Austin Journal of Psychiatry and Behavioral Sciences

Open Access

Austin Publishing Group

Review Article

Psychiatric Rehabilitation and Its Application to the African Context; an Overview

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Received: August 01, 2019; **Accepted:** December 10, 2019; **Published:** December 17, 2019

Abstract

Several authors have defined psychiatric disability their own way. Accepted definitions incorporated the following points: the presence in a person of a diagnosed mental disorder, and the mental disorder limits capacity of the individual to perform expected tasks and to function in terms of important social interactions. Studies compellingly indicate that severe mental illness can impair social and inter-personal functioning. Psychiatric rehabilitation is a process of facilitating recovery and full community integration, as well as improve quality of life of persons who have a diagnosed mental disorder. Psychiatric rehabilitation services enable the rehabilitation process by helping individuals acquire skills and access community resources. The core principles of psychiatric rehabilitation remain the same while the approaches can differ. In low and middle-income countries including Sub-Saharan Africa, there is a need to develop rehabilitation services which minimize cost and exploit the family and social structure advantages available in the community. There are some examples of unique and innovative approaches of psychiatric rehabilitation piloted in Africa, and some are discussed in this article. However, there is paucity of studies in the adaptation of psychiatric rehabilitation for use in such countries. Efforts should be geared towards further developing innovative approaches of psychiatric rehabilitation for use in the continent of Africa.

Keywords: Psychiatric disability; Psychiatric rehabilitation; Low-and-middle-income countries; Severe mental illness; Community re-integration

Introduction

Mental illnesses cause high disease burden among the population of the world; this is true in particular when the Disability Adjusted Life Years (DALYs) are taken into consideration [1]. Severe Mental Illnesses (SMIs) are usually associated with long-lasting disability. The socio-economic burden of mental illness is high; it keeps people out of economically productive activities and poses burden to family by care-giving to patients. Based on an investment-case analysis, it is projected that the global cost of the lost production due to mental illness amounts to more than 10 billion days of lost work annually – the equivalent of US$1 trillion per year [2]. Today, there are effective treatment modalities to many of the mental health problems but due to complex nature of mental illness and repetitive non-compliance to treatment many patients usually encounter relapse; due to this the overall prognosis of mental illness could be unfavorable. The usual practice of psychiatry focuses on treating target symptoms, and aims to control psychopathology; it usually gives minimal consideration to rehabilitating the patient. Treating patients with mental illness routinely to control the illness without full integration or re-integration of those affected into community remains a challenge. Such practice leaves untouched the major problem of patients and caregivers, and leaves the overall psychiatric treatment incomplete.

It is not always easy to set up psycho-social rehabilitation services for those who suffer from disabling mental disorders. It requires resources and expertise; however, it is not unattainable. The most important thing is to really understand its importance and the fact that psychiatric treatment is not complete without actually rehabilitating the patient. More and more evidence needs to be generated in order to come up with innovative methods of applying psychiatric rehabilitation, and to make the rehabilitation process be important component of the treatment offered to people with mental illness. Most of the evidence generated so far is based on studies from the developed world. Even if the core principles of psychiatric rehabilitation are universal, the socio-economic context in Low-And-Middle-Income Countries (LAMICs) is different from that of developed countries.

This article focuses on defining psychiatric disability; defining psychiatric rehabilitation and describing its objectives, principles and approaches; and shows instances of how the principles and approaches can be modified and adapted to the context of low-and-middle-income countries including Africa. Review of existing literature relevant to the topic was carried out and discussed in detail and recommendations were made based on what further tasks remain to be done.

Defining psychiatric disability

Several authors have defined psychiatric disability their own way. Anthony and Farkas described psychiatric disability based on the following points: the presence in a person of a diagnosed mental disorder, and the mental disorder limits capacity of the individual to perform expected tasks and to function in terms of important social interactions [3]. Anthony and Cohen had described the negative impact of severe mental illness on function in a broad manner. According to

Citation: Haile K and Umer H. Psychiatric Rehabilitation and Its Application to the African Context; an Overview. Austin J Psychiatry Behav Sci. 2019; 6(2): 1074.

Anthony and Cohen disability has four stages in a spectrum [4]. The first step in the spectrum is impairment. Impairment describes the presence of abnormality in terms of physiological and psychological functioning of the individual; this may be expressed by effects of hallucinations and/or delusions. The next step in the spectrum is the stage of dysfunction; it comprises restriction or decreased ability to perform one's task due to impairment from the illness. Dysfunction may be expressed, for example, as lack of Activity of Daily Living (ADL) skills. The third step in the spectrum is the stage of disability, i.e., the lack of the ability of the individual to fulfill his/her role due to impairment and dysfunction. Disability can be expressed by unemployment. The final stage is disadvantage, which comprises of a lack of opportunity for an individual based on the limitations. The social consequence of disadvantage can result in poverty [4].

Studies compellingly indicate that severe mental illnesses can impair social and interpersonal functioning [5,6]. It is known that social and interpersonal skills play significant role in a person's vocational success; for example, an individual needs to communicate with bosses and/or coworkers effectively to be successful at work. Likewise, social and interpersonal skills also become relevant in success at school, in obtaining and maintaining housing, and in managing their finances effectively [5,6]. Severe mental illnesses like schizophrenia markedly affect such skills resulting in difficulty with occupation; for instance, the rate of competitive employment in such patients is not more than 20% [7]. It must be noted that symptoms of schizophrenia not only disrupted the capacity for work among patients but also severity of the symptoms was often the driving force for work impairments [8]. Psychiatric symptoms impair ability of patients to concentrate, memorize, and maintain motivation [9]. It is therefore important to recognize the importance of relieving the persons of the symptoms of the mental illness. Individuals with severe psychiatric disorders are not only at increased risk of becoming homeless, but also may have difficulty using opportunities they come across [10]. The other thing is that a patient with schizophrenia may secure stable housing but he/she may still have deficits in skills relevant to living independently [11]. It is estimated that only 31-34% of all individuals with schizophrenia live independently [11,12]. Such patients usually lack the necessary skills in managing finances, managing health, and engagement in healthy leisure activities.

Therefore, it becomes logical and appropriate to incorporate the important key features and define psychiatric disability based on the following three points: there must be a diagnosable mental illness; the individual becomes unable to pursue significant life goals because of the mental illness; and the mental disorder is chronic with prolonged impact [6].

Defining psychiatric rehabilitation

Several authors have defined psychiatric rehabilitation various ways; however, the importance of targeting functional impairment is the common denominator in almost all of the definitions proposed for psychiatric rehabilitation. The United States Psychiatric Rehabilitation Association adopted the following definition in 2007: "Psychiatric rehabilitation promotes recovery, full community integration, and improved quality of life for persons who have been diagnosed with any mental health condition that seriously impairs their ability to lead meaningful lives" [3]. Psychiatric rehabilitation is a process, which helps individuals with psychiatric disability, achieve their highest possible potential in their desired roles [13]. Psychiatric rehabilitation can also be defined as follows: "A whole systems approach to recovery from mental illness that maximizes an individual's quality of life and social inclusion by encouraging their skills, promoting independence and autonomy in order to give them hope for the future and leads to successful community living through appropriate support" [14]. In the definition it must be noted that the rehabilitation process should address deficits in social skills of patients and enhance their ability to acquire and maintain supportive social relationships. It is important to note that the skills provided should enable the individuals to live independently within their communities and to utilize community resources effectively. The gains from the rehabilitation process empower individuals to carry out their task of daily living by themselves, as well as to take care of their mental health.

Characteristics of psychiatric rehabilitation

Psychiatric rehabilitation is a participatory process and should empower the individual being rehabilitated in all stages of the process [3]. To that end, the rehabilitation process encourages and assists the individual to determine the rehabilitation goals. The goals are concerned with the decision on what the individual wishes to achieve in terms of the occupational and social roles he/she desires. After goals are determined, the next step is assisting the individual to identify his/her strengths and deficits; the strengths refer to what the individual can do well at the moment, and the deficits refer to what the individual needs to do in order to achieve the rehabilitation goals. Finally, the individual is assisted to identify the supports or resources necessary. The individual is then helped to build on strengths and to develop the skills and/or supports lacking to enable him/her achieve the goals [3]. The individual should be empowered to participate in all phases of the rehabilitation process from determining diagnosis to rehabilitation planning and finally to its implementation [15]. The diagnostic phase begins with assisting the patient to self-determine on the issue of readiness for rehabilitation. Then, the individual is assisted to set the rehabilitation goals; this includes identification of his/her strengths in terms of skills and supports, and the deficits in the areas of skills and supports. In the planning phase of rehabilitation the individual is assisted to determine the possible ways of developing the skills and supports. Finally, the plan is implemented to the achievement of the goals established at the onset [15].

Adequate functioning of an individual is a result of individual characteristics, community requirements for adequate functioning, and the level of environmental support the individual can get. The individual characteristics are the symptoms, and deficits in cognitive functioning, etc which limit the patient's functioning; the community's requirements include community evaluations of the fulfillment of individual's role function; and the environment can have positive or negative impact on the individual's functioning [16]. Activities of rehabilitation intend to achieve goals by intervening on the relevant individual strengths and deficits, and/or by intervening on developing environmental supports [3]. To this effect, appropriate setting should be selected for each activities of rehabilitation based on the wish of the patient. The process of psychiatric rehabilitation can be conducted in psychiatric hospitals or psychosocial rehabilitation centers, in community mental health centers, or other appropriate

settings [3].

Objectives of psychiatric rehabilitation

Psychiatric rehabilitation aims to increase community functioning and enable individuals to function maximally despite existence of symptoms of a mental disorder by developing the skills of the individuals [17]. Thus, the objectives of psychiatric rehabilitation are geared towards tackling the psychosocial correlates of severe mental illness not adequately addressed by medication alone, such as unemployment, isolation, vulnerability to stress, substandard living conditions, homelessness, and the heavy burden of care-giving on relatives [12].

It aims to provide important life skills, including social and vocational, to help reduce deficits in social and role functioning of the individuals [18,19]. Interventions are targeted at the identified deficits. The social skills training, for instance, intends to develop the individuals socializing skills by strategies of regularly mixing him/her with other people in sport avenues, watching television with other patients, etc. Self-care skills training may include training patients in skills like tooth-brushing, bathing, laundry, self-grooming, etc. Behavioral re-shaping is applied using methods like counseling and through positive and negative re-enforcement. Decision-making skills can also be addressed, e.g. patients can be trained to manage their finances during the rehabilitation process by opening an account in the rehabilitation facility and trained to manage their account while in the rehabilitation facility. Vocational skills training can be provided based on the patient's baseline vocational skills and develop his/her prior vocational skills, or the patient can be given option to choose from a set of vocational skills relevant in their community. The patient is then given the vocational training of his/her choice by professionals of each skill set [20].

Existing rehabilitation service approaches

People with psychiatric disabilities tend to have the similar life aspirations as people without disabilities in their society or culture [21]. They want to be respected as autonomous members of the community and lead a normal and meaningful life. Like any other person in their community, they aspire to have their own house, decent education and career, satisfying social interactions, etc [22]. Thus, in order to fulfill the above aspirations the rehabilitation process is supposed to address all possible needs of the patient based on availability of resources. Several combinations of rehabilitation services can be provided as they apply.

With the process of rehabilitation, most patients with severe mental illness can be discharged from psychiatric hospitals and live successfully in community settings [23]. If individuals have problems with housing, providing housing becomes an issue. The Residential Continuum (RC) option has been used in countries with available resources. The RC may range from options which enable full self-sufficiency to providing full dependent care; however, such measures may incur high cost [24]. The provision of emergency shelters is one of the options within the RC, when no other housing is available. Another option is supplying patients with transitional housing temporarily while working to establish community reintegration or till provision of permanent residence is possible. An alternative to RC is supported housing options [25]. This approach provides individuals with permanent housing; provision of the options is coupled with provision of a support package. Based on individual needs, the support package may include individual and family counseling, medical services, vocational training, etc [26,27].

Due to the fact that involvement in work activities improves the health condition of a patient, vocational rehabilitation has become a vital component of psychiatric rehabilitation [28]. More than its economic benefits, involvement in occupational activities gives opportunity to the individual to be active and to have social contacts. Besides, involvement in work activities markedly improves the individual's self esteem and his/her compliance with treatment. In successful cases, work and employment gives the individual economic independence and enhances his/her self-esteem with favorable prospect toward full community integration [22,29]. Vocational rehabilitation, when initiated in a hospital setting, may result in reduction of boredom and increased stimulation for patients and reverses withdrawal behavior of the patients; however, vocational rehabilitation can not be fully provided in hospitals [30]. Vocational rehabilitation programs may take a graded approach to introduce or re-introduce the individual to employment; in mild cases it may suffice to teach the person on how to search for a job, the application process, and how to prepare for job interviews. In severe cases, however, more robust approaches like the provision of transitional employment services till the person gets competitive employment opportunity was found to be appropriate [31]. The provision of temporary employment with practical on-job training, was associated in practice with the undesirable effect of causing the individuals remain stuck in temporary employment [22]. Due to this undesirable effect of transitional employment approach, the preferred and more beneficial vocational rehabilitation model has been the Supported Employment (SE) approach. One form of SE approach is the Individual Placement Model, whereby, persons are placed immediately in the competitive employment of their choice and receive all support needed to maintain their jobs [32,33]. The Individual Placement and Support (IPS) model is an evidence-based place and train model supporting people with psychiatric disability [34,35]. The IPS model has 6 stages including: referral, initial assessment, vocational profiling/action planning, job searching, employment start, and in work support. The support provided needs to be continued indefinitely. The person is actively engaged in mental health and employment services concurrently. Supported employment is evidence-based approach with good chances of acquiring and maintaining employment [34,35]. Supported employment approach has resulted in better quality of life for the individuals, as well as better symptom control of the mental disorder [33-36].

Social skills training is the psychiatric rehabilitation approach employed to help patients develop the skill of building and maintaining social relationships. This approach has travelled significant strides since the 1970s when Robert Liberman and his colleagues designed structured skills training methods [37]. The social skills training approach includes activities like symptom and medication management skills, basic conversational skills, interpersonal problem solving skills, recreation and leisure, etc [38]. The approach could utilize various training means including videos, role plays, homework assignments, etc. The training should be provided on long-term basis for better outcome [32,39,41].

A very important aspect of psychiatric rehabilitation deals with families of patients. In most communities the family and relatives shoulder the burden of caring for mentally ill people. It is estimated that 50-90% of patients with psychiatric disability live with their relatives [42]. Informal care-giving by family and relatives is known to significantly contribute to healthcare and rehabilitation [43]. Family members and care-givers must be provided with support to help reduce and enable them handle their frustrations due to the physical, financial and emotional burden from care-giving; this approach also produces good results for the patient [22,44]. Family interventions have shown results in providing support to family members of patients with severe mental illness; counseling sessions regarding expectations of the family members about the illness and its treatment, as well as on coping strategies have been found to be useful [44]. Family interventions have reduced Expressed Emotion (EE) in patients; EE is a known predictor of relapse of psychosis in patients with schizophrenia [45]. Families who participated in family intervention approach were able to provide non-invasive care to patients; this has resulted in lower relapse rates and better outcomes [22,45].

Psychiatric patients remain with troublesome symptoms during their life. Successful rehabilitation is associated with better symptomatic control which is a result of psychiatric treatment. It is not always possible to remove all the symptoms of severe mental disorders by treatment, however, the provider should identify which symptoms cause the most impairment and therefore warrant priority attention if rehabilitation is to be successful. Such symptoms must be the target of the rehabilitation process itself and patients and care-givers must be taught in the recognition of the symptoms and the early indicators of relapse so that immediate intervention is possible [46].

As has been described above, the environment of the person with psychiatric disability has a significant effect on his/her recovery. The community of the individual in this case plays a major part of the environmental factors affecting recovery. For the community to play a favorable role to the individual's recovery, steps should be taken to change attitudes of the community about the recovery process [47]. Stigma and discrimination about mental disorders have a huge deleterious effect on the process of recovery of the person with psychiatric disability [48-52]. Labeling and discrimination by the community result in development of perceived stigmatization attitudes in the individual patient with the outcomes of demoralization, unemployment and reduced social networks in the individual [48-52]. The net effect of such attitudes is low chances for the attainment of recovery and normal life [53]. On the contrary, perceived social support predicts positive outcomes in the process of recovery and full community integration, [54] as well as quality of life [55-57]. In many communities there is deep-rooted stigma related to mental illness which is becoming a barrier to full integration of patients. Therefore, the approach to psychiatric rehabilitation should include interventions at the community level [22]. To this effect, measures like provision of housing environment which avoids isolation, ensuring patient participation in cultural and political life are recommended. Generally, social inclusion should provide the individual with access to supportive relationships, involvement in group activities and civic engagement.

Community support systems

As most of the psychiatric rehabilitation is expected to take place in community setting, community mental health and rehabilitation services become vital part of the process. The types of community services, which should be available in each country, may differ depending on the development of community services and expertise available, as well as the economic capacity of the countries concerned. In developed countries, there exist systems of community support which are based on specialized professionals who work on different aspects of the patients' lives. In the presence of various specialized services which provide services targeting a specific part of patient care, there should also be a system of coordinating and integrating the services based on the needs of the patient [22]. Case Management (CM), as such, is a means of coordinating and integrating of those services. CM is utilized in the countries with developed community psychiatry services. Case managers conduct comprehensive assessment of the needs of the patient, be it health or social needs, and identify and coordinate relevant services from the mental health system as well as patient's environment for the benefit of the patient [58,59]. The core functions of case managers are assessment of patient needs to help them come up with comprehensive service provision plans, followed by arranging the services to be delivered to the patient. The services arranged may include housing, psychiatric and other healthcare, social benefits, transport, etc [57,60]. Case management can be provided by individual or by team and there are several case management models with specific characteristics. The Brokerage Model is one of the case management models [61], in which the case manager identifies needs and refers the patient to existing community services. In the Clinical Case Management model [62], the case manager plays the role of both treatment provider, as well as liaison [60]. Assertive Community Treatment (ACT) was developed with the aim of treating poorly cooperative patients with frequent hospitalizations. ACT involves multidisciplinary teams who provide all necessary treatments out of institution in patient's natural environment [63]. ACT is an approach, which was developed in 1970s by Stein and Test, as a community-based alternative to hospital care [63]. ACT allows provision of treatment, rehabilitation and support services by multidisciplinary teams in the community through assertive outreach approach [64]. The Personal Empowerment Model is another form of case management, which identifies a source of patient's strengths, instead of weaknesses and focuses on interests, abilities and competencies, and not on deficits, weaknesses and difficulties [66]. The model capitalizes on empowering and participation of the patient in treatment decisions. This approach is associated with high satisfaction with services [67]. In the Rehabilitation Model of case management, [68] like the empowerment model, the emphasis is on patient needs [68]. All the above models have their own applicability and benefits in different situations; it is possible, however, to incorporate different models of case management together as appropriate to make use of the cluster case management model.

Applicability of Psychiatric Rehabilitation to the African Context

The principles and approaches of psychiatric rehabilitation are universal and applicable to all communities. However, differing situations of different countries and communities in terms of income

and cultural backgrounds make the use of specific approaches to each community necessary. The process of psychiatric rehabilitation in Low and Middle-Income Countries (LAMICs), particularly the community rehabilitation process takes a different approach. Developing countries, such as those in sub-Saharan Africa, have limitations of resources to establish and run rehabilitation services similar to those found in developed countries. In addition to poor budgets for establishing such services, these countries also have severe shortage of appropriately trained providers [69-71]. Many African countries have started to implement the approach of providing integrated services at the level of the primary health care services [69,70,72]. The integration approach includes mental health services and community involvement, as well as utilization of family networks in the provision of treatment and rehabilitation. The application of psychiatric rehabilitation in Africa has utilized the integrated primary health care model supported by the World Health Organization, as well as indigenous models.

Some indigenous models of psychiatric rehabilitation in the African continent made use of the family and community social support system found in most of the continent. One example of such an approach is the rehabilitation villages which were utilized in Tanzania [73,74]. The villages provided productive activities in a setting of a friendly natural and social milieu [20]. The patients were provided with the opportunity to participate in the production activities that included agriculture, livestock keeping, etc. The villages provided an environment identical to the community where the patient lived and will live, making it easier for the patient to adapt when reintegrated to the community. At discharge from the villages, the community leader with land for agricultural activities which they have practiced while in the villages [20] provided the patients.

Another approach to rehabilitation, which was tried in the developing world, was integrating the process of rehabilitation into development activities. A typical example is the civil society organization known as BasicNeeds. BasicNeeds is an international development organization, which also was involved in psychiatric rehabilitation services in Africa. It was established in 2000 to initiate mental health and development programs in less developed countries [75,76]. This model implemented the approach of patient and caregiver participation concurrently in both mental health care and developmental activities. The Model was composed of five separate but interlinked interventions: capacity building, community mental health, sustainable livelihoods, research and management/ administration [75]. In the program, the participants for the Community Mental Health (CMH) process were identified within their communities and Community-Based Workers (CBWs) or nurses registered participants who later were diagnosed and provided with treatment and follow-up from psychiatrist or other qualified professionals. Community-based workers or nurses visit the homes of participants regularly to assess and provide guidance on adherence to treatments [75]. The advantage of this innovative approach was that it integrated psychiatric rehabilitation into community development support activities, which are needed by several African communities to survive, making it acceptable to patients and communities.

Delivering mental health services integrated into primary health care has been the approach recommended by the WHO for LAMICs [77]. In line with this, the use of PHC workers and the role of patient family in psychiatric rehabilitation has been studied in Africa. In South Africa PHC nurses were involved in rehabilitation work [78]. The nurses worked on identifying the first indicative symptoms of relapse in a patient and on educating the patient and family about those symptoms. The nurses along with the patient and family made their rehabilitation plans based on the symptoms indicative of relapse. The plans focused on ways to cope with illness of the patient, on handling conflicts, and managing family expectations about the patient and illness. Such an approach was found to be useful in terms of achieving the set objectives. The advantage of the approach was that it made use of both PHC workers and care-givers (families) of patients in the process of rehabilitating patients.

A similar approach has been studied in rural Ethiopia, but the latter utilized trained Community-Based Rehabilitation (CBR) workers instead of PHC workers [79,80]. In this approach, lay persons with no prior mental health experience were recruited from the local area and provided with short training to serve as CBR workers. The CBR intervention comprised of home visits by CBR workers, community mobilization, and family support groups [79,80]. Home visits were conducted by CBR workers with intended activities including psycho-education, adherence support, family intervention, crisis management, support returning to work and social activities, as well as dealing with stigma and stress [79,80]. Community mobilization included community awareness raising and targeted mobilization of financial or practical support depending on individual need. Family support groups focused on enabling understanding of schizophrenia, access to healthcare, human rights, and crisis management [79,80]. The CBR approach also considered to include dealing with distressing symptoms such as hallucinations and delusions as rehabilitation targets [79]. The advantage of this approach was that it took into consideration the fact that disability arose due both to illness and societal factors [81], and it intended to employ an intervention addressing both aspects. This model provided affordable approach to community rehabilitation of patients with schizophrenia, which can be integrated into the health extension activities, which existed in the healthcare system of Ethiopia by taking advantage of the established system of delivering healthcare to the masses.

Conclusions

Psychiatric rehabilitation should be a necessary component of the overall psychiatric treatment to help patients recover from their illness and be productive. Psychiatric disability occurs when persons have diagnosed mental illnesses that limit their capacity to perform certain tasks and functions. Targeting functional impairment is a necessary component in the definition of psychiatric rehabilitation. Psychiatric rehabilitation may use diverse approaches, but it has been generally defined as a process of applying activities aimed at helping people with severe mental illness achieve their highest potential in normal adult roles, such as working, living independently, and improving social relationships. Psychiatric rehabilitation is a participatory process and should empower the individual being rehabilitated in all stages of the process. While the principles and approaches of psychiatric rehabilitation can universally be applied to all types of communities, affordability and differing cultural backgrounds make it necessary to modify and use specific approaches

for each communities. The application of psychiatric rehabilitation gauged to the context of African countries has been implemented in some countries; however, studies conducted to evaluate effectiveness of various psychiatric rehabilitation approaches in the continent of Africa have been insignificant. The approaches of psychiatric rehabilitation studied in Africa combined different aspects of PHC, community-based approach, and involvement of local community resources and organizations. There is scarcity of studies from Africa; however, reviewing the existing evidence from the continent the overall application of effective approaches of psychiatric rehabilitation has been insignificant. More innovative approaches need to be devised and tested in order to come up with effective, acceptable and affordable methods of psychiatric rehabilitation in the continent of Africa.

Acknowledgments

We are grateful to the Research and Training Department of Amanuel Mental Specialized Hospital for providing the necessary support.

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