Research Article

Assessing the quality of training activities by measuring participants' reaction: a questionnaire based study from Kurdistan/ Iraq

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Abstract

Background: Investigating and interpreting quality, accessibility, delivery, and outcomes of training activities are the key to feed back health officials, providers, and other decision makers about the impact of the training programmes provided for health staff.

Objectives: To assess the attitude of the staff toward the quality of training activities conducted over the last 5 years for staff affiliated to MOH in Kurdistan/ Iraq.

Methods: A cross-sectional study was conducted in Erbil, Sulaimani, and Duhok Governorates from 26th Oct - 10th Nov 2013. Multistage systematic random sampling was used to enroll the participants in this study through visiting the institutions being selected and to hold a direct interview with the participants to explain the questionnaire. The questionnaire included 4 parts to assess many aspects of training activities.

Results: Total number of participants was 79; Thirty-three were women and 46 were men. Nineteen participants (24.1%) were from Ministry of Health in Kurdistan/Iraq and 60 (75.9%) were from its Health directorates.

Men are outnumbering women in participation in the training courses, workshops and conferences. Participation in training courses and attendance of conferences were statistically associated with level of education of the staff. Majority of participants agreed that the training courses have raised their awareness and skills (77.72%), developed social networking (76.71%), and strengthened their technical and/or administrative capabilities (75.95%); however, (37.72%) considered that training courses were waste of time, money and efforts. Participates have stated that personal relationships with managers may affect the selection for participation (72.66%). Also (46.33 %) of participants agreed that the selection was not based on working background and technical capabilities. More than 50 % the participants have not been adequately notified about the date of activity or receiving the agenda of the training courses in advance.

Conclusion: Men participated in training activities more than women especially in attending conferences. Selection criteria for training are related to educational levels rather than working experiences. Participation in training courses can raise awareness and develop skills for participants; however, selection of participants is not always based on scientific and objective criteria. Participants are not well prepared by early notification and provision of educational agenda and materials before the start of training activities.

Key words: Training activities, attitudes.

INTRODUCTION

Training is more than just teaching. It is a mean of facilitating learning by those who are being trained so that they acquire new knowledge, skills and even attitudes.[1]

The discrepancy between the current condition and wanted condition must be measured to appropriately identify the need which can be a desire to improve a current performance or correct a deficiency. Need assessment is the systematic process for determining and addressing needs or "gaps" between current conditions and desired conditions or "wants".[2]

The training needs assessment is a critical activity for the training and development function. A human resource, generalist or specialist, should be adept at performing a training needs assessment. To be effective and efficient, all training programs must start with needs assessment. Long before any actual training occurs, the training manager must determine who, what, when, where, why and how of training.[3]

Furthermore, there are three levels of a training needs assessment: Organizational assessment to evaluate the level of organizational performance, Occupational assessment examines the skills, knowledge, and abilities required for affected occupational groups, and Individual assessment which analyzes how well an individual employee is doing a job and determines the individual's capacity to do new or different work. The benefits of training needs assessments are: Puts training needs in context of organizational needs (business

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drivers), validates and/or augments sponsor's ideas about the need for training, ensures training design respond to need, identifies non-training issues influencing performance, ensures survival of training function, and establishes foundation for post-training evaluation.[4]

There are three reasons for evaluating training programs. The first which is the most common reason is that evaluation can tell us how to improve future programs. The second reason is to determine whether a program should be continued or dropped. The third reason is to justify the existence of the training department and its budget.[5] That is why investigating and interpreting quality, accessibility, delivery, and outcomes of training activities is the key to inform health officials, providers, and other decision makers about authenticity of effects of training for the staff.

Formal assessment of the efficacy of the training programmes is very crucial step for ensuring development and achieving targets; however studies addressing this vital issue are scarce in Ministry of Health in Kurdistan/Iraq. This study was designed to fill this gap by measuring the attitude of a sample of medical and administrative staff working at Ministry of Health in Kurdistan about the training activities performed over the last 5 years and also to determine factors that may affect selection of those participants in these activities.

METHODS

Deign and settings

A cross-sectional analytic study,conducted at Ministry of health in Kurdistan/ Iraq and its health directorates; Erbil, Sulaimani, and Duhok from 26th Oct-10th Nov 2013.

Sample size and selection

Potential participants were selected if they fulfilled the following criteria:

1. Being an employee working at Ministry of Health in Kurdistan/ Iraq, and its general directorates; Erbil, Sulaimani, and Duhok.
2. They have either medical, Health or administrative titles.
3. Has a working experience of more than 5 years (the period of time the training activities needed to be assessed in the study).

Due to shortage of time and resources we decided to select a sample from those potential candidates to be enrolled in this study. A multistage systematic random sampling was used to achieve this target through two stages; the first was to randomly select institutes from the centre of the ministry and its three general directorates, then a subset sampling was selected from each institute by choosing every third employee through direct interview. The interview was seized to explain to study and the questionnaire they are requested to be filled in.

Questionnaire

The questionnaire was designed by the investigators themselves, and it included four parts. The first, included questions related to some demographic criteria that may affect the participation in the training programmes like gender, level of education and duration of working. The second, included some questions to assess how the participates evaluate the training programmes, the third part included some questions about the way the employees have been selected for participation in these programmes while the fourth part included questions to assess the preparation of the candidates for participation in the programmes.

Each participant was directly interviewed by trained people to ensure that he or she has understood the aim of this study and the mean of each question. We stressed in this interview that the training activities needed to be evaluated by the participants are only those performed over the last 5 years before the study. Anonymity was guaranteed by asking the participants not to write their names on questionnaire paper, also they are assured that their answers will not be used but for the aim of this study.

The response showing a level of importance against each question was measured on 5 points Likert scale ranging from strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5).

Definitions

For the sake of this study the following definitions were used:

Conferences; a formal meeting of people with a shared interest typically one that takes place over several days.[6]

Workshops: a meeting at which a group of people in intensive discussion and activities on a particular subject or project.[6]

Training courses: a series of lessons to teach the skills and knowledge for a particular job or activity.[7]

Data entry and analysis:

We used the statistical package of social sciences (SPSS V. 19) to enter and analyze the data. Descriptive and analytic data analysis was used; p-value < 0.05 was regarded as statistically significant.

Results of section 4, 5, and 6 of the questionnaire, were based on measuring the mean of answering of the questions. The mean was calculated by the following formula:

[(number of people who selected response 1)*(weighting of response 1) + (number of people who selected response 2)*(weighting of response 2)… (Number of people who selected response 5)*(weighting of response 5)] / (total number of respondents)

The Relative agree percent was calculated by the following equation:

[(number of people who selected response 1)*(weighting of response 1) + (number of people who selected response 2)*(weighting of response 2)… (Number of people who selected response 5)*(weighting of response 5)]*100 / [(total number of respondents)*(weighting of response 5)

RESULTS

We selected 80 participants to be included in this study. All but one have completed the questionnaire form with a response rate of 97.5%. So calculations of the results were based on 79 participants who have answered the questions.

Nineteen of them(24.1%) were from Ministry of Health (MoH)while 60 (75.9%) were from Directorates of Health (DoH).The distribution of participants among DoH was as follows: Erbil 39 participants (49.4%), Duhok 20 participants (25.3%), and Sulaimani 20 participants (25.3%).

The study showed that 27 participants were doctors (34.2%), twenty-four were administrative staff (30.4%), and 28 (35.4 %) participants were from other health professions.Thirty-six participants (45.6 %) were from the age group (30-40) years.

Table 1, 2, and 3 show the effect of gender, level of education

and working experience of the staff on participation in the training activities.

Table 4 shows the answers of the participants about the effectiveness of the training activities. The majority (77.72%) agreed that training had raised their awareness and improved their skills; still (37.72%) had stated that training activities were waste of time, money, and efforts. **Table 5** shows how the participants had evaluated the selection criteria for participation in the training activities while **table 6** shows whether the organizers of the training activities have paid attention to prepare, in advance, the participants to the training courses or not.

Table 1: Gender distribution of the training activities participated in last 5 years

Activity		Gender		Total (%)	P value
		Men (%)	Women (%)		
Workshop	Participated	35 (44.3)	21 (26.6)	56 (70.9)	0.23
	Didn't Participate	11 (13.9)	21 (15.2)	23 (29.1)	
		46 (58.2)	**33 (41.8)**	**79 (100)**	
Training Course	Participated	39 (49.4)	28 (35.4)	67 (84.8)	0.99
	Didn't Participate	7 (8.9)	5 (6.3)	12 (15.2)	
		46 (58.2)	**33 (41.8)**	**79 (100)**	
Conference	Participated	31 (39.2)	9 (11.4)	40 (50.6)	<0.001*
	Didn't Participate	15 (19)	24 (30.4)	39 (49.4)	
		46 (58.2)	**33 (41.8)**	**79 (100)**	

* Statistically significant association.

Table 2: Working Experience by activities participated in last 5 years.

Activity		Duration of Working Experience				Total (%)	P value
		<5 years (%)	5 - <10 Years (%)	10 - 15 Years (%)	>15 Years (%)		
Workshop	Participated	12 (15.2)	12 (15.2)	15 (19)	17 (21.5)	56 (70.9)	0.97
	Didn't Participate	4 (5.1)	5 (6.3)	6 (7.6)	8 (10.1)	23 (29.1)	
		16 (20.3)	17 (21.5)	21 (26.6)	25 (31.6)	79 (100)	
Training Course	Participated	13 (16.5)	16 (20.3)	20 (25.3)	18 (22.8)	67 (84.8)	0.1
	Didn't Participate	3 (3.8)	1 (1.3)	1 (1.3)	7 (8.9)	12 (15.2)	
		16 (20.3)	17 (21.5)	21 (26.6)	25 (31.6)	79 (100)	
Conference	Participated	4 (5.1)	10 (12.7)	15 (19)	11 (13.9)	40 (50.6)	<0.03*
	Didn't Participate	12 (15.2)	7 (8.9)	6 (7.6)	14 (17.7)	39 (49.4)	
		16 (20.3)	17 (21.5)	21 (26.6)	25 (31.6)	79 (100)	

* Statistically significant association.

Table 3: Educational level by activities participated in last 5 years.

Activity		Educational Level					Total (%)	P value
		Preparatory (%)	Secondary (%)	Institute (%)	College (%)	Higher Education (%)		
Workshop	Participated	2 (2.6)	0 (0)	1 (1.3)	25 (32.5)	27 (35.1)	55 (71.4)	0.21
	Didn't Participate	0 (0)	1 (1.3)	0 (0)	14 (18.2)	7 (9.1)	22 (28.6)	
		2 (2.6)	1 (1.3)	1 (1.3)	39 (50.6)	34 (44.2)	77 (100)	
Training	Participated	1 (1.3)	1 (1.3)	0 (0)	33 (42.9)	32 (41.6)	67 (87)	0.02*
	Didn't Participate	1 (1.3)	0 (0)	1 (1.3)	6 (7.8)	2 (2.6)	10 (13)	
		2 (2.6)	1 (1.3)	1 (1.3)	39 (50.6)	34 (44.2)	77 (100)	
Conference	Participated	1 (1.3)	1 (1.3)	1 (1.3)	10 (13)	26 (33.8)	39 (50.6)	<0.001*
	Didn't Participate	1 (1.3)	0 (0)	0 (0)	29 (37.7)	8 (10.4)	38 (49.4)	
		2 (2.6)	1 (1.3)	1 (1.3)	39 (50.6)	34 (44.2)	77 (100)	

* Statistically significant association.

Table 4: Effectiveness of the trainings

Variable	Mean	SD	R A (%)
Training raise awareness & develop skills	3.9	0.96	77.72
Training help to avoid boredom	3.9	1.13	77.72
Training develops staff social networks	3.8	1.17	76.71
Training strengthen tech. /& or admin. capabilities	3.8	0.95	75.95
Training provides technical. /& or admin. information	3.7	1.01	74.68
Trainings are wastes of time, money & efforts	1.9	1.20	37.72
Trainings helped to apply what learned to the job	3.6	1.12	72.91
Training participated were directly related to the job	3.5	1.25	70.13

SD: Standard deviation, RA: Relative agreement

Table (5): Staff selection for trainings			
Variable	Mean	SD	R. A (%)
Staff selection is based on working background & technical capabilities	2.7	1.3	53.67
Personal relationships with the manager/ supervisor helps a lot for staff selection for trainings	3.6	1.27	72.66
I'm the qualified person for most of the trainings attended	3.4	1.1	67.85
SD: Standard deviation, RA: Relative agreement			

Table (6): Pre-training notification & preparation			
Variable	Mean	SD	R. A (%)
Notified about the date of the most trainings at least 14 days before the starting date	2.5	1.33	49.37
supplied with the agenda of the training at least one week before the starting date	2.2	1.19	44.30
SD: Standard deviation, RA: Relative agreement			

DISCUSSION

Training has become an important element in improving the performance of both, the individual and the organization. Thus it is critical to follow up what has been learned during the training, to assess how much of the new learning is being put into practice, to identify factors that encourage the implementation of the new skills and information, and to ensure that the learners and their programmer meet expectations, objectives and results.[1]

About half of the staff participated were young, age between 30-40 years. This is very important for the decision makers as investment in training of young employee is usually fruitful and long lasting.

Our study has showed that men dominate women in participation in training activities; however, the differences were not statistically significant except for attendance of conferences. Studying the causes of these differences was not in the scope of this study, but predominance of man in our community, more commitment of the women in family affairs, predominance of social customs that restrict liberal movement of women can explain to some extent the causes of these differences.

This study has showed that working experience, as measured by the number of years a participant has spent as an employee, was not an important criterion in selecting people for taking part in training courses and workshops. But it has a statistical significance in selecting them for participation in conferences. This is very logical results as participation in conferences needs active role such as presentation of medical articles and taking part in scientific discussions; activities which need scientific capabilities, good experience, and sometimes possession of good English language skills. The acquisition of these skills is usually but not exclusively is gained with time. The above reasons can be also used to explain that level of education was statistically significant in selecting an employee to participate in conferences. Table 5 shows that selection for participation in training courses depends on the level of education (p value ≤ 0.02). This result needs to be studied well as those with low educational level are in more need to be enrolled in training courses in order to promote their capabilities.

The main purpose of training is to acquire and improve knowledge, skills and attitudes towards work related tasks. It is one of the most important potential motivators which can lead to both short-term and long-term benefits for individuals and organizations. There are so many benefits associated with training.[8] There is documented evidence that training activities have a positive impact on the performance of individuals and teams. Training activities can also be beneficial regarding other outcomes at both the individual and team level. e.g., attitudes, motivation, empowerment and acquisition of new skills that serves as antecedents of job performance.[9] Studies showed that training improves declarative knowledge, planning and task coordination, collaborative problem solving and communication in novel team and task environments.[10]

Regarding the attitude of the staff participated in this study toward the quality of training activities conducted over the last 5 years, most of them agreed that training activities are essential for them to raise their awareness, develop skills, avoid boredom and build good social relationships with colleagues. This is promising results about achieving the targets of training activities which are not restricted to promote technical capabilities but also to develop social relationships with other colleagues. The same results were also seen in a study from India [11] on 78 employees. However, these results do not mean that all trainees who positively assess the effectiveness of a training activity will show positive changes in performing and approaching their practical work. [1]

For a training programme to be effective and efficient, the training manager must analyze as much information as possible about the followings:

1. Organization and its goals and objectives.
2. Jobs and related tasks that need to be learned.
3. Competencies and skills that are needed to perform the job.
4. Individuals who are to be trained.[3]

But this study has showed; according to the opinions of the participants, that selection for participation in training activities was not always based on working background and technical capabilities **(table 5)**; furthermore, 72.66% of participants stated that selection was based on personal relationships with the manager/ supervisor. Here we need to take these results cautiously and to be reconsidered and studied extensively as they may seriously, once proved, endanger any effort to gain positive results from implementing training activities.

To maximize the benefits of training activities, organizers should pay considerable attention to processes that prepare participants to these activities, in advance; like notification about the date of training activities, provision of agenda of

the training courses and other relevant educational materials. We need to work more on this issue as more than half of participants have denied the presence of such preparations.

This study is a simple trial aimed at evaluating some training activities performed by Ministry of Health in Kurdistan/ Iraq over the last 5 years through measuring the reaction of the participants towards these activities. Limited time and resources were the major obstacles against doing the study on a large size sample and measuring other levels of evaluation. In addition, it should be clearly stated that assessment of any training programme need to be done on many levels to provide decision making process with accurate, wide angle and professional assessment. More comprehensive studies on larger size sample and studying other levels of assessment of training activities are needed to achieve validated results which can be adopted by decision makers.

CONCLUSION

1. Men are selected more frequently than women for participation in training activities especially in attendance of conferences.
2. High level of education and long working experiences are two important factors that increase the chance of participation in conferences.
3. As being perceived by participants, training activities have raised awareness and promote skills of the participants, especially those related to their work.
4. Selection for participation in training activities may not be totally based on scientific and objective criteria.
5. Participants in training activities are not adequately prepared before being enrolled in these activities.

RECOMMENDATION

1. Causes that prevent women from participation in training activities should be studied well and adequately being overcome.
2. Staff selection is better to be based on both educational and experience levels.
3. Selection criteria of the staff for participation in training activities should be revised and based on scientific procedures.
4. Health staff should be notifying earlier about the training activities and their agenda.

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