Journal of
Social Behavior and Community Health

Feasibility Study on Providing Bibliotherapy Services in Addiction Treatment Camps Affiliated with State Welfare Organization in Tehran Province

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ARTICLEINFO

ORIGINAL ARTICLE

Article History:
Received: 26 Aug 2023
Revised:15 Oct 2023
Accepted: 25 Oct 2023

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Citation:
Nemati-Anaraki L, Shahkhah N, Roudbari M, Sardari F. Medical Information and librarianship, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran. Journal of Social Behavior and Community Health (JSBCH). 2023; 7(2): 1159-1166.

ABSTRACT

Background: The purpose of this study is to evaluate the feasibility of providing bibliotherapy services in addiction treatment camps affiliated with State Welfare Organization (SWO) in Tehran province. The research concerns information resources and manpower, financial resources and technical infrastructure as well as expressing the shortcomings and barriers of this method.

Methods: The present study was conducted through a descriptive-survey method with an applied purpose in 2020. A questionnaire was developed by the researcher and validated with the help of experts. In order to assess the reliability of the questions, Cronbach's alpha test was used, which was calculated at 0.925. Sampling was performed using Cochran's formula. The sample size included 66 officials in 66 addiction treatment camps. SPSS software version 22 was used for data analysis

Results: The possibility of providing bibliotherapy services in terms of specialized and committed manpower in the field of bibliotherapy in addiction treatment camps was desirable. These centers were not in a good financial position. There was also the possibility of providing bibliotherapy services in terms of the technical infrastructure and manpower. The most effective methods of implementing bibliotherapy in addiction treatment camps were creative and group methods. Lack of budget and trained staff, staff reluctance to provide bibliotherapy services and lack of support from SWO were obstacles which have hindered the provision of bibliotherapy services in addiction treatment camps in Tehran province.

Conclusion: The benefits of providing bibliotherapy services in addiction treatment camps include increasing the client's psychological well-being, improving physical condition, preventing the client from returning to drug use, and to some extent, reducing the time of quitting drugs. Assessing and eliminating the shortcomings and barriers of bibliotherapy can play effective roles in the implementation of bibliotherapy.

Keywords: Feasibility Study, Bibliotherapy, Addiction Treatment Camp, Client, Addiction

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[DOR: 20.1001.1.27832104.2023.7.2.8.8]
[DOI: 10.18502/jsbch.v7i2.14094]

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[DOR: 20.1001.1.27832104.2023.7.2.8.8]
[DOI: 10.18502/jsbch.v7i2.14094]

Introduction

Physical and mental health of individuals is one of the challenges every society always faces, having a great impact on economic and social development of the society (Zare Farashbandi & Salimi, 2014).Addiction is one of the diseases that causes great harm to society including increase in crime rate (Sheikholeslami, Sotodeh Navroudi, Zeinali, & Talebi, 2013).Treatment programs for addicts include a range of detoxification programs, pharmacological, psychological, community-based psychological therapies, and recovery management (Tomás-Rosselló et al., 2010).Currently,several methods are used for quitting addiction in Iran, including treatment with methadone and addiction syrup, detoxification using antimorphine drugs, treatment and hospitalization in addiction treatment centers and addiction treatment camps (Ekhtiari et al., 2020).Among the mentioned methods, addiction treatment centers or addiction treatment camps are among the main and first options for quiting addiction in the country (Khaghani, Torkan, & Yousefi, 2021).

Addiction treatment camp has a desirable environment whichnot onlycan meet the needs of addicts, but also is compatible with their mood.In addiction camps, addicts learn skills so that they can make a living and not relapse into drugs again (Khaghani et al., 2021).

Bibliotherapy is one of the treatment methods which has proved effective (Zare Farashbandi & Salimi, 2014). Reading simple and entertaining books reduces people's attention to the factors which cause mental illness. Bibliotherapy means psychotherapy using self-study books (Wang, Bressington, Leung, Davidson, & Cheung, 2020). Bibliotherapy can be useful in supporting people suffering from mental illness(Dos Reis, Vidal, de Souza Caetano, & Dias, 2020; Stip, Östlundh, & Abdel Aziz, 2020; Wang et al., 2020).Specifically, bibliotherapy can be applied to patients suffering from mental health disorders such as anxiety, mood disorders, depression, phobia, sleep disorders or to enhance psychological well-being (Dos Reis et al., 2020; Wang et al., 2020). Bibliotherapy is used in four cases such as behavior change, social change, emotional discharge and mental change(S & A, 2017; Šmitienė, Klanienė, & Pavalkyte-Vasiliauskienė, 2020)].

Many articles have shown the positive effect of bibliotherapy in the treatment of mental illness abroad(Apodaca & Miller, 2003; Dos Reis et al., 2020; Stip et al., 2020; Wang et al., 2020). In Iran, the aspects of self-help and the effectiveness of the bibliotherapy on reducing various types of mental disorders in different patiants have been addressed(S & A, 2017).Currently, few psychiatrists and counselors use this method based on their personal experience. Bibliotherapyis used as an effective and low-cost approch with intellectual and educational content wordwide and is considered a complement to the main treatment in various conditions, including crises (S & A, 2017).

A feasibility study is the analysis and evaluation of a proposed project based on research, and it might support the decision-making process. Feasibility studies include three dimensions such as organizational feasibility, financial feasibility, and technical feasibility (Gadke, Kratochwill, & Gettinger, 2021). Considering the role of bibliotherapy in treatment of most of the mental illnesses in the world and also acceleration and facilitation of quitting addiction, the present study is conducted to determine the feasibility of providing bibliotherapy services in addiction camps affiliated with State Welfare Organization (SWO) in Tehran province.

Methods

The present study was conducted through descriptive-survey method with an applied purpose. The target population of the study included officials and experts of addiction treatment camps affiliated with SWO in Tehran province. Alist of 80 addiction treatment camps related to the SWO of Tehran Province in three areas of Shemiranat, Tehran, and Shahr-e-rey was provided by the General Administration of Tehran Province. Sampling was performed using Cochran's formula. The sample

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size consisted of66 officials in 66 addiction treatment camps in three areas of Tehran, Shemiranat and Shahr-e-rey.

A questionnaire was developed by the researcher to determine the possibility of providing bibliotherapy services in addiction treatment camps.The questionnaire was developed in eight main sections to fully assess all aspects of the feasibility of providing bibliotherapy services in addiction treatment camps. These eight sections included questions related to manpower, economics, camp infrastructure, factors affecting the implementation of bibliotherapy, bibliotherapy methods, necessary facilities for bibliotherapy, the benefits of bibliotherapy, and finally, barriers to providing bibliotherapy, with each section having five to ten items.

A5-point Likert scale was used in this questionnaire, includingvery high, high, medium, low and not at all .In order to assess the validity of the questionnaire, 13 experts in the field of medical library, information, and psychology reviewed the questions. They included those had done research in the field of bibliotherapy, information therapy, and similar fields, as well as 5 officials in addiction treatment camps. After confirming the validity and making necessary corrections, the questionnaire was used as a data collection tool in the research. Moreover, in order to assess the reliability of the questions, it was distributed among 30 subjects; based on their answers and using Cronbach's alpha test, the reliability of the questionnaire was calculated. Cronbach's alpha was calculated to be 0.925, and thus, the questionnaire had acceptable correlation and reliability. After obtaining necessary permits, the researcher attended 66 addiction treatment camps. After that, he provided the necessary explanations on the subject, answered the questions, and handed over the questionnaire to the participants. SPSS version 22 was used to analyze data.

Results

A total of 66 officials from 66 addiction treatment camps in three regions of Shemiranat (18 person), Tehran (28 person) and Shahr-e-rei (20 person) participated in this study.The participants were officials who were fully aware of the conditions and facilities of the camp. Most of the studied camps had 40 to 50 clients, and the lowest number of clients belonged to the camp in Shemiranat with 10-20 clients.

In all the57 camps, only 1staff had a degree in counseling and psychology. 5 camps had 2 counselors and psychologists, and 4 camps had more than 3 counselors and psychologists. Among 66 addiction treatment camps, 41 camps had only 1 social worker, 16 camps had 2 and 9 camps had more than 3 ones. The results showed that all but one of the surveyed camps had information resources including books, magazines, brochures, etc. Most of the information sources were on psychology and personality, and the least ones wereon religious issues.

As can be seen in Table 1, the mean score for provision of bibliotherapy services in addiction treatment camps in terms of manpower was 4, for financial, infrastructure, 2.45, and for technical infrastructure, it was 3.63.

Since the mean was measured based on the Liker scale, scores above 3 were considered desirable and below 3 were considered undesirable. The results are shown in Table 1.

Table 1. Feasibility of bibliotherapy services in terms of manpower, financial and technical infrastructure

	Dimension	Mean	Status
Feasibility	Manpower	4.00	Desirable
	Financial	2.45	Undesirable
	Technical Infrastructure	3.63	Desirable

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According to the participants, some of the factors effective in implementing of bibliotherapy services included holding discussion sessions (43.9%), seminars ,and conferences to share the experience of clients with each other (42.4%);preparing recommended books (39.4%);encouraging experts to participate actively in bibliotherapy services (37.9%); and evaluation and elimination of obstacles after bibliotherapy service to implement again. The results are shown in Table 2.

Table 2. Frequency distribution and mean of effective factors in implementing bibliotherapy in addiction treatment camps affiliated with SWO

effective factors in implementing bibliotherapy	Frequency (in percentage)				
	Very high	High	Medium	Low	No frequency
Preparing recommended books	16 (24.2)	26 (39.4)	19 (28.8)	4 (6.1)	1 (1.5)
Creating a hyperlink to introduce suggested books on website if there is a website in the camp	3 (4.5)	10 (15.2)	30 (45.5)	20 (30.3)	3 (4.5)
Creating associations for clients to exchange views on effective methods of conducting bibliotherapy	9 (13.6)	25 (37.9)	19 (28.8)	12 (18.2)	1 (1.5)
Holding seminars and conferences to share the experience of clients with each other	15 (22.7)	28 (42.4)	16 (24.2)	5 (7.6)	2 (3)
Holding discussion sessions during the implementation of bibliotherapy	13 (10.7)	29 (43.9)	17 (25.8)	5 (7.6)	2 (3)
Encouraging experts to participate actively in bibliotherapy services	11 (16.8)	25 (37.9)	22 (33.3)	8 (12.1)	-
Evaluating and eliminating obstacles after the implementation of bibliotherapy to implement again	7 (10.6)	25 (37.9)	24 (36.4)	10 (15.2)	-
Total mean					3.5065

The methods such as group method (45.5%), creative method (holding discussion sessions about the book) (40.9%), and face-to-face method (36.4%) were among the most effective methods of implementing bibliotherapy in addiction treatment camps. It was also found that according to the participants, methods such as self-help (introduction of a list of suitable books), individual, and absenteeism were used less.

Based on the results, the facilities required to provide bibliotherapy services in addiction treatment camps consisted of training specialized staff in the field of bibliotherapy with a mean of 39.4, the provision of resources (such as books and other sources of information), appropriate conditions with a mean of 37.9, and determining the exact method of funding for the provision of books regarding bibliotherapy services.

According to the participants, the provision of bibliotherapy services greatly increases the client's mental well-being along with improving physical condition by a mean of 45.5, which can largely prevent the client from returning to drug use with a mean of 37.9.

The results indicated that factors such as staff reluctance to provide bibliotherapy services, lack of appropriate information resources, lack of adequate budget and financial support (39.4%), clients reluctance, lack of support from the SWO and other organizations involved in providing bibliotherapy services (34.8%) as well as the lack of specialized trained personnel (31.8%) were among the factors which largely prevented the implementation of bibliotherapy services in addiction camps. The results are shown in Table 3.

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Table 3. Frequency distribution and mean of effective methods of implementing bibliotherapy in addiction treatment camps affiliated with SWO

effective methods of implementing bibliotherapy	Frequency (in percentage				
	Very high	High	Medium	Low	No frequency
Lack of support from the SWO and other organizations involved in providing bibliotherapy services	23 (34.8)	23 (34.8)	14 (21.2)	2 (3)	4 (6.1)
Lack of trained and specialized staff	21 (31.8)	20 (30.3)	17 (25.8)	3 (4.5)	4 (6.1)
Lack of sufficient space to create a library	11 (16.8)	10 (15.2)	26 (39.4)	13 (10.7)	6 (9.1)
Lack of sufficient budget and financial support	26 (39.4)	18 (27.3)	12 (18.2)	6 (9.1)	4 (6.1)
Lack of appropriate information resources	12 (18.2)	26 (39.4)	19 (38.8)	4 (6.1)	5 (7.6)
Lack of software and hardware facilities	9 (13.6)	12 (18.2)	24 (36.4)	16 (24.2)	5 (7.6)
Clients reluctance to bibliotherapy services	20 (30.3)	23 (34.8)	14 (21.2)	6 (9.1)	3 (4.5)
Lack of access to the Internet and databases	7 (10.6)	8 (12.1)	17 (25.8)	29 (43.9)	5 (7.6)
Staff reluctance to provide bibliotherapy services	13 (10.7)	26 (39.4)	18 (27.3)	5 (7.6)	4 (6.1)
Total average					3.478

Discussion

Since the mean score of technical infrastructure in addiction treatment camps was 3.6, the participants were in moderate condition in terms of technical infrastructure such as hardware, software, and space to provide bibliotherapy services. The necessary measures and standards should be taken in this regard by the camp officials as well as the SWO(Kabiri, Fazli, Neshati Sani, Vazifehshenas, & Haghparast, 2021). Comparing other studies with the present study regarding the feasibility of bibliotherapyin terms of technical infrastructure, showed that other centers also did not have a desirable condition in term of necessary facilities to provide bibliotherapy services, and more attention is needed in this regard.

The mean score of feasibility of bibliotherapy services in terms of manpower and information resources was 4, showing a desirable condition in this regard.The research by Khomeini et al. showed that psychologists, counselors, and librarians were among the people involved in performing bibliotherapy. The most important personality and required skills of the therapists in order of importance were motivation, creativity, confidentiality, and passing related courses (S & A, 2017).Moreover, Najafikhah et al.'s research suggested that more than two thirds of librarians in the study had the necessary skills, motivation,and interest to provide virtual referenceservices (Najafikhah R, Jalalidizaji A, & E., 2017). However, in the study by Shadi et al., it was found that these hospitals were not in a desirable condition in terms of skilled manpower (Shadi & Bageri, 2008).

The mean score of feasibility for providing bibliotherapy in terms of financial dimension was 2.45, which was undesirable. It was also found that these camps were not funded by the SWO to provide bibliotherapy services. One of the main problems in implementing and providing virtual reference services in public libraries of Gilan

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province according to Najafi-Khah et al. was the lack of sufficient budget (Najafikhah R et al., 2017).

Participants in this study believed that items such as preparing appropriate books, creating associations for clients to discuss effective methods, and holding discussion sessions can play an effective role in providing bibliotherapy services in addiction treatment camps.

Analysis of data as well as the results of similar studies revealed that factors such as trained and specialized manpower, resources such as books and other information resources, cooperation between addiction camps ,and other relevant organizations, cooperation between librarians and other people involved in other organizations, and determining the exact way of financing of bibliotherapy were in a satisfactory level; however, these conditions must be better and more stable (Delshad, Behzadi, & Radad, 2019; Fanner & Urqhuart, 2009; Shadi & Bageri, 2008).

In a study by Apocadoet al., alcohol use was found to decrease significantly among those treated with books, and participants confirmed the effectiveness of bibliotherapy and telephone counseling (Apodaca & Miller, 2003). Changes in depressive symptoms and a significant reduction in the level of mental distress of prisoners were the benefits of bibliotherapy according to Pardini et al.'s study. In addition, it was found that bibliotherapy was effective in reducing depression scores (Pardini et al., 2014).In the current study, according to the officials, providing bibliotherapy service can increase the client's psychological well-being along with improving physical condition, preventing the client from returning to drug use, and to some extent, reducing the time of quitting drugs.

Barriers to providing bibliotherapy services in addiction treatment camps, such as lack of budget and trained manpower, staff reluctance to bibliotherapy services, and lack of support from the SWO were similar to other studies(Fanner & Urqhuart, 2009). Furthermore, Shadiet al. in their research concluded that the target hospitals were in great need and interested in implementing the clinical library services, but these hospitals were short of skilled manpower (Shadi & Bageri, 2008).

Conclusion

The possibility of providing bibliotherapy services in terms of infrastructure and human resources was moderate.Factors influencing the implementation of bibliotherapyin addiction treatment camps included preparation of appropriate books, establishment of associations for the exchange of clients' views on effective methods, holding discussion sessions and specialized meetings, encouraging experts to participate actively in bibliotherapy services, and evaluating and eliminating the shortcomings and barriers. The most effective methods of implementing bibliotherapy were creative method (holding book discussion sessions), group method and face-to-face method.

Necessary facilities to provide bibliotherapy services in addiction treatment camps, such as trained and specialized manpower, information resources, cooperation between addiction camps and other relevant organizations, cooperation between librarians and other people involved in other organizations, and determining the exact way of financing bibliotherapy were in a satisfactory level. However, these conditions must become better and more stable. The benefits of providing bibliotherapy services in addiction treatment camps are increasing the client's psychological well-being, improving the physical condition, preventing the client from returning to drug use, and reducing the time of quitting drugs. Barriers to providing bibliotherapy services were lack of support from SWO and other organizations involved in providing bibliotherapy services, lack of trained and specialized staff, lack of sufficient space to establish a library, and lack of access to the Internet and database, which makes the process of bibliotherapy more difficult and reduces the its efficiency.

Acknowledgment

This article was a part of the master's thesis

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[DOI: 10.18502/jsbch.v7i2.14094]

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entitled; it was approved by Iran University of Medical Sciences in 2020 with the code IUMS-SHMIS_98 -02-2695. The authors would like to thank all the managers and officials of addiction treatment camps for participation in the study.

Conflict of Interest

All authors declare that they have no conflicts of interest.

Funding

There is no funding for this research.

Ethical Considerations

This article was a part of the master's thesis entitled; it was approved by Iran University of Medical Sciences in 2020 with the code IUMS-SHMIS_98 -02-2695.

Code of Ethics

IR.IUMS.REC.1397.425

Authors' contribution

L. EA, supervised the study, and was involved in the study design, data analysis, and writing the manuscript; N. Sh, was a student and was involved in data collection, data analysis, and writing the manuscript; M. R, was the consultant professor and was involved in data analysis; F. S, collaboration in writing the manuscript and interpreting the results.

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References

Apodaca, T. R., & Miller, W. R. (2003). A meta-analysis of the effectiveness of bibliotherapy for alcohol problems. Journal of clinical psychology, 59(3), 289-304.

Delshad, T. N., Behzadi, H., & Radad, I. (2019). Survey of Bibliotherapy in Hospital Libraries of Iran Based on SWOT Model. Library Philosophy & Practice. [Persian]

Dos Reis, A. C., Vidal, C. L., de Souza Caetano, K. A., & Dias, H. D. (2020). Use of recorded poetic audios to manage levels of anxiety and sleep disorders. Journal of religion and health, 59, 1626-1634.

Ekhtiari, H., Noroozi, A., Farhoudian, A., Radfar, S. R., Hajebi, A., et al. (2020). The evolution of addiction treatment and harm reduction programs in Iran: a chaotic response or a synergistic diversity? Addiction, 115(7), 1395-1403. [Persian]

Fanner, D., & Urqhuart, C. (2009). Bibliotherapy for mental health service users Part 2: a survey of psychiatric libraries in the UK. Health Information & Libraries Journal, 26(2), 109-117.

Gadke, D. L., Kratochwill, T. R., & Gettinger, M. (2021). Incorporating feasibility protocols in intervention research. Journal of School Psychology, 84, 1-18.

Kabiri, P., Fazli, F., Neshati Sani, S., Vazifehshenas, N., & Haghparast, A. (2021). Standards for Iranian Hospital Libraries: Why do Hospital Libraries Need to be Standardized. J Med Libr Inf Sci, 2, e13. [Persian]

Khaghani, F., Torkan, H., & Yousefi, Z. (2021). qualitative research Factors affecting adherence to treatment in addicts undergoing In the camps of Isfahan city. Knowledge & Research in Applied Psychology, 22(3), 71-82. [Persian]

Najafikhah R, Jalalidizaji A, & E., M. (2017). The Evaluation of the Feasibility of Establishing the Electronic Reference Services in Public Libraries of Guilan Province. Knowledge Studies, 3(9), 61-80. [Persian]

Pardini, J., Scogin, F., Schriver, J., Domino, M., Wilson, D., et al. (2014). Efficacy and process of cognitive bibliotherapy for the treatment of depression in jail and prison inmates. Psychological Services, 11(2), 141.

Khoeyni S, Norouzi A. Biblotherapyprinciples and methods. Tehran: Chapar; 2017.

Shadi, A., & Bageri, D. M. (2008). Feasibility of clinical librarian services in the hospital libraries of Tabriz University of Medical Sciences. Academic Librarianship and Information Research, 42(47). [Persian]

Sheikholeslami, F., Sotodeh Navroudi, S. O.,

[Downloaded from sbrh.ssu.ac.ir on 2026-09-07]

[DOR: 20.1001.1.27832104.2023.7.2.8.8]

[DOI: 10.18502/jsbch.v7i2.14094]

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Zeinali, S., & Talebi, M. (2013). Comparison of religious beliefs and mental health, self esteem and anger in normal and drug-dependent people. Journal of Holistic Nursing And Midwifery, 23(2), 45-51. [Persian]

Šmitienė, G., Klanienė, I., & Pavalkyte-Vasiliauskienė, G. (2020). Socio-pedagogical aspects of the application of bibliotherapy at a day centre. Regional formation and development studies(2), 81-90.

Stip, E., Östlundh, L., & Abdel Aziz, K. (2020). Bibliotherapy: reading OVID during COVID. Frontiers in Psychiatry, 11, 567539.

Tomás-Rosselló, J., Rawson, R. A., Zarza, M. J., Bellows, A., Busse, A., et al. (2010). United Nations Office on Drugs and Crime international network of drug dependence treatment and rehabilitation resource centres: Treatnet. Substance Abuse, 31(4), 251-263.

Wang, S., Bressington, D. T., Leung, A. Y. M., Davidson, P. M., & Cheung, D. S. K. (2020). The effects of bibliotherapy on the mental well-being of informal caregivers of people with neurocognitive disorder: A systematic review and meta-analysis. International journal of nursing studies, 109, 103643.

Zare Farashbandi, F., & Salimi, S. (2014). Bibliotherapy: Applications, approaches, roles. Health information management, 11(1), 124-134. [Persian]

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[DOR: 20.1001.1.27832104.2023.7.2.8.8]

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