

## Knowledge and Attitude of Faculty Members of Kerman University of Medical Science about Lesson Planning

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### Abstract

**Background and purpose:** In education, planning is necessary and inevitable. This study was conducted to identify knowledge and attitude of faculty members of Kerman University of medical science about lesson planning.

**Methods:** In this cross-sectional study the sample was all of the faculty members of Kerman medical university (320 persons). Data collected by a researcher-made questionnaire which its validity and reliability were already confirmed.

**Results:** The result showed that faculty members got 53% total score of attitude; 31.96% got more than 75% of attitude score. They got a mean of 47% of knowledge score. Only 18.56% of faculty members got more than 75% of knowledge total score. The highest score of knowledge belonged to "educational goals domain" (75%) that obtained by 59.45% of participants, while the lowest score belonged to "teaching method", so that 5.15% of respondents got more than 75% of total score of knowledge in this domain. There was a significant difference between the lecturers' attitude based on the faculty where they taught ( $p=0.002$ ), so that the medical faculty members got highest score of attitude. There was a significant statistically difference on level of knowledge score based on academic rank ( $p=0.023$ ), so that the mentors knowledge score was more than other respondents.

**Conclusion:** The findings showed the academic members' knowledge was not in satisfactory level and they had not positive attitude about providing lesson plan. It is because the majority of academic members have not participated in any formal education course or workshop or the former workshops on lesson planning in order to increasing of level knowledge and change of faculty members' attitude was not successful. Therefore it is an essential for educational management to have a serious review to implement these programs.

**Keywords:** LESSON PLANNING, KNOWLEDGE, ATTITUDE, FACULTY

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### Introduction

The effective learning and teaching is required to an appropriate lesson plan and

course design. Curriculum and lesson plan is including the decision making about educational programs' components and their relationships to each other (1). Achieving to any goal or conducting any activity is based on a program which is anticipated for it. Attention to planning and training course with concerning to complexity and special delicacy of learning and teaching process is an essential need in education as a dynamic and purposeful system. Because the outcome of educational system is production of

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knowledge, skill, attitude and change in learners' behavior thus, lesson plan as a critical factor affects all learning process which preparing and planning for learners (2). Lesson plan is a set of educational goals, teaching methods, time and place of teaching and learners evaluation methods that provide to keep integration of every educational period. Based on lesson plan lecturers are going to compile their courses. It can recognize as final production of lesson designing (3). In other word, lesson plan is a written description of lesson designing process for a teaching program which answers to these questions: What are the objects that students must be learn? Which methods are better to using for teaching? How much time is needed to students going to learn? Where is educational place? (4) Of course, the class can manage without lesson plan and compilation of program, but lecturers must compile their lesson plan exactly if they want to do their duties well (5).

Lesson plan preparation by faculty members is one of the appropriate ways for promotion of education quality; it can help the lecturers in teaching as guidance (6). It enables teachers to think and consider all aspects throughout their instruction period. It also help lecturer in below fields: A) to create the required motivations. B) To emphasize on different part of lesson such as activities that students should be do. C) To sure that including all required information for students. D) To provide the using of the educational aids equipments. E) To anticipate questions on the proper time. F) To perform the instructors teaching based on pre-determined plan (5).

Strong and rational relationship between goals, teaching methods, learning, and students' evaluation is a key criterion in an admirable lesson plan. Many of courses that begin with indefinite and obscure goals, the teaching process have a weak connection with goals. Therefore evaluation methods have a few connections with goals and learning methods or they are detached completely. In

this condition, students play a guess game and their educational future is prize of this guess game! This pattern can improve just by taking a systematic method which will be connecting the goals with learning and evaluation methods (7).

Educational experts believed that a good lesson plan and explicit goals facilitated teaching process, increase students motivation for regular presenting in classes, following the topics and subjects, active contribution in class discussions, and finally leading to further learning overall (8,9). Lesson plan is main foundation of educational structure and it is core of education. Faculty members should not be present in class without a lesson plan because it is required for a successful teaching (10).

Concerning the role of lesson plan in increasing the quality of teaching in medical education and need for faculty members' knowledge development in this field, the researcher of this study would like to investigate this process in Kerman medical university to assess the faculty members' attitude and their knowledge regarding design and use of lesson plan.

## Material and Methods

This cross-sectional study was conducted to determine knowledge and attitude of faculty members about lesson planning in Kerman University of Medical Science. The sample was all of faculty members of Kerman University of Medical Science (320 people). For data collection a researcher designed instrument was used that included four parts: A. the questions related to demographic information such as age, gender, faculty, and academic rank. B. The knowledge assessment questions that consisted 26 multiple-choice items with 0 to 26 scores. C. Attitude questions were consisted of 26 items; all items were measured on a five-point Likert's scale. Total score was form 26 to 130. D. The questions related to necessity of lesson plan components; there were 10 items measured on a five-point Likert's scale, with a total

score from 10 to 50 score. Content validity was determined in different parts of questionnaire (11). After gathering of data, Cronbach's Alpha used to investigate internal consistency in 3 parts of questionnaire(B,C,D). It was 0.77 for knowledge section, 0.90 for attitude section, and 0.86 for necessity of components. Statistical analyses used in this study were descriptive values (frequency and percents), Chi Square test, and Pearson's correlation test. The data analyzed by Stata (version 10).

## Results

Of 320 questionnaires that distributed, 291 questionnaires were returned (response rate was 90%).Of all respondents 55.8% were male. The mean age ( $\pm$ SD) was 42.5 ( $\pm$ 7.3) years. Of the respondents, 5.1% were professors, 11% were associate professors,

54.7% were assistance professors, 18.3% were instructors, and 10.9% were trainers.

The majority of participants in this study were from faculty of medicine(53.6%), followed by faculties of dentistry (18.2%) , nursing and midwifery (12.4 % ), pharmacy (5.8%) , health sciences (4.4%), management and medical Information (3.7%), and paramedical sciences (1.7% ) . There was no significant relationship between total knowledge score and total attitude score ( $P=.59$ ,  $r=.032$ ).

About seventy percent of lecturer pointed out that they have the experience of teaching based on lesson plan; 34.4% developed lesson plan for all theory courses, and 26.1% provided it for practical courses. More than half of respondents (51.5%) believed, the quality of teaching will be improved by lesson plan (Table 1).

**Table 1:** Frequency distribution of faculties' responses regarding their lesson planning practice and their opinion on usefulness of lesson plan

| Component  | Number | Percent |
|--|--------|---------|
| Teaching with lesson plan                        |        |         |
| Yes  | 203    | 69.5    |
| No   | 63     | 21.5    |
| Without answer                                   | 25     | 8.6     |
| Lesson plan development for theory lesson        |        |         |
| All courses                                      | 100    | 34.4    |
| Some courses                                     | 100    | 34.4    |
| None of the courses                              | 91     | 31.3    |
| Lesson plan development for practical lesson     |        |         |
| All courses                                      | 76     | 26.1    |
| Some courses                                     | 72     | 24.7    |
| none of the courses                              | 143    | 49.1    |
| The effect of lesson plan on educational quality |        |         |
| No deference                                     | 150    | 28.5    |
| Improved it                                      | 13     | 51.5    |
| It has not any effect                            | 45     | 4.5     |
| No answer  |        | 15.5    |

Forty five percent of lecturers said the preparation of lesson plan was a duty of the

lecturers; 6.5% believed it was better that the group's head prepare the lesson

**Table 2:** The distribution of faculty members' knowledge score by different sections of lesson plan

| Knowledge level<br>Knowledge aspects                     | ≤50    |            | 50-75  |            | >75    |            |
|--|--------|------------|--------|------------|--------|------------|
|  | number | Percentage | Number | Percentage | Number | Percentage |
| Goals ( main, behavioural objectives, entrance features) | 138    | 47.42      | 98     | 33.68      | 55     | 18.90      |
| Educational goal category                                | 98     | 33.68      | 20     | 6.87       | 173    | 59.45      |
| Teaching method  | 204    | 70.10      | 72     | 24.74      | 15     | 5.15       |
| Evaluation   | 156    | 53.61      | 74     | 25.43      | 61     | 20.69      |
| Context, resource and educational aids                   | 163    | 56.01      | 58     | 19.93      | 70     | 24.04      |
| <b>Total</b>   | 127    | 43.64      | 110    | 37.80      | 54     | 18.56      |

**Table 3:** Frequency distribution of faculty members' point of views on necessity of lesson plan sections

| Necessity of Lesson plan<br>Components                           | Very much | much | Somewhat | little | No  | Without answer | Mean | SD   |
|--|-----------|------|----------|--------|-----|----------------|------|------|
| course goals   | 46.4      | 37.8 | 7.9      | 1      | 0.7 | 6.2            | 4.4  | 0.57 |
| Lesson content in 3 category (cognitive ,affective, psychomotor) | 21.6      | 37.8 | 24.1     | 4.5    | 3.1 | 8.9            | 3.8  | 0.98 |
| Objective  | 23        | 35.4 | 21.6     | 4.8    | 2.4 | 12.7           | 3.8  | 0.98 |
| Time table   | 36.8      | 37.8 | 13.4     | 2.7    | 1.4 | 7.9            | 4.1  | 0.88 |
| Teaching method  | 37.5      | 37.5 | 15.1     | 2.7    | 0.7 | 6.5            | 4.2  | 0.85 |
| Educational aids   | 37.5      | 31.6 | 17.9     | 4.1    | 1.4 | 7.6            | 4.1  | 0.95 |
| Identification of educational resources                          | 45.7      | 33.7 | 11.3     | 1.7    | 1.4 | 6.2            | 4.3  | 0.86 |
| Identification of students entrance behavior                     | 21        | 30.9 | 27.1     | 8.6    | 2.1 | 10.3           | 3.7  | 1    |
| Learners evaluation methods                                      | 27.1      | 41.2 | 20.6     | 2.4    | 0.7 | 7.9            | 4    | 0.83 |
| Complementary activities (exercise, conference, seminar...)      | 28.2      | 41.2 | 18.2     | 4.1    | 0.7 | 7.6            | 4    | 0.87 |

**Table 4.** Comparison between knowledge and attitude's score of lesson plan, by faculty members' academic status and Faculty

| Variables               |                 |                     | ≤50    |         | 51-75  |         | >75    |         | Chi Square test                         |
|-------------------------|-----------------|---------------------|--------|---------|--------|---------|--------|---------|---|
|                         |                 |                     | number | percent | number | percent | number | percent |   |
| knowledge Score Percent | Academic status | Trainer and Mentor  | 21     | 28.4    | 30     | 40.5    | 23     | 31.3    | P=0.023                                 |
|                         |                 | Assistant professor | 60     | 43.2    | 56     | 40.3    | 23     | 16.5    |   |
|                         |                 | Associate professor | 15     | 53.6    | 9      | 32.1    | 4      | 14.3    |   |
|                         |                 | professor           | 9      | 69.2    | 2      | 15.4    | 2      | 15.4    |   |
|                         | Faculty         | Medical             | 83     | 53.2    | 55     | 35.3    | 18     | 11.5    | P=0.0001                                |
|                         |                 | Dentistry           | 21     | 39.6    | 25     | 47.2    | 7      | 13.2    |   |
|                         |                 | pharmacy            | 8      | 47.1    | 7      | 41.2    | 2      | 11.8    |   |
|                         |                 | other               | 15     | 23.1    | 23     | 35.4    | 27     | 41.5    |   |
| attitude Score Percent  | Academic status | Trainer and Mentor  | 7      | 9.5     | 42     | 56.8    | 25     | 33.8    | With combined column 1 and 2<br>P=0.4   |
|                         |                 | Assistant professor | 8      | 5.8     | 82     | 59      | 49     | 35/3    |   |
|                         |                 | Associate professor | 2      | 7.1     | 19     | 67.9    | 7      | 25      |   |
|                         |                 | professor           | 0      | 0       | 11     | 84.6    | 2      | 15.3    |   |
|                         | Faculty         | Medical             | 6      | 3.8     | 91     | 58.3    | 59     | 37.8    | With combined column 1 and 2<br>P=0.002 |
|                         |                 | Dentistry           | 1      | 1.9     | 42     | 79.2    | 10     | 18.9    |   |
|                         |                 | pharmacy            | 1      | 5.9     | 16     | 94.1    | 0      | 0       |   |
|                         |                 | other               | 9      | 13.8    | 32     | 49.2    | 24     | 36.9    |   |

plan, while 37.8% preferred the preparation of lesson plan be carried out in group. Of all respondents, 54.3% believed that the group's head should monitor the lesson plans, while 34.4% disagreed to this practice. The average of attitude total score was 69.15 ( $\pm$  11.1), with a minimum of 33.08 and maximum of 93.85. Results showed that faculty members got

53% of attitude total scores, totally. Of all participants, 5.84% obtained less than 50% of attitude score and 62.2% got attitude score between 50 to 75%, and 31.96% got more than 75% of it.

The faculty members' knowledge scores on different sections of lesson plan showed that 59.45% obtained 75% of educational goals

sections score. It was the highest score among different sections of lesson plan and the lowest score belonged to teaching method section. Table 2 summarized the information regarding to knowledge scores. In addition, the viewpoints of faculty members about necessity of including different sections in lesson plan showed that the highest scores were for goals and resource specification, and the lowest was belonged to recognizing of student's entrance features, specifying lesson content, and objectives. There was no difference between the importance given to different sections of lesson plan by faculties (Table 3).

There was no significance difference between the lecturers' attitude based on the faculty, but there was a significant difference on level of knowledge score based on academic rank.

## Discussion

In our study, only 31.96% of faculty members did have more than 75% of attitude score, so most of them didn't have positive attitude toward lesson planning, which is different from results of studies in other universities. For example Majidshad et al in a study in Gilan University of Medical Sciences stated that 75% of faculty members had positive attitude to lesson plan, and 63.9 % of faculty members in this study made an effort to develop lesson plan, and 71.8 % of them were satisfied with it (12).

Another survey in Lorestan University of Medical Sciences, on faculty member's attitude, knowledge, and practice regarding lesson plan, most lecturer (66.7%) had a positive attitude about providing lesson plan and they believed that lesson plan is a necessity for teaching (13). Based on a study in Kashan University of Medical Sciences, 78.9 % of faculty members believed, lesson plan is necessary for teaching (14). According to Amininik, et al in Bushehr University of Medical Sciences, 64% of faculty members agreed that they should develop lesson plan (15).

Our results showed that 18.56% of faculty

member got more than 75% of knowledge section total score while 37.8% had a score which fell between 51% to 75% of total score and 43.64% of had a score below 50% of total knowledge score. So highest score of knowledge was related to educational goals category and lowest score was related to teaching method category. In spite of regular workshops on lesson plan which was offered by education development center (EDC), they didn't have a positive attitude and enough knowledge about lesson plan. Based on Hass point view, it's expected, the attitudes change and lead to better function by acquisition of more knowledge (16). In MoemenNasab and Zehtab survey of Lorestan University of Medical Sciences, most faculty member had a modest knowledge of lesson plan (53.7%) while Knowledge of 38.9% of faculties was good, and knowledge of 7.4% was weak. In another study in Kashan University of Medical Science, 65.4% of participants got 17.02 score out of a total of 26 knowledge score and 67.2% of clinical faculty members got 17.46 score out of total 26 score (17).

In this study faculty members identified main goals and resources, as essential components of a lesson plan, but in their identified student's entrance features and characteristics, lesson content in 3 areas of cognitive, affective, psychomotor objectives, had lowest necessity. In Bushehr University of Medical Sciences survey on lesson planning and its development methods, faculty members stated the most important part of lesson plan development was the writing of behavioural objectives; and teaching methods, resources and educational aids and evaluations methods were next priorities (15).

Ghourchian and khadivi showed that no special lesson plan cannot be recommended for all classes and all subjects, but it seems that, there was an agreement about vital formative factors of an effective lesson plan (18).

Moniry's study (17) indicated 91.3 % of faculty members recognized lesson plan as a vital factor for preparation of lecturers for

teaching and 85% identified it as an effective tool for students' educational improvement, and 75% of them believed that it was effective on teaching-learning activities and methods.

A study by Saberian in 2003 showed faculty members' positive views (88%) to lesson plan development, and 50.9% of them thought lesson plan, was very effective in increasing teaching quality(19). The survey in Kashan University of Medical Science revealed that 78.9% of faculty members thought lesson plan was necessary for teaching, and 78% of them believed that lesson plan helped teaching process and 35.9% of them had complete satisfaction with lesson plan, and 41.4% of them were almost satisfied with it(14).

In the study in Gilan University of Medical Sciences, 96.7% of faculty members believed that having a lesson plan was useful (12). In Bazrafkan and Shokrpour of Shiraz University of Medical Science found 70.9% of faculty members believed that lesson plan help to process of educational management and 51.5% of them believed lesson plan compilation is necessary(20).

The results of this study indicated there was a significant difference between the faculty members' attitude based on the faculty where they worked ( $p=0.002$ ); medical faculty members got highest score of attitude.

There was a significant difference on level of faculty members' knowledge score by their academic rank ( $p=0.023$ ), so that the mentors' knowledge score was more than other respondents. The reason is that the majority of mentors in this study was from nursing faculty, and lesson plan and teaching methods are in their formal curriculum.

## References

1. Mirzabeigi A. Curriculum Planning and Lesson Plan in Formal Education and Human Resource Training. Tehran: Yastoroon; 2001.
2. Tiragari H. Fundamental's o Curriculum Development. Tehran: Sanjesh; 2002.
3. Deputy ministry for education and university affairs ministry of health and medical education. Curriculum planning. *peyke-e- Amoozesh*. 2001:8-9.
4. Saberian M, Salemi S. How to write lesson plan. Tehran: Salemi; 2002.
5. Miller WR, Miller MF. Handbook for college teaching. Sautee-Nacoochee, GA: Pine Crest Publications; 1997.
6. Amininik S, Amami S, Jalalpour S, Azodi P. Survey of relation between lesson plan quality with student views about Boshar university of medical sciences faculty members. *The Journal of Medical School,Supp for the fourth national conference on medical education TehranIran,2000*:84.
7. Newble D, Kapelis Z. A handbook for medical teachers. Kluwer Academic Publishers; 2001.
8. Schmidt HG, Arend AVd, Moust JH, Kok XI, Boon L. Influence of tutors' subject-matter expertise on student effort and achievement in problem-based learning. *Academic Medicine*. 1993; 68(10):784-9.
9. Bergman K, Gaitskill T. Faculty and Student Perceptions of Effective Clinical Teachers: An Extension Study. *Journal of Professional Nursing*. 1990; 6(1):33-44.
10. Coppola AJ, Scricca DB, Connors GE. Supportive supervision: Becoming a teacher of teachers. CA, Thousand Oaks: Corwi ,press. 2004.
11. Lynn MR. Determination and quantification of content validity. *Nursing Research*. 1986; 35(6):382.
12. Maijdi shad A, Asadi L, Nemati MB. A survey of the academic staffs views on lesson plan and its implication. *Ghazvin University of Medical Sciences*. 2000; 1:32-8.
13. Momennasab M, ZahTab T. The survey on knowledge, attitude and implementation of faculty members of Lorestan University of Medical Science about lesson planning. *Ofogh:Journal of EDC(Educational Development Center)*. 2002; First year (2):1-6.
14. Vakili z, Mohamadian M, Saberi F, Miranzadeh S, Hosseinnian M, Moniry R.

Attitude of the faculty members of the Kashan UMSHS to course planning. *J Med Edu.* 2003; 4(1):165.

15. Amininik S, Kamali F, Hashemi S, Bahraini M. Survey of Medical faculty member's attitude on lesson planning and its development quality methods, in Boshar University of medical sciences. *THE Journal of Medical School, Supp for the fourth national conference on medical education TehranIran.* 2000:85.

16. Hass G. *Curriculum planing. Anew approach.* 5th ed ed. Boston: Allen and Boston Inc; 1987.

17. Moniry R, Taghadosi M, Akbari H, ShojaGharabaghi G, Afazal MR. A survey on the awareness and attitude of faculty members of medical sciences towards lesson planning. *J Med Edu.* 2003; 4(1):157.

18. Goorchian Ng, Khadivi A. Supervision on classes in the third millennium. *Fasnameh talim va tarbiat.*

19. Saberian M, Aghajani S, Gorbani R, Malek M. Medical faculty member's attitude on lesson planning, Semnan University of medical sciences. *J Med Edu.* 2003; 2(2):61-5.

20. Bazrafkan L, Shokrpour N. Academic Staff's View Points on the Implementation of Lesson Plan. *Journal of Medical Education.* 2005; 8(1):27-31.