities are used only 44.7 percent of the results of conducted researches for their planning.

In a paper that was to examine the opinions of faculty members of Ardebil University on research barriers, 98 % of the participants have considered the research necessary for the promotion and advancement of society, 89.9 % of the population believed that this has no effect on the decision, and 86.2 percent believed that the results of their researches are not used in the country⁶.

The findings showed there is a significant relationship between the plan approval time by the Research Committee during the period from 88 to 85 and the type of the researcher plans. The relationship between education and the data collection tools as well as education of scientists and the approved salary was significant; while, there was no significant correlation between the duration of the research project approval by the Research Council and 1- researchers' education, 2- researchers' working place, 3- type of the study, 4- data collection tools, 5- sampling methods, 6- sex of scholar, 7- background of the researcher, and 8- how to calculate the sample size. Also, there was no statistically significant relationship between the education and the type of the research projects.

Research problems in most universities are similar in many cases, and researches believe that the lack of research facilities, cumbersome administrative regulations, barriers to approve the research proposals, having no positive attitude to the benefits of the research by the administrative officials, a lot of busy work, lack of access to information, low research per capita in the country, lack of adequate funding, and the lower research fees, difficult and lengthy funding processes for research projects are of the research barriers^{5,6,12,13}.

Some other barriers of doing original researches and writing the articles are as taking advantage of the research results, lack of research skills, no impact of researches on decision-making, lack of adequate encouragement and spiritual guidance, lack of research culture, the problems created by the Research Councils, making no reference to the problems of other organizations to the researchers, lack of interest to teamwork and lack of laboratory facilities⁵. Hafferin *et al.*, also, have considered factors such as no use of research results, a lot of busy work, difficulties in statistical analysis, lack of support to perform research activities, lack of time and motivation and costs, as the main barriers for research activities¹⁴. In a study to investigate the factors affecting scientific writing from the viewpoints of faculty members in Hamadan, 73.3% of the participants have stated the barriers for research activities as the second impact factor in this field¹⁵. Unfortunately, loss of interest in researches in the medical universities and doctors is not unique to our country. In a similar study at the Medical College of Pennsylvania, financial-family problems, career plans, and medical tasks have expressed as the main reasons for lack of research activities of 283 faculty members⁸. Also, the decrease in research in the past two decades as well as reduce in the number of medical research scientists of the United States is reported¹⁶.

In such circumstances, if the university wants to progress in the field of scientific research projects and improve their position in the ranking of research universities, it needs a serious fundamental intervention in the most research areas. The study by Darabi *et al.* showed that there are significant differences between the results of the surveys before and after the application of managerial interventions aimed at reducing barriers to research⁴.

ACKNOWLEDGEMENTS

Researchers sincerely thank the Research and Technology Council of Medical Sciences of Ilam University for approval and funding of this study.

REFERENCES

1. Shayan M, Suitable model for the distribution of funds between units. *Rahyaft*. 1375; 13-36
2. Yaghubi T, Problems in research projects from the perspective of faculty members of Mazandaran University of Medical Sciences. *Journal of University of Medical Sciences, Fourth National Medical Education Conference*. 1379; 186
3. Bakhtiari S, Research, needs and development. *Hamshahri newspaper*. 13th Mehr. 1377; 1559(6): 6
4. Darabi S, Koohpaei A, Yusefi MH, Komeili Movehed T, Ahmari H, Rahmani M,, The severity of the research problems before and after administrative management interventions from the perspective of faculty and researchers of Qom University of Medical Sciences. *Qom University Press*. 1388; 37-44
5. Zohur A, Fekri A, Barriers to research form the Viewpoints of faculty of Iran University of Medical Sciences. *Payesh*. 1382; 2(2): 113-20
6. Dadkhah B, Mohammadi AM, Purnaseri S, Mozafari N, Adham D, Ardebil University faculty views about the barriers to research in universities in 1382. *Ardebil University Press*. 1382; 1(8): 37-44
7. Talebi M, Factors affecting the production and publication of scientific articles in prestigious international journals. *Rahyaft*. 1381; 27: 188
8. Lloyd T, Phillips BR, Aber RC, Factors that influene doctors participation in clinical research *Med Educ*; 2004; 38(8): 848-51
9. Abedian M, State of scientific papers of researchers form some Islamic countries published in international journals, from 1990 to 1996. *Ministry of Science, Research and Technology* 1379; 1(8): 540
10. Falah M, Hushmand B, Joneidi A, Shamsaei F, Bashirian S, Research insight and ability of medical PhD graduates and dental professionals of Hamadan University of Medical Sciences. *Iranian Journal of Medical Education*. 1384; 5: 129-38
11. Azizi F, Medical education: challenges and prospects. *Tehran: Vice Chancellor and Student Affairs, Ministry of Health and Medical Education*, 1382.
12. Jafari H, Yaghubi T, Heidari J, Esmaeili R, Hekmatara M, Ataei M, The view of Mazandaran University of Medical Sciences faculty about the barriers to effective internal and external research by faculty members of the University in 1378. *Shakiba*. 1383; 6-7(4): 13-20
13. Haynes B, Haynes A, Barriers and bridge to evidence based clinical practice. *British Medical Journal*. 1998; 31(7): 273-274
14. Hafferin EA, Horsley AV, Promoting Research Based Nursing: The Nurse Adminator's Role. *The Journal of Nursing Adminstination*. 1982; 12: 34-41.
15. Kurki M, Mahjub H, Sheikh N, Factors affecting reluctance to scientific writing form the point of view of Medical Sciences faculty members. *Hamedan University of Medical Sciences and Health Services*. 1386; 4(4): 59-63
16. Solomon SS, Tom SC, Pichert J, Wasserman D, Powers AC (?) Impact of medical student.