

Comparing the Effects of Methadone Maintenance Treatment, Therapeutic Community, and Residential Rehabilitation on Quality of Life and Mental Health of Drug Addicts

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Original Article

Abstract

Background: This study compared the effects of three drug addiction treatment methods on quality of life and mental health of drug addicts.

Methods: In this study, 227 Iranian male drug addicts were selected from Mazandaran Province (northern Iran). They were randomized to be treated with methadone maintenance treatment, therapeutic community, or residential rehabilitation. The Short Form Health Survey (SF-36) and the General Health Questionnaire (GHQ) were completed by the subjects at the start and end of the study. The length of intervention and SF-36 and GHQ scores before and after treatment were compared between groups. All statistical analyses were performed in SPSS.

Findings: Significant differences in quality of life and mental health scores were found between the three groups. We found that if drug addicts stay in the therapeutic community center for more than 6 months, this method will be the most effective intervention to improve quality of life and mental health of drug abusers.

Conclusion: Evaluation of different methods drug addiction treatment is very difficult. Therefore, further studies are required to better understand the effects of therapeutic community.

Keywords: Quality of life, Mental health, Drug abuse, Methadone maintenance, Residential rehabilitation, Therapeutic community

Citation: Babaie E, Razeghi N. Comparing the Effects of Methadone Maintenance Treatment, Therapeutic Community, and Residential Rehabilitation on Quality of Life and Mental Health of Drug Addicts. *Addict Health* 2013; 5(1-2): 16-20.

Received: 24.07.2012

Accepted: 07.11.2012

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Introduction

The root cause of drug abuse and thus its treatment are very complicated. Therefore, a wide range of different treatment protocols and interventions, including behavioral and pharmacological approaches, should be used and considered. Some interventions aim to avoid the risk by reducing the amount and frequency of drug use.¹ Each of the various theories of treatment considers a certain process in explaining the behavioral characteristics of addiction and addicts. Changes in people's tendencies over time have altered their attitudes towards various methods of addiction treatments. Pedersen et al. evaluated different methods of therapy during 1998-2008. They suggested that total abstinence rates are highly consistent over time and seem to change little with changes in systems of care. Moreover, their findings indicated that the tendencies and attitudes of participants were in favor of residential rehabilitation rather than daily treatment.²

Many studies have examined the efficacy of methadone maintenance treatment, residential rehabilitation, and therapeutic community on the quality of life and mental health of addicted persons. Changes in care that improve access to treatment may reduce the overall burden of opioid addiction to both individuals and society. Mider believed that psychological characteristics of individuals determine how they respond to treatment. He found differences between drug addicts in a therapeutic community and those under methadone maintenance treatment since the first was based on interpersonal relations and the latter increased social dependence.³

Results of most previous studies have indicated that a combination of different methods is the most effective treatment for addiction with great influences on the quality of life and mental health of addicted persons. The general objective of the current study was to compare the efficacy of methadone maintenance treatment, therapeutic community, and residential rehabilitation in improving quality of life and mental health of drug addicts.

Methods

This study compared mean scores of quality of life and mental health between drug addicts

treated by methadone maintenance, therapeutic community, and residential rehabilitation.

Cluster sampling method was used to select male drug addicts in Mazandaran Province (northern Iran). The subjects aged 20-45 years old and were allocated to three groups of methadone maintenance treatment ($n = 112$), residential rehabilitation ($n = 90$), and therapeutic community ($n = 25$).

All groups completed the Short Form Health Survey (SF-36) and the General Health Questionnaire (GHQ). The SF-36 is a 36-item generic health questionnaire that measures eight dimensions of health status including physical functioning (PF), role limitation due to physical problems (RP), role limitation due to emotional problems (RE), social functioning (SF), mental health (MH), energy and vitality (EV), bodily pain (BP), and general health perception (GH). Scores of each dimension range from zero to 100. A score of 100 indicates the highest rate of health. In addition, a mental component summary (MCS) and a physical component summary (PCS) can be derived from these eight scales by factor analysis.

GHQ is the most common tool to assess mental health. It was developed as a screening tool to detect individuals likely to have or be at risk of developing psychiatric disorders and can thus reveal common mental health problems/domains including depression, anxiety, somatic symptoms, and social withdrawal. Although a variety of versions with 12, 28, 30, or 60 items are available, the 28-item version (GHQ28) is used most widely. This is not only because of time considerations but also because the GHQ28 has been used more often in other populations, allowing for more valid comparisons.

Analysis of covariance (ANCOVA) was used to compare the differences in mean scores of the three groups. Differences were considered significant at $P < 0.05$. All statistical analyses were performed in SPSS₁₅ (SPSS Inc., Chicago, IL, USA).

Results

Table 1 shows the frequency and percentage of participants in the three groups. Table 2 summarizes mean and standard deviation (SD) of mental health and quality of life scores of the three groups. At baseline, mean scores of mental health in methadone maintenance treatment, therapeutic community, and residential rehabilitation groups were 93.39 ± 8.89 , 97.00 ± 10.11 , and 95.10 ± 11.83 ,

respectively. The corresponding values in posttest were 95.19 ± 9.76 , 102.90 ± 4.35 , and 96.46 ± 15.51 (Table 2). Mean scores of quality of life in methadone maintenance treatment, therapeutic community, and residential rehabilitation groups in pretest were 111.76 ± 16.60 , 118.64 ± 18.78 , and 114.83 ± 16.67 , respectively. The values changed to 114.45 ± 17.18 , 128.27 ± 13.57 , and 114.03 ± 20.87 in posttest (Table 2).

Table 1. Frequency and percentage of participants in three groups of addiction treatment

	Frequency	Percent
Methadone maintenance treatment	33	28.7
Therapeutic community	11	9.6
Residential rehabilitation	71	61.7
Total	115	100

Comparison of mental health scores between the three groups showed $f = 1.108$ and $P = 0.334$. Mean scores of mental health in posttest were higher in therapeutic community group compared to the other two groups. On the other hand, comparison of mean scores of quality of life between the three groups resulted in $f = 2.404$ and $P = 0.095$. Mean scores of quality of life in posttest were higher in therapeutic community group compared to the other two groups.

Discussion

Our results support the feasibility and efficacy of therapeutic community method in improving quality of life among drug addicts. This method was found to be superior to other treatment methods such as methadone maintenance treatment and residential rehabilitation. There are several possible explanations for the positive outcomes of treating substance abuse by therapeutic community method. First, certain components of therapeutic community method may reduce barriers to treatment entry and

retention. In fact, treatment in therapeutic community creates a social and psychological environment conducive to bringing a person to recovery. In therapeutic community, emphasis is on long-term care with focus on cognitive-behavioral approach. Cognitive-behavioral therapy in turn concentrates on education, learning, changing attitude, developing positive characteristics, self-control, and self-efficacy. The basic philosophy of a therapeutic community is that the addicted person becomes addicted not only to the substance, but also to the environment. Previous research has indicated the positive outcomes of treatment based on therapeutic community. Perfas and Spross showed that staying in a therapeutic community for long or short periods of time result in different effects on the addicted person.⁴

Although therapeutic community programs have improved the rate of recovery in drug addicts, they may create a cultural conflict for paraprofessional staff members who work with the drug-free self-help philosophy. McCusker et al. conducted a study to compare addicted people who stayed in a residential rehabilitation center for 40 days and those who stayed in a therapeutic community for 6-12 months. Their findings indicated that 539 clients (86%) completed follow-up interviews until at least 16.5 months after admission.

Moreover, 6-month programs were generally beneficial only to those who stayed at least 40 days while 12-month programs of therapeutic community were efficient among addicts who stayed in the center for at least 171 days.⁵

Guydish et al. compared different methods of drug abuse treatment. They found that after 18 months of follow up, methadone maintenance treatment was effective on some psychological problems. However, treatment in residential rehabilitation center with a stay of more than 6 months was more effective.⁶ Similarly, Tate et al.

Table 2. Scores of mental health and quality of life among three groups of methadone maintenance treatment ($n = 33$), therapeutic community ($n = 11$) and residential rehabilitation ($n = 71$)

	Group	Before treatment	After treatment
Mental health	Methadone maintenance	93.39 ± 8.89	95.19 ± 9.76
	Therapeutic community	97.00 ± 10.11	102.90 ± 4.35
	Residential rehabilitation	95.10 ± 11.83	96.46 ± 15.51
Quality of life	Methadone maintenance	111.76 ± 16.60	114.45 ± 17.18
	Therapeutic community	118.64 ± 18.78	128.27 ± 13.57
	Residential rehabilitation	114.83 ± 16.67	114.03 ± 20.87

indicated that multidimensional rehabilitation interventions, which include psychological factors such as psychological-behavioral approaches, would reduce the problems and the chance of drug abuse recurrence.⁷ Smith et al. reported staying in residential rehabilitation or therapeutic community centers for less than 6 months to fail to have significant effects.⁸ According to Sorensen et al., drug addicts who stay in a therapeutic community center for 3 months or more will obtain better results compared to those treated with methadone maintenance and residential rehabilitation.⁹ Smye et al. found that methadone maintenance treatment is not only used along with various other methods, but also well accepted in different cultural and political contexts.¹⁰ In contrast, Andersen et al. concluded that methadone can highly decrease the attention span of a person and can negatively change brain cell structures.¹¹ Greenberg et al. conducted a research on addicted people who were receiving methadone maintenance treatment while staying in a residential rehabilitation.¹² They confirmed that the combination of methadone maintenance treatment, residential rehabilitation, and therapeutic community is significantly effective on the quality of

life and mental health of drug addicts.

Our study had several important limitations. First, our findings may not be generalized to all addicts because we only focused on male gender. Another potential limitation of this study was the small sample size. However, since there is only one therapeutic community center in the whole northern part of Iran, it was not possible to assess a larger sample. Moreover, it was impossible to find subjects after they had left the center and thus the follow-up period could not continue for more than one year.

In conclusion, this study found therapeutic community method to be beneficial for substance-abuse treatment. This study also underscored the constant need for well-designed studies on therapeutic community method to improve the future health and well-being of drug addicts

Conflict of Interest

The Authors have no conflict of interest.

Acknowledgements

This study was supported by Grant-in-Aid for Scientific Research from Payame Noor University, Sari, Iran.

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مقایسه اثربخشی روش‌های درمانی مختلف: درمان نگهدارنده با متادون، درمان در مراکز اقامتی میان مدت کمپ‌ها و درمان در اجتماع درمان‌مدار بر روی کیفیت زندگی و سلامت روان

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مقاله پژوهشی

چکیده

مقدمه: هدف از تحقیق حاضر، مقایسه اثربخشی برنامه‌های درمانی ترک اعتیاد با درمان دارویی (فقط درمان با متادون)، درمان با رویکرد اجتماع درمان‌مدار و درمان در مراکز بهبودی اقامتی میان مدت بر کیفیت زندگی و سلامت روان بود.

روش‌ها: به منظور دستیابی به اهداف پژوهش، ۲۲۷ فرد معتاد که به سه شیوه درمانی فوق در استان مازندران تحت درمان قرار گرفته بودند، انتخاب شدند. نمونه‌ها با استفاده از دو پرسش‌نامه سلامت روان و کیفیت زندگی برای تعیین اثربخشی هر یک از شیوه‌های درمانی ذکر شده، مورد ارزیابی قرار گرفت و در سه گروه درمان به شیوه اجتماع درمان‌مدار، درمان نگهدارنده با متادون و درمان در مراکز اقامتی میان مدت کمپ‌ها دسته‌بندی گردید. طول مدت درمان، سلامت روان و کیفیت زندگی افراد قبل و بعد از مداخلات درمانی نیز سنجیده شد.

یافته‌ها: اختلاف معنی‌داری در کیفیت زندگی و سلامت روان افراد مبتلا به اعتیاد به مواد مخدر به سه شیوه درمان نگهدارنده با متادون، درمان به شیوه اجتماع درمان‌مدار و درمان در مراکز اقامتی وجود داشت. یافته‌های پژوهش مؤید این مطلب بود که اگر افراد به مدت ۶ ماه یا بیشتر در مراکز اجتماع درمان‌مدار به سر برند، شیوه اجتماع درمان‌مدار مؤثرترین روش مداخله درمانی در درمان افراد وابسته به مواد می‌باشد.

نتیجه‌گیری: ارزیابی از شیوه‌های متفاوت درمانی در درمان سوء استفاده از مواد مخدر بسیار مشکل است. نتایج پژوهش حاضر بیانگر این موضوع می‌باشد که، بررسی‌های بیشتری نیاز است تا بتوان به اثربخشی درمان به شیوه اجتماع درمان‌مدار پی برد.

واژگان کلیدی: کیفیت زندگی، سلامت روان، سوء مصرف مواد، درمان نگهدارنده با متادون، درمان در مراکز اقامتی میان مدت کمپ‌ها، درمان در اجتماع درمان‌مدار

ارجاع: بابایی انسیه، رازقی نادر. مقایسه اثربخشی روش‌های درمانی مختلف: درمان نگهدارنده با متادون، درمان در مراکز اقامتی میان مدت کمپ‌ها و درمان در اجتماع درمان‌مدار بر روی کیفیت زندگی و سلامت روان. مجله اعتیاد و سلامت ۱۳۹۲؛ ۵ (۱-۲): ۲۰-۱۶.

تاریخ پذیرش: ۹۱/۸/۱۷

تاریخ دریافت: ۹۱/۵/۳