

Curriculum Development in regard to Illicit Drug Abuse

Background: Illicit drug use is widely different among various societies. To date, no national curricula have been developed for medical students. To develop a community-oriented course for illicit drug use a preliminary need assessment as well as knowledge, attitude and performance of health care staff were performed.

Methods: All personnel of Sarakhs Health Network were studied in 2011. A construct questionnaire was developed and validated.

Results: The mean (SD) age of participants (n=185) was 32 (7.4) years with equal numbers of males and females. "Family problems" (Likert Scale: 137), "having an addict friend" (135) and "low determination" (133) were the most common expressed reasons for starting drug use. The most effective people in helping addicts reported to be family (151), friends (148), and Narcotics Anonymous Group (NA) (147). "Admission in hospital" (110), "staying in rehabilitation camp" (102) and "Methadone Maintenance Therapy" (101) were stated as the most effective treatment methods. Males selected these items more than females (p=0.032). "Lack of family support" (151), "presence of an addict family member or friend" (149), and "craving" (148) were the effective factors for failure. "Family support" (160), "distance from addicts" (157), and "friendly help network" (156) were the most important factors in staying off the drugs after treatment. Females selected these items more than males (p=0.03). From health care staff perspectives "Methamphetamine" (157), "Heroin" (156) and "Opium" (149) were the most addictive drugs. The most common sources for participants' information were TV and radio (65.4%).

Conclusions: Knowledge-related biological reasons of addiction and abstinence are limited among health workers, and sometimes misleading. Misperceptions and deviated knowledge and their attitude should be focused in curriculum development for health and medical educational courses.

Keywords: Knowledge; Attitude; Illicit drug; Health Education; Medical Education; Curriculum

Abbas Zavar¹, Reza Afshari^{1,2}, Mahbobeh Alidoust², Razieh Pourandi^{1,2}, Bita Dadpour³
¹Addiction Research Centre, Mashhad University of Medical Sciences, Mashhad, Iran.
²Sarakhs Health Network, Mashhad University of Medical Sciences, Mashhad, Iran.
³Medical Toxicology Centre, Mashhad University of Medical Sciences, Mashhad, Iran.

*Addiction Research Centre, Imam Reza Hospital, Ibn-e-Sina Street, Mashhad, 91735-348, Iran
 Tel: + 98 511 8598973
 Fax: + 98 511 8420305
 E-mail: Afsharir@mums.ac.ir
 Received: Mar 6, 2012
 Accepted: Mar 22, 2012

نظرة التعليم الصحي و الطبي بالنسبة الى الادوية المحظورة

التمهيد: الأُدوية المحظورة متفاوتة جداً بين مختلف المجتمعات. إلى الآن، لم يتم تطوير منبرج عالي لطلاب الطب، إنشاء مجموعة دروس تخصصية لمستعملي الأُدوية المحظورة في المرحلة الأُولى تحتاج إلى ربط المعرفة و السلوك و المباشرة من قبل عمراء الصحة بشكل واف.

الطريقة: تمت الدراسة على جميع الأُنخاص في شبكة مرضى الصحية و من تم أنشأت إستشارة و تم تأييدها.

الاستنتاج: كان متوسط اعمار المُشاركين الذين كان مجموع عددهم ١٨٥ (٧.٤) ٣٢ سنة مع تعادل نسبة الذكور و الإناث. "المشاكل العائليه" (مقياس ليكرت ١٣٧) "وجود أصدقاء مدمنون" (١٣٥) و "تحديات قليلة" (١٣٣) كانت عموماً أغلب الأسباب للبدء في استعمال الأُدوية المحظورة. الأُفراد الأكثر تأثيراً في مساعدة المدمنين يتصلون بالعائلة (١٥١)، الأصدقاء (١٤٨)، و مجموعة (NA) (١٤٧). "الإقامة بالمستشفى" (١١٠)، "الإقامة في مراكز إعادة التأهيل" (١٠٢) و "المعالجة بالمحافظة على مستوى ألتنادون" (١٠١) كانت الطرق العلاجية الأكثر تأثيراً. الذكور اختاروا هذه المواضيع أكثر من الإناث (P=0.032).

"النقص في الصلابة العائليه" (١٠١)، "الوجود في عائلته أو أصدقاء مدمنون" (١٤٩) و "الروى" (١٤٨) كانت العوامل الأكثر تأثيراً في الفشل. "الصلابة العائليه" (١٦٠)، "البعد عن المدمنين" (١٥٧) و "شبكة الإغاثة الوديه" (١٥٦) كانت العوامل الأكثر أهمية في التثبيت على مقاطعة الأُدوية بعد العلاج. الإناث اختاروا هذه المواضيع أكثر من الذكور (P=0.03) من وجهة نظر عمراء الصحة "مبتدئين" (١٥٧)، "أرويين" (١٥٦) و "أوبيوم" (١٤٩) كانت أغلب أُدوية الأدمان. و أكثر المصادر المعلومات للمشاركين كانت عموماً عبر التلويزيون و الراديو (٦٥.٤%).

النتيجة: المعرفة بالأسباب البيولوجية للأدمان و عمره محدودة فيما بين عمال الصحة و في بعض الأحيان مفررة و بسبب نقصان الأُدرار و إنحراف المعرفة و السلوك يجب أن يتم التركيز على تطوير منبرجيه المواد التعليمية الصحية و الطبيه.

الكلمات الرئيسية: المعرفة، السلوك، عمراء الصحة، الأُدوية الغيرقانونيه، التعليم.

منشيات کے استعمال کے تعلق سے طبی نصاب میں بہتری لانا

بیک گراؤنڈ: مختلف معاشروں میں منشیات کا استعمال مختلف طریقوں سے پایا جاتا ہے۔ اس وقت ملک کے طبی تعلیمی نصاب میں منشیات سے مقابلہ کرنے کا موضوع شامل نہیں ہے۔ اسی غرض سے یہ تحقیق انجام دی گئی ہے کہ طب کے شعبے سے منسلک افراد کو منشیات سے مقابلہ کرنے سے آگاہ کیا جائے۔

روش: سرخس شہر کے طبی شعبوں سے وابستہ افراد پر یہ تحقیق انجام دی گئی۔ یہ تحقیق دوپزار گیارہ اور بارہ میں انجام دی گئی۔

نتائج: جن لوگوں کو تحقیق میں شامل کیا گیا تھا ان کی عمر اوسطاً پینتیس برس کی تھی۔ مردوں اور خواتین کی تعداد برابر تھی اور کل ملا کر ایک سو پچاسی افراد تھے۔ لیکن تجزیاتی وسیلے سے انجام دئے گئے تجزیے کے مطابق منشیات کی عادت شروع کرنے میں گھریلو مسائل، منشیات کے عادی دوست اور قوت ارادی کی کمزوری کا ذکر کیا گیا ہے۔ منشیات کے عادی افراد کی مدد کرنے والے میں سب سے زیادہ موثر لوگ اہل خانہ، دوست اور سابق منشیات کے عادی افراد بتائے گئے ہیں۔ تحقیق میں شامل افراد کے مطابق، اسپتال میں علاج، کیمپ میں علاج اور بناؤن سے علاج منشیات کی عادت چھڑانے میں بہتر طریقے بتائے گئے ہیں۔ یہ انتخاب مردوں میں زیادہ تھا۔

سپورٹ نہ ہونا، گھر میں یا دوستوں میں منشیات کے عادی افراد کا ہونا منشیات کی لت میں دوبارہ گرفتار ہونے کے اہم ترین اسباب قرار دئے گئے ہیں جبکہ دوستوں کی مدد اور اہل خانہ کی حمایت کامیاب علاج میں موثر بتائی گئی ہے۔

سفارشات: منشیات کے عادی افراد نشے کی علت کے نقصانات اور اس سے پیچھا چھڑانے کی افادیت سے آگاہ نہیں تھے، طبی شعبوں سے وابستہ افراد کی اس کمزوری کو دور کرنے کی نہایت ضرورت ہے اور اس کے لئے طبی نصاب میں ایک موضوع کو شامل کیا جانا چاہیے۔

کلیدی الفاظ: آگہی، منشیات، طبی شعبے۔

بہبود کوریکولوم آموزشی در خصوص سوء مصرف مواد غیر قانونی

زمینه و هدف: الگوی مصرف مواد غیر قانونی در جوامع مختلف متفاوت است. در حال حاضر این موضوع در مباحث کوریکولوم آموزش پزشکی کشور وجود ندارد. با هدف پیشنهادهای ایجاد دوره آموزشی جامعه محور در خصوص مصرف مواد غیر قانونی؛ آگاهی، نگرش و عملکرد کارکنان حوزه سلامت در این خصوص مورد ارزیابی قرار گرفت.

روش: کارکنان حوزه سلامت شاغل در واحدهای مختلف شبکه بهداشت و درمان سرخس در سال ۱۳۹۰ مورد مطالعه قرار گرفتند. پرسشنامه در دسترس، بهبود یافته و معتبر گردید.

یافته ها: میانگین سنی موارد پژوهشی (۱۸۵ نفر) حدود ۳۲±۷/۴ بود. افراد مورد بررسی از نظر جنسیت هم تعداد بودند. بر اساس رتبه بندی لیکنرت عوامل موثر در شروع مصرف مواد مشکلات خانوادگی، وجود دوست معتاد و ضعف اراده انتخاب گردید. موثرترین افراد جهت کمک به فرد مصرف کننده به ترتیب خانواده، دوست و گروه معتادان گمنام (NA) پیشنهاد گردید. از نظر افراد مورد پژوهش درمان بستری، درمان در کمپ و درمان نگهدارنده با متادون سه روش موثرتر درمان بود. این ترتیب انتخاب در مردان بارزتر بود (p=0.032). عدم وجود حمایت، وجود دوست یا خانواده معتاد و وسوسه بیشترین عوامل موثر در شکست درمان انتخاب شدند. حمایت خانوادگی، دوری از افراد معتاد و حمایت دوستان موثرترین عوامل در ادامه درمان شناخته شدند. این ترتیب انتخاب در زنان معنی دار بود (p=0.03). شیشه (مت آمفتامین)، هروین و تریاک در بین مواد غیر قانونی، اعتیادآورتر انتخاب شدند. بیشترین منبع کسب اطلاعات افراد مورد پژوهش در موضوع مصرف مواد غیرقانونی، رادیو و تلویزیون بود (۶۵/۴٪).

نتیجه گیری: آگاهی افراد شرکت کننده نسبت به اعتیاد و ترک آن محدود بود. ضعف آگاهی و نگرش کارکنان حوزه سلامت در موضوع مصرف مواد غیرقانونی باید با بهبود کوریکولوم های آموزش پزشکی و بهداشت مرتفع گردد.

واژه های کلیدی: آگاهی، نگرش، مواد غیرقانونی، آموزش بهداشت، آموزش پزشکی، کوریکولوم

INTRODUCTION

Illegal drug use is one of the health care problems and major social issues in the world (1-2). Since Iran is a neighbor of Afghanistan, which is the biggest producer of narcotic drugs, and for the historical and other reasons; this country is one of the victims of drug abuse in the world (3). Addiction is prevalent in Iran (4). Based on international reports, Iran has the highest rate of using opiate (opium and heroin) in the world (450 million tons in the year) (5-10). Available statistics, from United Nations Office on Drugs and Crime (UNODC) showed that more than two millions of Iranian population (3%) were addicted to illegal drugs including opiates, cannabis (hashish) and stimulants in 2010 (5,11-13). It is widely recognized that while substance misuse is increasing in prevalence, this is not properly reflected in the composition of medical curricula (14).

Cognitive or awareness factors are the personal information about the effects and disadvantages of drugs. In fact, people who know about negative outcomes of drugs are less likely to use them comparing with those uninformed (15). People's attitude plays a very imperative role in their future performance, and stronger and the more knowledge, experience and education-based it is the more effective in person's future behavior (16). Supporting addicts or those under treatment and rehabilitation is directly influenced by person's knowledge and understanding of addiction, treatment efficiency, and rehabilitations benefits (17). Assessing people's attitude in any given time and also evaluating attitude changes during passage of time is one of the main components of interventional evaluation which is taking place for improving attitude. To perform this evaluation, a special tool with specified accuracy is necessary (18). Awareness is mind's data collection tool in order to use or recording the information. Attitude reflects physical and psychological tendencies towards surrounding issues and usually comes after knowledge (19).

Before planning education of curricula, the need should be assessed, therefore knowledge, attitude, and practice (KAP) studies should be performed. Such studies not only help recognizing the need for medical and health education but also are necessary for the next evaluation of health education by understanding the change of KAP (19).

Despite the key role of physicians and health care staff in promoting health goals and also their critical position in community education, little information about their level of knowledge, attitude, and performance regarding substance/drug use is available to develop a local course plan. This information is necessary for health care programmers to plan appropriate educational and training programs for physicians and health care staff (nurses, midwives, paramedical staff, and professional health workers) and subsequently their covered community.

We surveyed illegal drug use-related knowledge and attitudes of health care workers in Sarakhs Health Network, to assess their educational needs and to develop a locally validated course plan.

METHODS

Population and sample

Study population included health care staff (physicians, nurses, midwives, paramedical staff, and professional health

workers) of Sarakhs Health Network (around 300 employees – only those staff and physicians who work directly in health or treatment district). Study sample was calculated to be 185 based on Morgan's Table. Study participants were randomly selected based on their presence at work place during survey time and their consent to participate. Selection continued until study sample reached 185.

Questionnaire

Data was gathered by knowledge and attitude questionnaire with multiple choice and Likert scales, consisting three parts; demographic information, knowledge evaluation including 9 questions with 78 answering items in Likert Scale, and attitude assessment including 2 questions with 31 answering items in Likert Scale. To determine the validity of questionnaire, content validity evaluation methods were used and experts' opinions were collected. To assess the reliability of questionnaire two steps were taken; Item Analyses Method (to find ambiguous or problem points) and Test-Retest Method. In the first step 10 questionnaires were filled by staff, and ambiguous or problematic points were detected and corrected. In the second step 30 questionnaires were filled by selected staff, Cronbach's alpha coefficient was used to assess the reliability of tests and weak questions were removed. With statistical assessment, Cronbach's alpha for knowledge assessment part of questionnaire was 0.61 to 0.86, and for attitude assessment part of questionnaire was 0.78 to 0.91. The overall alpha Cronbach of the questionnaire was 0.84. In general, evidences showed that homology of questions under each scale (each part of questionnaire) were in an acceptable range.

Data handling

Data was gathered with direct interview and through questionnaire in selected units. Before distributing questionnaires, participants were assured about the confidentiality of their data and their choice in participation. 185 questionnaires were filled. Data was coded and entered in SPSS-version 11.5 and then analyzed. The relations between variables were evaluated by crosstabs, Chi-square and Spearman tests. Mann Whitney non parametric test and Kruskal-Wallis were used to detect the differences between the means of independent variables. $P < 0.05$ was considered significant in all calculations. The results are reported as mean (SD).

RESULTS

185 participants were included in this study, 50% male (92 subjects). Health care staff included 26 physicians, 43 nurses, 21 midwives, 15 paramedical staff, as well as 80 professional health workers (Behvarz). The mean age (SD, Min-Max) of participants was 32 (7.4, 22-47) years old.

Relations between all items were selected by participants and sex, age and ethnicity have been illustrated in table 1.

Participants believed that Methamphetamine (locally called Shisheh), heroin (locally called crystal heroin or crack heroin) and opium were the most dangerous drugs for individual health. On the other hand, Betel's Nut (locally called Nas), Norgizak (Heroin & Dexamethasone) and Cigarette smoking were perceived to be less hazardous. Most of the staff had appropriate level of information about side effects of most available drugs in the community, but there were fewer answers for unfamiliar drugs such as Norgizak.

In this study participants thought that addiction is a sickness (Likert Scale: 75), drug access is easy (74), addiction is treatable (68), youth are more involved with drugs (64) and addicts deserve our sympathy (61). Just small proportion of participants believed that addiction is a crime (29), suitable for marriage (32), addicts are dangerous (32) and drug abuse is a stress reliever (33).

The sources of staff information about illegal drugs and

addiction have been shown in table 2.

Participants reported their knowledge level about addiction to be high 44%, average 40% and limited 16%.

The main sources of information about illegal drugs and addiction were television, radio, and press. Among them, just 7% got their information from textbooks or scientific literature. Finally, 95% felt the essential need for more information about illegal drugs and addiction.

Table 1. Health staff's opinion towards different features of illicit drug abuse based on their sex, age and ethnicity.

| Proposed item | Likert Scale Descending | Sex (Men to Women) P value | Age (Young to Old) P value | Ethnicity (Fars to Non-Fars) P value |
|-------------------------------------|-------------------------|----------------------------|----------------------------|--------------------------------------|
| Precipitating Factors | | | | |
| Family problems | 137.42 | 0.30 | 0.15 | 0.46 |
| Have an addict friend | 134.69 | 0.26 | 0.20 | 0.76 |
| Low determination | 133.07 | 0.41 | 0.75 | 0.73 |
| Pleasure | 131.93 | 0.79 | 0.16 | 0.08 |
| To forget problems | 129.87 | 0.01 | 0.07 | 0.27 |
| Lack of appropriate recreation | 127.59 | 0.57 | 0.64 | 0.10 |
| Emotional problems | 126.97 | 0.14 | 0.80 | 0.51 |
| Lack of hope to future | 126.58 | 0.18 | 0.79 | 0.19 |
| Curiosity | 125.50 | 0.79 | 0.12 | 0.07 |
| Psychological and neurotic problems | 116.74 | 0.21 | 0.02 | 0.93 |
| Increasing sexual power | 111.97 | 0.65 | 0.26 | 0.95 |
| Physical pain | 110.97 | 0.01 | 0.01 | 0.34 |
| To increase working power | 110.79 | 0.23 | 0.94 | 0.46 |
| Lack of pleasure from sex | 109.73 | 0.86 | 0.69 | 0.56 |
| Supportive structures | | | | |
| Family | 151.89 | 0.68 | 0.07 | 0.82 |
| Friends | 148.56 | 0.18 | 0.72 | 0.85 |
| Narcotics Anonymous group (NA) | 147.24 | 0.04 | 0.38 | 0.38 |
| Psychologists | 143.63 | 0.99 | 0.54 | 0.92 |
| Psychiatrists | 138.14 | 0.33 | 0.33 | 0.49 |
| Social workers | 130.97 | 0.04 | 0.63 | 0.91 |
| Relatives | 128.28 | 0.07 | 0.19 | 0.83 |
| Specialist doctors | 117.57 | 0.01 | 0.46 | 0.73 |
| General physician | 100.90 | 0.58 | 0.80 | 0.69 |
| Police forces | 94.46 | 0.08 | 0.48 | 0.12 |
| Treatment methods | | | | |
| Admission in hospital | 110.22 | 0.60 | 0.47 | 0.47 |
| Admission in rehabilitation camps | 102.26 | 0.25 | 0.54 | 0.54 |
| Methadone Maintenance Therapy | 101.12 | 0.37 | 0.04 | 0.04 |
| Buprenorphine Maintenance Therapy | 96.41 | 0.27 | 0.31 | 0.31 |
| Outpatient treatment in the clinic | 93.84 | 0.27 | 0.56 | 0.90 |
| Opium Tincture Maintenance Therapy | 90.98 | 0.19 | 0.15 | 0.55 |
| Ultra rapid opioid detoxification | 90.31 | 0.06 | 0.49 | 0.63 |
| CNS medication | 89.18 | 0.04 | 0.64 | 0.85 |
| Tramadol maintenance treatment | 88.00 | 0.44 | 0.26 | 0.91 |
| Traditional treatment in home | 80.73 | 0.75 | 0.44 | 0.36 |
| Imprisonment | 72.76 | 0.16 | 0.53 | 1.00 |

| Table 1. (Continued.) | | | | |
|---|--------|-------------|-------------|-------------|
| Failure related variables | | | | |
| Lack of adequate family support | 151.59 | 0.50 | 0.01 | 0.90 |
| Presence of an addict friend | 149.58 | 0.95 | 0.02 | 0.76 |
| Craving | 148.78 | 0.18 | 0.68 | 0.34 |
| Personality disorder | 139.90 | 0.29 | 0.26 | 0.85 |
| Withdrawal symptoms | 139.64 | 0.04 | 0.27 | 0.94 |
| Presence of an addict family member | 138.25 | 0.31 | 0.01 | 0.10 |
| Pain | 136.38 | 0.20 | 0.33 | 0.45 |
| The insistence of friends and peers | 134.56 | 0.14 | 0.77 | 0.44 |
| Financial problems/unemployment | 132.13 | 0.02 | 0.92 | 0.60 |
| Depression / mood problems | 130.91 | 0.08 | 0.94 | 0.01 |
| lack of motivation for treatment continuation | 128.43 | 0.68 | 0.46 | 0.42 |
| Insomnia | 127.43 | 0.03 | 0.86 | 0.45 |
| Factors related to continuing treatment | | | | |
| Family support | 160.45 | 0.49 | 0.43 | 0.96 |
| Distance from addicts | 157.47 | 0.03 | 0.06 | 0.62 |
| Friends Helping | 156.67 | 0.29 | 0.64 | 0.94 |
| Relatives Helping | 151.40 | 0.20 | 0.74 | 0.79 |
| Exercise | 151.22 | 0.50 | 0.31 | 0.62 |
| Recreational and artistic activities | 151.06 | 0.17 | 0.86 | 0.43 |
| Rehabilitation centers Counseling | 151.00 | 0.99 | 0.15 | 0.41 |
| Employment | 149.22 | 0.47 | 0.18 | 0.07 |
| Treatment of neurological/mental problems | 146.04 | 0.02 | 0.36 | 0.30 |
| Treatment of physical problems | 143.26 | 0.52 | 0.45 | 0.09 |
| Change of residence | 118.36 | 0.53 | 0.30 | 0.13 |
| Limitation and controlling at home | 106.35 | 0.61 | 0.05 | 0.95 |
| Health risks of different illicit drugs | | | | |
| Shisheh (Glass; Methamphetamine) | 157.25 | 0.93 | 0.77 | 0.80 |
| Heroin\Crystal\Crack | 156.52 | 0.92 | 0.56 | 0.59 |
| Opium | 149.63 | 0.50 | 0.65 | 0.70 |
| Opium Residue | 149.04 | 0.32 | 0.70 | 0.99 |
| Cannabis (Marijuana\ Hashish) | 147.94 | 0.34 | 0.39 | 0.50 |
| Psychoactive Pills | 146.65 | 0.91 | 0.78 | 0.53 |
| Alcohol | 142.16 | 0.68 | 0.32 | 0.15 |
| Tramadol | 135.42 | 0.15 | 0.58 | 0.07 |
| Cigarette smoking | 133.09 | 0.86 | 0.42 | 0.36 |
| Betel's Nut (Nas) | 121.34 | 1.00 | 0.99 | 0.35 |
| Norgizak (Heroin & Dexamethasone) | 118.54 | 0.79 | 0.51 | 0.07 |
| Adverse health impact of different drugs | | | | |
| Family | 166.12 | 0.85 | 0.60 | 0.73 |
| Communication with relatives | 160.51 | 0.32 | 0.94 | 0.79 |
| Communication with friends | 160.03 | 0.24 | 0.63 | 0.59 |
| Psychological Health | 159.03 | 0.99 | 0.51 | 0.79 |
| Create legal problems (i.e. prisons) | 156.03 | 0.96 | 0.19 | 0.46 |
| Physical Health | 148.70 | 0.74 | 0.26 | 0.95 |

Significant items have been bold and highlighted.

Table2. The sources of staff information.

| Source | Radio/ TV | News paper | School | Physicians | Health care staff | Relatives | Friends | Police | Education sessions |
|--------|--------------|---------------|--------|------------|----------------------|-----------|---------|--------|-----------------------|
| % | 65.4 | 9.3 | 0.5 | 2.2 | 6 | 3.3 | 3.8 | 1.6 | 7.1 |

DISCUSSION

In this study “Family”, “Friends” and “NA” were respectively reported to be the most effective groups in helping addicts. Results from similar studies from Iran and other countries also predicted the role of acquaintances (family, friends and relatives) as the most effective factor in beginning to use drugs (20,21,22). Data analysis showed that participants are not optimistic about addiction treatment methods and most of them believed that helping an addict, after the important role of acquaintance, is the job of a psychiatrist, physiologist, and even NA. Most of participants believed that steps taken by police have a limited role in addiction control. Future course plans should focus on correcting divert attitude of health workers. This is similar to the previous findings (20,21).

The most effective treatment methods were respectively perceived to be “admission in hospital”, “staying in rehabilitation camp”, and “Methadone Maintenance Therapy”. This is somehow different from what we expected. Rehabilitation camps, which majority are illegal, received a high social attention even among health workers. This should be addressed rigorously.

“Addicted friend”, “lack of appropriate support” and “high temptation” were recognized as the most “effective factors for failure”. These results are similar to other study results that have been done in Tehran and Bam (20,21).

This study revealed wide gaps in knowledge about drug use/misuse, prevention programs, and treatment options which is similar to previous findings (23).

Health professionals’ attitude towards addiction was also rather inappropriate. These should be focused in curriculum development for health and medical educational courses.

Since physicians and health care staff are influentially positioned in improving community health, their knowledge and attitudes towards illicit drugs, preventive programs, and performing educational sessions are essential. Expanding and enrichment of ongoing education may be necessary to expedite changes. It seems necessary to incorporate drug abuse prevention courses into education program of

medical, nursing, midwifery, and paramedical students.

Although changes made in the medical education curricula of medical schools have resulted in many challenges during the recent decades (24), but it seems that adding a course named as Drug Abuse Prevention to the medical and paramedical education period is a real necessity.

Developing continuous education programs for current health care staff are also recommended. These findings could be useful to formulate and implement evidence-based education. Using standardized addiction cases based on these findings could be helpful (25).

In addition, further investigations are needed to clarify why 80% of health staff got information from public media instead of medical resources or educational sessions.

In conclusion, knowledge of these educational gaps could build the capacity of medical educators to develop targeted educational materials that could improve the preventive and treatment practices of health care providers. Consistent with previous recommendations, developing a national curriculum is needed to improve the quality and frequency of educational program in order to optimize students’ knowledge. Substance abuse competencies should be integrated into medical and health training (26).

Local information is essential for drug abuse. Better curriculum publication guidelines in this regard would help ensure that provided literature has a positive impact on public health (27).

ACKNOWLEDGEMENT

We appreciated vice chancellor for research of Mashhad University of Medical Sciences (MUMS) that supported this study. Also we are grateful to all of the Sarakhs Health Network staff who participated in this study. We express our special thanks to professional supports of Dr. Farhodian (Welfare and Rehabilitation Sciences University).

Research committee approval and financial support: This study was approved (No; 900742) and financially supported by Mashhad University of Medical Sciences.

Conflict of interest: The authors declare no conflict of interest.

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