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Occupational Therapy in Forensic Settings

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Abstract

It is necessary for a person to comply with the expectations of society and the rules of law to which these expectations are secured. Offenders turn back to the community after the penalty was executed by isolating from society and some occupations. An occupational imbalance is seen in the individuals, during this penalty period and afterward, because of limited occupational participation. As an occupational being, this affects their physical, mental and psychological well-being. Imprisonment is an important practice in criminal law to punish criminals. This may be necessary for the protection of society from criminals, but successful integration into a community after exiting the prison is the most important factor in preventing recidivism. Occupational therapy focuses on health and well-being by using meaningful and purposeful occupations. Occupation involves any activity that people perform or participate in, such as giving care to themselves or others, working, learning, playing games, and interacting with others. From this perspective, the role of occupational therapists in forensic settings is to determine the abilities of these individuals to congregate their deprived freedoms and use them to train them for an independent and autonomous life; to provide a professional orientation, career counseling, and self-esteem; to gain some habits for physical, spiritual and moral life and to reinforce.

Keywords: forensic setting, occupational therapy, recidivism, offender, intervention

1. Introduction

Human is a social being, which occupies in different ways to survive. Occupations are all of the daily activities in one's life that make him who he is. Occupations are formed by cultural backgrounds and include all the tasks performed to fulfill the time and give life meaning. Occupational therapy is a treatment option for individuals with physical, mental



or developmental conditions that focus on health and well-being by using meaningful and purposeful occupations for individuals for the development, improvement or maintenance of the essential skills needed to be successful in their environment [1].

Forensic occupational therapy refers the occupational therapy service that assesses and makes interventions to the individuals with occupational problems in the criminal justice system [2]. The forensic settings can be variable and be challenging, but the main point here to pay attention is the holistic and humanistic view of occupational therapy which says that occupation is vital for human and is essential for health and well-being. From this view, forensic occupational therapy is the same as the mental health occupational therapy practice in some ways [3]. The main difference is the legal context and the restrictive correctional environment. The legal context is usually built upon deprivation of some occupations, and this alienates the individual to the occupation. Also, labeling and stigma affect reintegration to the community [4].

In terms of the individual, occupational therapy is an important necessity for occupational participation and occupational balance. With these, occupational therapy prepares the person for community life and protects the individual from recidivism [5]. This is not the sole benefit of occupational therapy. Also, there are benefits for the community; reducing crime provides social wellbeing and also increases social welfare by contributing to the individual's productivity activities, so that, forensic occupational therapy has dual aim both for the individual and the community.

The forensic population is growing all over the world and brings challenges with this growing population [5–8]. These challenges can depend on the person, environment and/or activity. The thing that should never be ignored is the legal context, and the therapists must consider the needs of individuals in the legal context [9].

Offenders' rehabilitation is a multidisciplinary teamwork, and occupational therapy is a key part of the treatment and rehabilitation. The methods are similar to other mental health settings. The key focuses for the occupational therapists working in forensic settings are assessment, prevention of occupational deprivation, development of occupations to prevent recidivism, preparation for discharge and activities of daily living (ADLs), preparation to community and the vocational rehabilitation.

This chapter describes the occupational therapy in forensic settings such as prisons, secure hospitals and community reintegration services. The chapter also discusses the assessments, models that can be used in forensic settings, interventions and challenges in forensic settings.

2. Forensic settings

Correctional administration is the reinstatement and retraining of a person's antisocial behavior and feelings through confinement for treatment purposes. Correctional settings regulate the individual's psychosocial status and provide health care service for the prisoners [10].

Correctional settings are a way to facilitate the mental health recovery of the inmates. Since, many of the inmates have serious mental disorders, the forensic unit, of the correctional

facility, plays an important part in their recovery. The unit reduces the risk associated with the inmates and facilitates their transition into the community or less restricted settings. However, the same results could be achieved with occupational therapists. The two main methods that are adopted by occupational therapists (OTs) are the reduction of occupation deprivation and increasing skills by occupational participation. Hence, the inmates are provided with an opportunity to play a purposeful and meaningful occupation in society [3].

Patients, who are admitted to the forensic units and get in contact with the criminal justice system as a consequence of their committed crimes, are detained in accordance with the country-specific mental health legislation. However, some patients are admitted due to severe behavioral issues.

There are several types of correctional settings where charged offenders are held. The main institutions are forensic mental health settings, jails and prisons. Forensic mental health settings include the following: high secure units, medium secure units, low secure units, psychiatric/acute mental health units, community, forensic hostel, special hospital, acute unit of a forensic hospital, high-security section of a forensic hospital, sub-acute unit of a forensic hospital, consultation/liaison position in the community sector, tertiary mental health facility, extended forensic/psychiatric safe care and medium to high secure unit [11].

Jails and prisons are the main correctional facilities since they are able to hold the greatest number of people. There are approximately 12 million jail admissions, which is approximately 19 times that of state and federal prisons [12].

Jails and prisons served for different purposes; have restricted opportunities for rehabilitation; offer a similar grade of occupational deprivation, inadequate access to health services and poorly planned methods; are temporary in nature and lack systematic regulation and resources [13].

Jails and prisons provide care for mentally disturbed offenders in ill-equipped correctional institutions. In particular, jails are used for temporary confinement and are usually lacking in mental health screenings and treatment received by inmates in jails is more limited. Prisons, however, might offer inmates the opportunity to access consulting service for substance abuse treatment even though the service delivery is generally insufficient [14].

2.1. Jails

Jails serve as an introduction to the incarceration system. They are local correctional facilities operated by a city or country instead of the federal or state government. The main purpose of jails and prisoner distribution centers is to confine a person before and after court judgments and to filter prisoners to and from courts and other correctional facilities. Some people in jails have been sentenced, while others might be waiting to be convicted. Many individuals receive an imprisonment of less than 2 years [3].

Judgment is mostly a complex process of sentencing. In this respect, inmates in forensic settings might either be arraigned or experiencing the trial process.

2.2. Prisons

Prisons are classified as high, medium and low security institutions that are typically used for convicted criminals who have been sentenced to at least a year of imprisonment in U.S. Federal Bureau of Prisons. In addition, depending on the severity of the crime, some individuals are sentenced to either state or federal prisons. However, compared to jails, prisons offer a far more stable environment for the inmates and restrict their interaction with society for longer periods of time [3].

The primary purpose of prisons is to ensure public safety and the security of inmates. In addition to incarcerating criminals, prisons offer them programs to address their criminogenic needs related to education, substance abuse, employment and transition to the community.

Basic services in prisons involve intake and screening of psychotropic medicines and to provide occupational therapy services. Those services are substantially provided for prisoners to decrease their social isolation and increase their problem solving and adaptation skills, self-efficacy and self-esteem. The occupational therapy services also promote emotional regulation abilities and social and emotional skills in order for the inmate to deal with prison life and take this opportunity to improve on self-efficacy and occupational engagement [15].

- 1. High-security units: Individuals classified as high risk to public safety have been sentenced to life imprisonment and are receiving long term treatment, are housed in high-security prisons. The physical environment in these facilities consists of a number of physical and structural barriers between the facilities and the external environment of the institution.
 - In high-security prisons with highest number of staff, and both multiple and single cells, criminals remain in their cells or in an outer cage in the facilities' yard. Each cell is equipped with a toilet, screwed to its floor, and prisoners are permitted up to three 10-min showers per week. Movement is firmly restricted and activity within the cellblock does not occur without other constraints, such as handcuffs, leg irons and corrective officer escorts [3]. Orientation can be considered as essential because it gives the staff the chance to be acquainted with the prisoners. The ward program focus areas, such as improving awareness of self, others and the environment; orientation to time, place and situation; probing cognitive abilities and teaching of new skills to improve leisure time use and psychomotor activation, should be maintained after discharge [16].
- 2. Medium-security prisons: Those institutions house individuals with a criminal background and requiring 2–5 years of treatment [17]. Medium-security prisons, where prisoners' accessibility to prison gardens and exercise areas, libraries, showers and health services are high, offer far more opportunities in terms of interaction, movement and activity inbetween prisoners [3]. Medium-security prisons usually have a wide diversity of work-oriented and treatment programs. Parole is more frequently granted in medium-security prisons and may be classified as supervised (always less than 1 h), limited (sent to wards for only 1 or 2 h), occupational therapy parole (join structured activities or subcontract work) and unlimited parole (mostly on weekends and during the week when they do not join specific rehabilitation activities).

Patients included in the rehabilitation process are integrated into community life by developing intellectual and emotional insight, self-care and self-expression skills and general work abilities. Furthermore, providing stress and anger management, psychoeducation and prevention programs for substance abuse in psychoeducation groups facilitates the patients/inmates return to society [16].

3. Low-security prisons: These facilities have windows and open spaces that allow the prisoners to move and interact freely within the environment. Even though low-security prisons are surrounded by double-rings, they have no prison fences or other secured perimeter and are often unpatrolled by armed guards. Since the inmates might work on agriculture, transport or conservation projects, they can provide training to the prison's staff; in addition to meeting the labor force needs of other institutions [3].

In open wards (low or minimum-security prisons), during the therapeutic leave and discharge periods, greater priority is given to preparation of patient participation. Patients are expected to adhere to hospital rules and regulations, but are allowed to freely leave their wards and take the opportunity to practice skills acquired in the medium secure wards and joining educational training programs outside the health services [3].

The intensive life skills training program is comprised of communication, conflict management and criticism handling, problem-solving, money handling (budgeting, current price trends) and work-related skills (job seeking, application for a job, writing of curriculum vitae, work interviews through the use of role play). In addition, recreational activity program, and specific work skills-related programs are implemented to enhance psychosocial interactions [15, 16].

2.3. Forensic hospitals

Forensic psychiatric settings are generally located in secure units that rehabilitate individuals deemed unfit to stand trial or not criminally responsible. Those inmates pose a serious threat to either themselves or others because of severe mental illness. A forensic psychiatric setting provides treatment-based approaches with a view to rehabilitating patients while keeping the public safe. Patients, temporarily transferred from correctional facilities or incarcerated environment, are assessed and treated for mental illness in the facility that consists of secure, closed and open common units [17].

Forensic psychiatric hospitals reintegrate patients systematically into the community with well-equipped and specialized clinical services, as well as an exhaustive range of vocational and rehabilitative programs. Treatment is typically long-term, in order to improve and safely stabilize patients' mental well-being.

2.4. Community reentry centers

Reentry centers are facilities that help inmates by offering structured and supervised residential settings just before or after their release. In addition to providing a permanent residence to the individuals, assistance in financial management and facilitating, their return to the society

is also arranged. These centers might be especially useful, because the psychological adaptation required for offenders, with expansive criminal histories, returning to the community after a long period of imprisonment, can be particularly demanding.

A crucial component of community reentry centers is substance abuse management and mental health treatment and counseling. Growing prison populations are largely due to drug-related crime and drug abuse, but relatively few prisoners receive the appropriate treatment. In this respect, community-based correctional settings have launched out prison-based drug treatment programs during the past few years [3].

2.5. Psychological models in forensic rehabilitation

There are two main models of psychology about correctional treatment. The risk, need and responsivity model (RNR model) was built up by Andrews and Bonta, and they describe the criminal risk variables named 'central eight' (**Tables 1**) [18]. Good lives model (GLM) is the other model which claims, that rather than addressing criminogenic needs, the focus of treatment should be on the enhancement offenders' abilities to obtain primary human goods [19]. Purvis describes 11 primary human goods (**Tables 2**) [20].

If it is examined the models, both are similar, but RNR Model is based on cognitive-behavioral and the GLM is based on humanistic philosophy. The GLM identifies 11 'primary human goods' and RNR identifies 'central eight' which are inverse overlap. It can be said that GLM 'primary human goods' are inverse restatements of the 'central eight' risk factors, viewed from the lens of humanistic psychology [19]. Depending on these criminal risk factors, it is argued that the criminal procedure of the individual can be predicted and therefore the criminal procedure can be prevented by taking the necessary precautions. However, the RNR model is not compatible with occupational therapy outlook in the view of the possibility of irreversible risk factors and bias holding against the individual.

- **1. History of antisocial behavior:** If there is an early involvement in antisocial acts and if they are still continuing, it is a big risk variable.
- 2. Antisocial personality: Adventurous, pleasure-seeking, poor self-control personality pattern are other risk factors.
- 3. Antisocial cognition: Attitudes, values and beliefs supporting crime cause a personal identity favorable to crime.
- **4. Antisocial associates**: Quality of relationship affects the behavior. So that, having close association with criminal peers and relative isolation from prosocial others because of either the individual or the community affects the criminal behavior.
- **5. Family/marital**: Problematic circumstances of home, lack of nurturing relationship and/or poor monitoring behavior.
- 6. School/work: Circumstances such as low levels of performance and satisfaction in school or work
- 7. Leisure/recreation: Low levels of involvement and satisfaction in prosocial activities such as leisure time activities
- 8. Substance abuse: Abuse of alcohol or drugs affects the criminal behaviors.

Table 1. The 'central eight' criminal risk variables.

- 1. Life (including healthy living and optimal physical functioning, sexual satisfaction)
- 2. Knowledge(how well informed one feels about things that are important to them)
- 3. Excellence in work (including mastery experiences)
- **4.** Excellence in play (hobbies and recreational pursuits)
- **5.** Excellence in agency (autonomy and self-directedness)
- **6. Inner peace** (freedom from emotional turmoil and stress)
- 7. Relatedness (including intimate, romantic and family relationships)
- 8. Community (connection to wider social groups)
- 9. Spirituality (in the broad sense of finding meaning and purpose in life)
- **10. Pleasure** (feeling good in the here and now)
- 11. Creativity (expressing oneself through alternative forms)

Table 2. The 'primary human goods'.

3. Occupational therapy models in forensic rehabilitation

The use of occupational therapy models in forensic rehabilitation focus on client-centered, holistic and occupation-focused practice with the approach of clinical reasoning based on individual preferences and needs. Normally, individuals engage in occupations which they prefer or want throughout their life; however, in secure environment situations, this ability of the individual can be limited or can be restricted by the individual's mental health/disorder/ learning disability, their perceived and their actual risks to themselves or others and institutional regulations, policies or legal restrictions. Individuals who need forensic rehabilitation face some participation limitations to all or a combination of activities and this can cause occupational deprivation additionally to the sense of hopelessness and poor mental health [6, 11, 15]. Moreover, community life skills and performing daily living activities and interaction with the environment of the individual can be limited. Therefore, group or individual occupational therapy programs often target basic living skills, self-care, vocational skills, adaptive coping strategies, creative arts and anger or stress management. The general aim of occupational therapy is to enable individual to experience occupational enrichment and achieve optimal occupational functioning. Occupational enrichment in forensic settings can be considered as both the goal and process of occupational therapy interventions, so evidence-based practice is very important [15].

Occupational therapy guideline recommendations show that Model of Human Occupation (MOHO) and its associated assessments are the most used occupational therapy model in forensic occupational therapy. The model was developed in the 1980s by Professor Gary Kielhofner and has had some revisions and collaborations until now. MOHO supports that human occupation is motivated, patterned and performed. Humans are conceptualized as three interrelated components: volition, habituation and performance capacity [16]. Also,

environmental considerations are very important to increase the occupational participation of the individual having forensic occupational therapy and rehabilitation [15].

Volition presents the individual's motivation for occupation and relates to individual's motivation to participate to occupations combined with their self-belief and capacity to succeed which means personal causation. Motivation and personal causation can be affected by the individual's mental health (such as depression, schizophrenia, personality disorder) or their perception of the reason and need for their admission. Therefore, the literature supports that it is important to establish the individual's own goals to ensure treatment readiness. Some individuals can have complex occupational histories, which are situated within social tensions related to their antisocial or criminal occupations present lack of motivation to engage and participate activities they want and these individuals can view the environment as a barrier to participation in usual activities which can impact the individual's mental health and well-being negatively. It is supported that volitional problems are likely to be highly relevant in the secure setting which can cause decrease in personal causation, difficulty in identifying or having unrealistic goals and an inability to and meaning or interest in activities [15, 16].

Occupational therapists have the skills and expertise to assess and engage people in those occupations which are meaningful and motivating. This requires a careful understanding and appreciation of what underlies the motivation and creating occupational opportunities like self-care, productivity and recreational activities. Occupational therapists also help people to identify and achieve their own hopes and aspirations such as vocational rehabilitation and work skills [15, 16].

Habituation refers the individual's roles and behavior patterns consistent with his/her lifestyle. It presents automatically and effectively doing routine tasks related to their environment. Roles of the individual are responsibilities of the individual associated with personal identity, occupations and activities of daily life and extraordinary occupations. Individual with criminal lifestyles can have problems on participating prosocial roles with their daily routines and occupations [15, 16].

Occupational therapy interventions in secure environments help individual to participate in prosocial roles and occupations in an effort to live within society without resorting to previous criminal or new antisocial behaviors. The imposed legal and security restrictions in secure environments can mean that patients are unable to participate in their habitual or chosen occupations; this may be because such occupations are antisocial, or due to lack of resources, facilities or particular environments being available in secure settings. Often patients benefit from the structure, stability and consistency of admission [19].

For occupational therapy interventions age, ethnicity and culture, finding the 'right' occupations that are culturally relevant, risk-managed and appropriate to the 'typical' forensic population can be challenging. The literature supports that not only redesigning lifestyle but also technological advances have an impact on the range of occupations that occupational therapist is able to offer to extend the inclusion level of the individual such as contemporary videogames and Nintendo® WiiTM additionally to participating actual sports and recreation activities [16].

According to the Model of Human Occupation, performance capacity is related to an individual's adaptive interaction with the environment, and the ability to do activities provided by physical and mental components and the associated subjective experience. Occupationally restricted individuals have problems with occupational performance skills for independence in daily living. Moreover, performance skills may not be acquired or learned during transition from child to adult. Occupational therapists in secure environments have a major role to play in helping patients to develop, maintain or acquire new skills for successful community reintegration or transition to less secure settings, for example in the area of vocational rehabilitation. Occupational therapists can guide individuals to identify possible vocational areas such as study/education, voluntary or paid employment [16, 20, 21].

Occupational therapy interventions should help the individual to identify prevocational needs and sometimes individuals have not been or will not have a productive activity like working again and therefore the therapists need to help them to establish different prosocial, productive and meaningful occupations to increase health, wellbeing, occupational performance and general quality of life. For these reasons, it is important for occupational therapists to measure and follow the progress of the individual with outcome measures during daily living activities [17, 18, 21].

Social and physical isolation of the individuals can cause problems to access their own complex occupational and environmental worlds. Being cut from own life can cause limitations over occupational choices and experience, so environmental changes and supports during activity performance can provide opportunities, constraints and demands to the individual. The literature supports that individuals in secure environments spend much of their time in passive leisure, personal care and rest occupations and occupational therapists are one of the core elements in increasing activity participation of the individual and develop occupations of their choice [15, 16]. Also, occupational therapists can facilitate the exploration of new or unknown occupations to increase positive life experiences of the individual.

As it is given earlier, there is a great model need to understand the volition, habituation, performance skills, physical and social environments in which an individual's occupation takes place. MOHO assists the understanding of occupation(s) and problems of occupation that occur in terms of volition, habituation, performance capacity and environmental context. This system-based model includes well-designed assessments, observational, self-report and interview schedules. One of the advantages of this model is that because of its extensive use in mental health settings; a forensic version of an assessment tool 'Occupational Circumstances Assessment and Interview and Rating Scale' was designed. But, the literature also supports that this tool is not the only one for the use of occupational therapists, and occupational therapists may find any particular model, or standardized assessment/outcome measures to support their interventions [4, 15, 16, 21, 22]. The literature supports that the use of occupational therapy models in forensic mental health may increase evidence-based practice and help the professionals to show the effect of occupational therapy. As Model of Human Occupation is seen to be the most used occupational therapy model, models including environmental and individual issues such as psychological issues, desires, wants, activity performance and satisfaction from the activity performance can help the occupational therapist to plan more effective assessments and interventions. Although the literature is still limited; different occupational models such as KAWA model, creative ability model, PEOP (Person, environment, occupation, performance), the Canadian model of occupational performance and engagement and the individual placement and support model with can be effectively used with standardized assessments and outcome measures in various individuals, situations, cultures and environments in provision of occupational therapy services in a cost-effective way [6, 15, 16].

4. Assessment in forensic occupational therapy services

Occupational therapy process commences with contiguity between the offender and occupational therapy service. Collecting information about the person and making special evaluations is the first step in this process. Gathering information about the individual and special assessments helps to determine the problems and needs, as well as the reason for the intervention. It also allows for the setting of intervention targets and the determination of the intervention plan. In the process of occupational therapy, the intervention plan is followed by the implementation of the intervention. The intermediate evaluation may be needed to determine the effectiveness of the intervention or to reveal new intervention goals and plans. After intervention plans that have been modified or reorganized after the interim evaluation are applied, the intervention is assessed. As seen in the abovementioned occupational therapies process, information gathering and evaluation also play an important role in the intervention for forensic occupational therapy applications. In summary, an occupational therapist working with prisoners should use a three-stage assessment of initial assessment, interim evaluation and outcome measurement during the occupational therapy intervention process [15, 21].

Occupational therapy sees people as active and social entities and treats the person, his occupations and the environment holistically in order for the individual to achieve or regain well-being. It is also important to assess the individual as a whole in the information gathering and evaluation process for the creation of a suitable intervention plan [15]. According to the occupational therapy reference frame written by AOTA [15], personal factors include the individual's values, interests, and spirituality as well as body structure and functions. Having knowledge about the boundaries and areas of internal energy in prisoners' participation in occupations can be useful to guide activity preferences and motivation processes. The things that constitute the meaning of prisoners' lives are values and beliefs they believe to be worth trying and taking the time. The occupational therapist in forensic setting desires recreates occupational identification of offenders who lose their roles by being isolated from the social environment. For this reason, it is very important to understand the value, relevance, strengths and limitations of the individual [4, 16, 22].

It is also necessary to assess the sensory, motor and cognitive skills involved in the body structure and functions of the person in need to meet the occupation requirements they wish to perform. These skills can make or break an individual's daily life. One point that should not be overlooked here is that during the process of occupational therapy collecting and evaluating information, the prisoner does not play a passive role, so the occupational therapist does not seem to be running a process alone. The occupational therapist and the prisoner are

in the business association during the presentation of information, evaluation and outcome measures, and the prisoner is actively involved in this process.

Occupational therapists are aware that the occupational performance of an individual is influenced by factors related to the individual as well as by the performance patterns and the environment. Roles, routines, rituals, and habits constitute performance patterns [15]. Routines and habits allow the individual to perform his/her daily activities without thinking about how to move, without trying to remember. Occupational therapists working in forensic health services care about whether the prisoner has useful habits and routines for him. It is necessary to know how individuals spend their days and which routines they create from day to guide to get new routines and habits to use the time and energy more efficiently when the living conditions change [11]. Roles are the whole of the behaviors that an individual imposes on his/her responsibility, which is imposed by the environment and culture. Rituals are symbolic behaviors that are understood by social, cultural and spiritual values that shape the occupational identity of the individual. During the evaluations, the roles of the prisoner and the importance of these roles and the determination of meaningful rituals in the individual's life provide significant benefits for the therapist's intervention plan. Changes in location and time can also cause changes in the roles and rituals of individuals. The change in the role and ritual of the individual after conviction can cause occupational alienation in the individual. In the context of a forensic health service, acquisition of the prisoner's new skills and habits, and the new roles and rituals that are well integrated with the environment make an important contribution to the occupational balance of the individual [3, 16, 23].

Understanding the environments in which occupational performance takes place, it is important for occupational therapists to understand the underlying effects of occupational participation. The environment includes dimensions related to physical, social (including individuals in the individual's life) and policies, and at the same time creates a supportive or restrictive effect for the occupational adaptation of the individual. Situations such as an absence of freedom for the individual, individual secrecy, and the meaningful and socially acceptable occupations constitute a barrier to prisoners' participation in their environment and occupation [15, 24]. Occupational therapists should also be thoroughly evaluating the environment of individuals who are establishing an intervention plan with prisoners applying to the occupational therapy service.

We have already mentioned the preferred models for forensic occupational therapy applications. MOHO, one of these theories, includes structured and unstructured assessment and information gathering tools [3, 4, 11] for collecting and evaluating information about offenders. Some of those:

- Occupational performance history interview (OPHI II)—A semi-structured measure of self-care and information about the individual's life history;
- Assessment of communication and interaction skills (ACIS)—evaluates three subdomain individuals, including the physical dimension of communication, information exchange, and relationships, in an occupational pattern or in a social group [25];

- The Model of Human Occupation Screening Tool (MOHOST)—gives the client a holistic view of his or her motivation to achieve occupation, communication and interaction skills, occupation patterns and the individual's process and motor skills as well as the environment. MOHOST also allows a highly effective assessment of the effectiveness of occupational therapy interventions [26];
- Occupational Self-Assessment (OSA)—a method of assessment that reveals how the individual focuses on the occupational competence of the individual about his/her occupational adaptation, helping to shape the needs and values of the individual. OSA is a highly recommended assessment tool for evaluating forensic occupational therapy. Individuals are given a very wide list of daily occupations, individualists are asked to evaluate the occupations in their own eyes and the level of their own performance [26];
- Occupational circumstances assessment interview and rating scale (OCAIRS-Forensic Mental Health Version)—the therapist has extensive content to get detailed information about the offender. It gives the individual an accurate and holistic view of occupational functionality. If the more fully involved the offender is in the evaluation process, the higher the participation in intervention practices [27, 28].

Evaluations such as Canadian occupational performance measurement, assessment of motor and process skill, independent living scale, and the role checklist are other measures preferred by occupational therapists [3, 24].

Another assessment heading in the forensic occupational therapy process is risk assessment. When considering the evaluation processes mentioned earlier, a prisoner who has forensic settings should be considered as a means of risk assessment to determine the potential for another crime or previous crime. Occupational therapists take into account the risk assessment and management of risks posed by each client and to increase the occupational involvement of individuals by taking environmental precautions and managing them to manage risks in environments such as high-risk kitchens and workshops to improve individual skills as well as providing positive risk-taking opportunities to enhance the capabilities of both individuals.

Current risk factors such as age and gender, substance use status, criminal history and potential risk factors such as marital status, occupational participation level in the forensic setting, family support should be considered in the risk assessment. Occupational therapists pay attention to the influence of the person-environment-occupation interaction on the occupational adaptation of the individual. Occupational therapists can estimate the effects of individual's personality and sociodemographic characteristics (physical, cognitive and psychological), their level of skill and the environmental risk factors, including interpersonal interaction, social support network, hospice environment, social security status on the possible risk factors. For this reason, they may play an active role in providing counseling to minimize the risks faced by prisoners and these risks' adverse effects on occupational adaptation [3, 21].

5. Interventions in offenders rehabilitation

As already mentioned, offender rehabilitation in forensic settings is not different from other mental services. Intervention methods used by occupational therapists must include life skills development (such as ADLs, IADLs, and health management), occupational development, awareness (such as self-awareness and social awareness), self-management, skill-building (such as social, relationship, vocational skills), education etc.

The GLM is a model that overlaps the humanistic point of view of occupational therapy. Although the GLM is a psychology-based model, it supports occupational therapies' application models such as PEO, MOHO, CMOP and role acquisition model. Occupational therapists may develop interventions taking into account the GLM's the primary human goods components. Some intervention recommendations based on the 'primary human goods' are given in Table 3.

The 'primary human goods'	Intervention recommendations
1. Life (including healthy living and optimal physical functioning, sexual satisfaction)	Aim: Understand themselves, reach personal satisfaction, live life better and achieve their goals
	Occupational strategies:
	Functional life skills
	Role development
	Independent living skills
	Literacy and education
	ADLs
	IADLs
	Health management
	Gender-specific issues
	Money management
2. Knowledge (how well informed one feels about things that are important to them)	Aim: Identify one's emotions, thoughts, interests, and values; understand how internal characteristics influence actions; maintain a sense of self-confidence and self-efficacy
	Occupational strategies:
	Self-awareness
	Drug and alcohol awareness
3. Excellence in work (including mastery experiences)	Aim: To keep the physical, psychological and social needs of the individual together, to increase the independence of the individual and to work with a holistic and customer-centric approach in the role of the worker.
	Occupational strategies:
	Prevocational training
	Job search skills
	Work-related practice
	Vocational rehabilitation: work preparation, voluntary and paid work
	Work hardening
4. Excellence in play (hobbies and recreational pursuits)	Aim: To build up hobbies, recreational pursuits
	Occupational strategies:
	Recreational skills
	Time management

The 'primary human goods'	Intervention recommendations
5. Excellence in agency (autonomy and self-directedness)	Aim: To organize and adapt a behavior to achieve individually selected goals and values
	Occupational strategies:
	Anger management
	Stress management
	Problem solving skills
	Motivation
6. Inner peace (freedom from emotional turmoil and stress)	Aim: Regulate emotions, thoughts and behaviors across contexts; cope with stress and manage impulses; set goals
	Occupational strategies:
	Self-management
	Increase self-esteem and confidence by promoting personal responsibility
7. Relatedness (including intimate, romantic and family relationships)	Aim: Establishing and maintaining relationships with others; resisting inappropriate social pressure; working in cooperation; preventing and resolving interpersonal conflict; asking for help when necessary [29].
	Occupational strategies:
	Relationship skills
	Complex relationship building
	Facilitating development of supportive relationships
	Social skills
8. Community (connection to wider social groups)	Aim: Being active in social groups
	Occupational strategies:
	Social skills
	Social awareness
	Responsible decision-making
	Graded community engagement and one-to-one goal planning
	Empathy
9. Spirituality (in the broad sense of finding meaning and purpose in life)	Aim: To find meaning and purpose of life
	Occupational strategies:
	Motivation
10. Pleasure (feeling good in the here and now)	Aim: Feeling good, loving life
	Occupational strategies:
	Motivation
	Increase self-esteem and confidence
11. Creativity (expressing oneself through alternative forms).	Aim: Knowing himself about what he can do
	Occupational strategies:
	Skills development
	Vocational activities include such as woodwork, crafts, graphics, horticulture

Table 3. Intervention recommendations in offender's rehabilitation from the view of occupational therapy.

- 1. Life: Life skills training is a commonly used occupational therapy intervention in mental health [30]. Offenders are at a higher risk for poverty, unemployment and difficulties in relationships. The life skills training interventions can focus on self-care, self-maintenance, intrinsic gratification, social contribution and interpersonal relatedness skills. The interventions must be client centered and the context must be well evaluated. While working with an offender, the balance of daily occupations should be kept in mind for a healthy lifestyle.
- 2. Knowledge: The development of interventions for improving self-awareness is very important in offenders' rehabilitation. Self-awareness is the ability to recognize him/herself as an individual who is different from other individuals. Self-awareness is having a clear perception of personality, including strengths, weaknesses, thoughts, beliefs, motivation and emotions. The aim of the interventions is to gain a sense of self-worth. Facilitatory interventions, such as education, feedback, behavior therapy and psychotherapy have been recommended to a greater extent than compensatory interventions.
- 3. Excellence in work: The main problem of ex-offenders is employment to maintain their lives [31]. Unemployment concerns begin to increase still they are in prison. They face substantial barriers to many types of legal employment [32]. These barriers are poor basic skills, low self-esteem, a lack of recent work experience, employer discrimination, behavioral and health problems. Interventions must include prevocational training, job search skills, work-related practice and also work hardening.
- 4. Excellence in play: Recreational activities and hobbies are the enjoyable, activities that are restorative in which the clients' choice and control often associated with leisure time. Recreational pursuits and hobbies are the power of life. The main aim of the therapeutic recreation is to enhance the patient's quality of life and ability to participate in leisure and/ or play. Also, it can improve social participation and social skills which is very important for the offenders.
- 5. Excellence in agency: Self-directedness is the ability to organize and adapt a behavior to achieve individual selected goals and values. Self-directedness includes the concept of an autonomous individual and concepts of personal integrity, self-respect, dignity, efficacy and feelings about one's life [33].
- 6. Inner peace: Anger management problems affect all parts of a persons' life. The goals of treatment are to increase the client's resources for coping with stress and try to decrease the demands made on the client. Treatment is first achieved by increasing awareness of the client about the relationship between anger and stress and then increasing the effective use of the stress management techniques that the client is able to cope with [11, 34]. Anger management interventions begin with recognizing the triggers of anger. The client must take responsibility for his/her own change so that the problem can be solved. The second stage of the intervention is the awareness of the behaviors when the client is angry, such as, shouting, swearing, treating verbal, postural or gestures, abusive behaviors such as phone calls, messaging or other communication ways, harassments, emotional abuses or violent. Also in this stage, the therapist must help the client to identify times when his/her thoughts do not lead to logical or rational conclusions. The third stage is teaching specific skills to help the client to manage triggers for anger effectively, such as relaxation techniques, mindfulness and assertiveness.

- 7. Relatedness: Group interventions in which the family members and friends are engaged are suitable for relatedness [35]. The aim of the interventions must be establishing and maintaining relationships with others, resisting inappropriate social pressure, working in cooperation, preventing and resolving interpersonal conflict, asking for help when necessary [29].
- 8. Community: Deficits in social skills are often seen in forensic groups. Social skills training is the main intervention method for being active in a group [36]. For being in a group, it is also important to make responsible decision to identify and evaluate the problems correctly, making decisions based on ethical and social norms, to evaluate decisions in context, contribute to the welfare of society, accurately identify and evaluate problems, make decisions based on ethical and social norms, consider context in decisions, contribute to well-being of community [29]. Social skills training consists of learning activities that use behavioral techniques that enable individuals to acquire independent life skills for better functioning in their communities. Direct teaching, modeling, role playing, behavior rehearsal, and social reinforcement can be used during the interventions.
- 9. Spirituality: The spirituality is the 'meaning and purpose in life, the life force or integrating aspect of the person and transcendence or connectedness unrelated to belief in a higher being' in occupational therapy perspective [37]. The meaning of spirituality is different for everyone, can be participating a religion, visiting religious places (such as churches, mosques, synagogues etc.) regularly and can be different for some praying alone, yoga, meditation, being in the nature, walking and so on. There can be challenges about talking about the beliefs and spirituality with the client and that much of spiritual experience can be culturally influenced [37]. Motivation techniques can be used to find meaning and purpose in life.
- 10. Pleasure: Pleasure is one of the subjective experiences of the human need-based experiences to engage in occupations [38]. It influences productivity, restoration and being active to engage occupations [39]. Motivational and increasing self-esteem and confidence interventions can be used to improve pleasure.
- 11. Creativity: It is stated that 'creativity is part of everyday practice; the use of creativity as a conscious approach; creativity involves risk-taking; creativity needs a supportive environment; and creativity is the use of expressive arts in therapy' [40]. Especially creative arts increase the capacities of offenders, help to explore their own resources, assist them to locate hope and motivation, recognize their interconnectedness with others without external pressure to comply [41].

6. Challenges in forensic occupational therapy

The main challenge is the context because of the complexity of the rules affecting the freedom of the offender and the occupational opportunities [7]. The heterogeneous client population is another challenging condition with in the context. Restricted daily living activities cause the loss of control and autonomy. Time use is another challenging factor, the lack of structured time use

besides the loss of control and autonomy affects the client's volitions, habits, and routines. Also, lack of opportunities for meaningful, individualized career choices for patients affects the client.

Also, change, itself is a challenging condition. There are many factors that affect the daily living activities that are the volitions, habits of the individual and the environment. Therefore, it is not possible to catch the change in every environment. Even in a prison or in a secure hospital or a probation service, the offender has always an obligation and mostly a restricted occupational choice. Motivation or perceived lack of choice is an important challenge. Another challenge is the obligations dictate some occupations and this is not the individual's choice. Occupational therapy is client-centered, but freedom deprivation is a challenge to make interventions. Occupational therapy is client-centered but freedom deprivation is a challenge to make interventions. Labeling and stigma are other challenging parts of the offenders' participation in the occupations and the community.

Keeping the three justices—criminal justice, occupational justice and social justice—in a balance is the main aim of the offender's rehabilitation and the most challenging part of the rehabilitation.

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