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Investigating the educational needs of addiction practitioners in Mashhad city, Iran

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Abstract

Introduction: The concept of need is one of the most widely used terms in various social sciences. One of these needs in terms of science and education is educational need. This research conducted to investigate the educational needs of addiction practitioners (physicians and psychologists) in Mashhad city (the second populous city of Iran).

Materials and Methods: In this descriptive study, 100 addiction practitioners (physicians and psychologists) working in hospitals and addiction treatment centers in Mashhad in 2017 were selected randomly. The research tool was a 27-items researcher-made questionnaire. Data were analyzed by SPSS software version 16, descriptive and inferential tests such as Friedman test, and T test.

Results: According to the results, 54.6% of the participants were physicians and 45.4% were psychologists. The most common educational needs of participants were "risk assessment knowledge and identification of psychiatric and addiction emergencies" with 4.2%, and the minimum training need was "knowledge of traditional medicine, recognition and use of herbal medicines for substance abuse treatment" with 3.22%. The first educational need of physicians was "knowledge about the pharmacology of maintenance and withdrawal medicines" with 18.65% and the first need for psychologists was "the skills of conducting interviews and psychological counseling for the families of patients with substance abuse" with 18.33%.

Conclusion: Comparing the scores of educational needs showed that the scores of physicians' educational needs did not differ much from the scores of psychologists' educational needs at the descriptive level. Still, the prioritization of the educational needs of physicians and psychologists is different.

Keywords: Addiction, Educational needs, Practitioner

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Introduction

Human needs are very different, but they can be classified into two general categories, psychological and material. In general, any kind of conscious human activity ultimately leads to satisfying needs (1). The motivation, effort, and training of the human being are some of the requirements. Understanding one's basic needs and providing them with conditions and facilities that can adequately address their needs can help prevent physical and mental problems, and the development of their talents (2). Considering the gap between the current situation and the optimal situation reveals the priorities and planning (3,4).

Educational needs are the desirable changes that a person or individuals in an organization need to make in terms of knowledge, skills, or behavior to perform his/her duties and responsibilities in a manner that is desirable, acceptable, and consistent with the standards of work, and create the fields for growth and excellence in various dimensions (5). The educational need is a skill, knowledge, and ability that individuals do not possess and are essential to successfully do their jobs (6). Assessment of educational needs is the first and most critical step in designing and implementing training programs that are process-based and accurate. It is the process of collecting and analyzing information that identifies the needs of individuals, groups, organizations, and communities (7). There are several definitions for need assessment. In one report, need assessment is collecting data for decision making, and achieving the goal (8). In another definition, it is the identification of educational needs and their prioritization (9), or the process of collecting and analyzing information, based on which the needs of individuals and groups are extracted and prioritized (10). The needs assessment is a systematic process between current performance and expected performance known as information to decision-making (11).

Investigating and recognizing the educational needs are prerequisites for a successful educational system and usually is the first step in educational planning. It is the first factor in creating and ensuring the effectiveness of training programs and improving expert and specialized personnel. Also, it is one of the most critical issues in curriculum planning (12). Mirzaei Karzan et al. assessed the educational needs of faculty members of Ilam University of Medical Sciences. The results showed that the educational needs were 5 subjects included education and learning, educational evaluation, research, information technology, and general field, respectively were: teaching methods, student evaluation method, essay writing in English, use of electronic resources, and writing scientific texts in English (13).

In a study by Khoshbaten et al. the most major educational needs of faculty members of Tabriz University of Medical Sciences were methods of evaluating students and other conditions in respectively, including education and learning process, how to write scientific papers, educational evaluation, research in the educational-health system, educational techniques, educational planning, programs evaluation, academic counseling and guidance, professional ethics, and computer use (14).

Regarding the absence of a similar study, and importance of issue, the present study aimed to assess the educational needs in addiction therapists.

Materials and Methods

This descriptive study examines the educational needs of addiction therapists in Mashhad city (the second populous city of Iran) in 2017. The statistical population included 135 addiction therapists. The sample size was determined using Cochran formula equal to 100 cases.

Inclusion criteria were physicians involved in the treatment of physical and mental illnesses caused by substance abuse and psychologists who had been treating the mental diseases of patients with substance abuse for at least two years. Exclusion criteria included unwillingness to complete the questionnaire and withdrawal from treating patients with substance abuse during the study.According to the Likert scale, the research instrument was a 27-item researcher-made questionnaire related to the educational needs of addiction therapists, scored between one and five. In this study, 100 questionnaires were distributed among physicians and psychologists.

To confirm the validity of instrument, the questionnaires and the primary purpose and hypothesis were delivered to several expert professors of psychiatry, and the changes and corrections desired by the professors were

considered. Cronbach's alpha multiplier was used to confirm the reliability of the questionnaire. Cronbach's alpha coefficient was 0.91 after a pre-test in 30 cases. Data analyzed through descriptive and inferential statistics (Friedman test and t-test) and SPSS software v.16.

Results

A total of one-hundred therapists participated in this study. Finally ninety seven cases (fifty-five physicians and forty-two psychologists) completed the questionnaires. There were thirty-three women and sixty men. In term of educational level, forty-two of them had a master's degree, twenty-five had a general practitioner degree, twenty-seven had a doctorate, and three of them had higher degrees. Thirty-two people aged 25-35 years, twenty-five aged 36-45 years, thirty-three aged 46-55 years, and seven aged over than 56 years.

In term of occupational experience, twenty-six participants had 2-5 years of experience, twenty-eight had 5-10 years, fourteen of them had 10-15 years, ten cases had 15- 20 years, eleven had 20-25 years, and eight cases had 25-30 years of occupational experience. Based on the level of educational needs, one person (%1) had very low educational needs, four (1.4%) had low level, seventy (%17.5) had average level, forty-six (%47.4) had high level, and twenty-nine cases (%29.9) had very high level of educational needs. The results showed that among 27 educational needs (Table 1), the significant value of the single-sample t-test in all cases (except item 6) was 0.001 (P<0.05). Therefore, it can be concluded that all the needs (except item 6) were among their educational needs. For the sixth need (knowledge of traditional medicine, identification, and use of herbal medicines to treat substance abuse), the significant value of the single t-test was 0.688, so it was not part of the educational needs of addiction therapists (P<0.05) (Table 1).Comparison of the mean scores of educational needs showed that at the descriptive level, the scores of educational needs of physicians (M = 104.4, SD = 14.32) did not differ from the score of educational needs of psychologists (M= 105.5, SD= 31.12, P= 0.688), so there is no significant difference between the educational needs of physicians and psychologists (P>0.05) (Table 2).

Also, comparing the mean scores of the educational needs of addiction therapists according to their degree shows that at the descriptive level, the scores of the educational needs of general physicians (M= 102.04, SD= 12.16) with the score of the educational needs of Specialized physicians (M= 105.7, SD= 12.86) did not differ much. Inferential analysis of data by the Friedman test also showed that the priority of the educational needs of physicians and psychologists addiction therapists is different.

The significance of the trial was 0.001 and less than 0.05 (P<0.05). The most important priorities of the educational needs of physicians and psychologists are as described in Table 4.Therefore, according to Table 4, adequate knowledge of the pharmacology to prescribe medications and medical rehabilitation (Withdrawal), knowledge of emergency medicine addictions including poisoning and abstinence syndrome and its complications, knowledge of risk assessment and identification of addiction and psychiatric emergencies, knowledge of choosing agonist and agonist-antagonist drug in substance abuse treatment, knowledge of drug side effects and drug interactions in patients with substance abuse, adequate psychiatric knowledge in dealing with psychiatric disorders associated with substance abuse, etc., are the most critical educational needs of physicians, respectively.

Also, skills for conducting interviews and psychological counseling for the families of patients with substance abuse, skills to teach rehabilitation methods after withdrawal, skills to identify new forms of addictive substances on the market, different ways of abuse, knowledge of risk assessment, and identification of addiction and psychiatric emergencies, skill to conduct clinical interviews, risk assessment, formulation of effective psychotherapy program in substance abuse, skills in choosing the right type of psychotherapy after withdrawal, theoretical knowledge of interviewing the patient, risk assessment and preparation of treatment plan, adequate knowledge of monitoring and evaluation of the course of treatment of substance-dependent patients, conducting skills in the form of national protocols, knowledge of psychological factors of addiction and substance abuse, etc., are the most critical educational needs of psychologists, respectively.

Table 1. Assessment the educational needs in addiction therapists

Educational needs	Mean	SD	Mean difference	T	Sig.
1. Knowledge of the neurobiology of addiction as a recurrent and chronic brain disease	3.79	0.865	0.794	9.035	0.001
2. Adequate knowledge of pharmacology of prescription medications and medical rehabilitation (withdrawal)	4.11	0.9	1.113	12.18	0.001
3. Adequate psychiatric knowledge in dealing with psychiatric disorders associated with substance abuse	4.13	0.786	1.134	14.22	0.001
4. Knowledge of emergency medicine addictions including poisoning and abstinence syndrome and its complications	4.08	0.932	1.082	11.44	0.001
5. Adequate knowledge of monitoring and evaluation of the course of treatment of drug-dependent patients	3.93	0.904	0.928	10.11	0.001
6. knowledge of traditional medicine, identification, and use of herbal medicines to treat substance abuse	3.22	1.157	0.216	1.843	0.068
7. Knowledge of infectious diseases and high-risk diseases related to substance abuse	3.65	0.925	0.649	6.918	0.001
8. Nutritional knowledge of the diet of patients related to substance abuse	3.44	0.829	0.443	5.268	0.001
9. Theoretical knowledge of interviewing the patient, risk assessment and preparation of treatment plan	3.95	0.841	0.979	11.46	0.001
10. Knowledge of different types of scientific classifications, how to combine and prepare drugs	3.67	0.867	0.667	7.538	0.001
11. Knowledge of methadone maintenance therapy (MMT)	4.06	0.899	1.062	11.63	0.001
12. Knowledge of medical withdrawal treatment (URD-RD)	3.86	0.901	0.856	9.351	0.001
13. Introduction of governmental and non-governmental medical institutions related to substance abuse	3.66	0.877	0.66	7.413	0.001
14. Knowledge of brain stimulation therapy in addiction treatment such as tDCS	3.55	0.902	0.546	5.968	0.001
15. Knowledge of psychological factors of addiction and substance abuse	3.86	0.935	0.856	9.01	0.001
16. Knowledge of social factors in addiction and substance abuse	3.8	0.92	0.804	8.607	0.001
17. Study articles, journals and Iranian scientific content related to substance abuse	3.76	0.998	0.763	7.531	0.001
18. Study articles, journals and foreign scientific content related to substance abuse	3.78	0.992	0.784	7.78	0.001
19. Knowledge of choosing agonist and agonist-antagonist drug in substance abuse treatment	3.96	1.03	0.959	9.168	0.001
20. Knowledge of medical side effects and interactions in patients with substance abuse	4	0.935	1	10.53	0.001
21. Skills in choosing the right type of psychotherapy after withdrawal	4.13	0.849	1.134	13.15	0.001
22. Knowledge of risk assessment and identification of addiction and psychiatric emergencies	4.2	0.812	1.196	13.51	0.001
23. Skills to identify new forms of addictive substances on the market, different methods of use	4.1	0.86	1.103	12.64	0.001
24. Skill to conduct clinical interviews, risk assessment, formulation of effective psychotherapy program in substance abuse	4.03	0.847	1.031	11.98	0.001
25. Skills to teach rehabilitation methods after withdrawal	4.15	0.808	1.155	14.07	0.001
26.Skills for conducting interviews and psychological counseling for the families of patients with substance abuse	4.14	0.79	1.144	14.26	0.001
27. Conducting skills in the form of national protocols	3.88	0.96	0.876	8.99	0.001

Table 2. Comparing the average educational needs of addiction therapists

Therapists	N	M	SD	t	df	P
Physician	55	104.4	14.32	0.402	95	0.688
Psychologist	42	105.5	12.31			

Table 3. Comparing the mean scores of educational needs of addiction therapists according to their educational degree (t-test)

Educational degree	N	M	SD	t	df	P
General physicians	25	102.4	16.12	0.937	53	0.353
Specialized physicians	30	105.70	12.86			

Table 4. Prioritize the most important educational needs of addiction therapists

N	Educational need	Physicians		Psychologists	
		Mean rank	Rank	Mean rank	Rank
1	Knowledge of the neurobiology of addiction as a recurrent and chronic brain disease	12.63	18	13	17
2	Adequate knowledge of pharmacology of prescription drugs and medical rehabilitation (Withdrawal)	18.65	1	12.58	19
3	Adequate psychiatric knowledge in dealing with psychiatric disorders associated with substance abuse	16.63	6	14.71	11
4	Knowledge of emergency medicine addictions including poisoning and abstinence syndrome and its complications	17.94	2	13.50	13
5	Adequate knowledge of monitoring and evaluation of the course of treatment of substance-dependent patients	13.28	16	16	8
6	knowledge of traditional medicine, identification, and use of herbal medicines in the treatment of substance abuse	9.35	27	10.80	27
7	Knowledge of infectious diseases and high-risk diseases related to substance abuse	11.18	24	12.08	21
8	Nutritional knowledge of the diet of patients related to substance abuse	9.45	26	9.54	26
9	Theoretical knowledge of interviewing the patient, risk assessment and preparation of treatment plan	13.20	17	16	7
10	Knowledge of different types of scientific classifications, how to combine and prepare drugs	12.37	21	11.59	23
11	Knowledge of methadone maintenance therapy (MMT)	15.96	8	14.69	12
12	Knowledge of medical withdrawal treatment(URD-RD)	15.33	9	11.98	22
13	Introduction of governmental and non-governmental medical institutions related to substance abuse	13.30	15	10.90	25
14	Knowledge of brain stimulation therapy in addiction treatment such as tDCS	10.45	25	11.38	24
15	Knowledge of psychological factors of addiction and substance abuse	11.87	23	14.89	10
16	Knowledge of social factors in addiction and substance abuse	12.13	22	13.23	16
17	Study articles, journals and Iranian scientific content related to substance abuse	12.46	19	12.67	18
18	Study articles, journals and foreign scientific content related to substance abuse	14.14	12	12.37	20
19	Knowledge of choosing agonist and agonist-antagonist drug in drug abuse treatment	17.21	4	13.46	14
20	Knowledge of drug side effects and drug interactions in patients with substance abuse	16.81	5	13.38	15
21	Skills in choosing the right type of psychotherapy after withdrawal	16.19	7	16.33	6
22	Knowledge of risk assessment and identification of addiction and psychiatric emergencies	17.22	3	16.93	4
23	Skills to identify new forms of addictive substances on the market, different methods of use	14.74	11	17.65	3
24	Skill to conduct clinical interviews, risk assessment, formulation of effective psychotherapy program in substance abuse	13.99	14	16.54	5
25	Skills to teach rehabilitation methods after withdrawal	15.01	10	17.95	2
26	Skills for conducting interviews and psychological counseling for the families of patients with substance abuse	14.05	13	18.33	1
27	Conducting skills in the form of national protocols	12.45	20	15.14	9

Discussion

The study aimed to assess the educational needs of addiction therapists. The first question of the research is what the educational needs of addiction therapists are? Data analysis showed that all the items mentioned except for item 6, are part of the educational needs of physicians and psychologists. But, knowledge of traditional medicine, identification, and use of herbal drugs in the treatment of substance abuse (item 6) were not among therapists' educational needs. The second question of the research is whether there is a difference between addiction therapists' educational needs according to their degree?

The results showed that the academic requirements are shared between physicians and psychologists and based on the level of education, and there is no difference between their educational needs. It can be concluded that training courses, retraining, and workshops for physicians or psychologists can be held jointly based on different levels of education, as well as educational issues. The next research question aims to arrange and prioritize educational needs for physicians and psychologists separately. Although in the previous problems, we saw that the conditions are expected between the two groups, but in this question, it became clear that the priority of educational needs between physicians and psychologists is different. The main reason for this difference is the type of treatment that physicians use and medical therapy, while psychologists use only psychological therapies.

Each group has identified priorities based on their professional duties. For physicians, the importance of educational needs is adequate knowledge of the pharmacology to prescribe medicines and medical rehabilitation (withdrawal), knowledge of emergency medicine addictions including poisoning and abstinence syndrome and its complications, knowledge of risk assessment, and identification of addiction and psychiatric emergencies, knowledge of choosing agonist and agonist-antagonist drug in substance abuse treatment, knowledge of drug side effects and drug interactions in patients with substance abuse, adequate psychiatric knowledge in dealing with psychiatric disorders associated with substance abuse, etc., are the most critical educational needs of physicians, etc. respectively. But these priorities are different for psychologists and are as follows: skills for conducting interviews and psychological counseling for the families of patients with substance abuse, skills to teach rehabilitation methods after withdrawal, skills to identify new forms of addictive substances on the market, different methods of abuse, knowledge of risk assessment and identification of addiction and psychiatric emergencies, skill to conduct clinical interviews, risk assessment, formulation of effective psychotherapy program in substance abuse, skills in choosing the right type of psychotherapy after withdrawal, theoretical knowledge of interviewing the patient, risk assessment and preparation of treatment plan, etc., respectively are the most critical educational needs psychologists. For both groups, traditional medicine is the last priority, consistent with the answer to the first question.

One of the reasons for this issue concluded from low therapists' trust in herbal medicines and traditional medicine or their greater trust in the advancement of modern medical science, as well as the therapists' belief in the greater effectiveness of chemical drugs and new methods in treating various diseases such as addiction. This has led therapists to feel less need for traditional medicine and herbal remedies in the treatment of substance abuse.

Therefore, they have made it the last priority. Such studies in educational and medical centers, especially in addiction treatment centers, help therapists educate and treat them in a more specialized way. Continuous education planning and training development should be based on the needs assessment of learners and training needs related to their field of work (15-18). Therefore, it is suggested that the needs of therapists be assessed periodically, and if there is a time limit for holding workshops and continuing education programs, prioritization should be considered based on the occupational field of the therapists.

One of the limitations of the study was the lack of a similar task. Doing similar research in other cities of the country according to the prevalence and difference of therapists can be useful. Identifying therapists' needs alone is not practical, and the necessary measures must be taken to meet these needs. Therefore, to meet therapists' maximum educational needs, their

ideas should be used in planning training courses and their quality and content so that the times are more responsive to educational needs.

Conclusion

Comparing the scores of educational needs showed that the scores of physicians' educational needs did not differ much from the scores of psychologists' educational needs at the descriptive level.

Still, the prioritization of the educational needs of physicians and psychologists is different.

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