

The Disability Profile of Individuals with Schizophrenia in Bahrain Using the Life Skills Profile 39	العنوان:
المجلة العربية للطب النفسي - اتحاد الاطباء النفسانيين العرب - الأردن	المصدر:
Jahrami, Haitham Ali	المؤلف الرئيسي:
Saif, Zahraa, Qaheri, Shubbar(Co-Author, Author)	مؤلفين آخرين:
مج 25, ع 2	المجلد/العدد:
نعم	محكمة:
2014	التاريخ الميلادي:
نوفمبر	الشهر:
190 - 200	الصفحات:
636042	رقم MD:
بحوث ومقالات	نوع المحتوى:
EduSearch	قواعد المعلومات:
انقسام الشخصية، البحرين، المعاقون، المهارات الحياتية	مواضيع:
http://search.mandumah.com/Record/636042	رابط:

The Disability Profile of Individuals with Schizophrenia in Bahrain Using the Life Skills Profile 39

أوجه الإعاقة لدى الأشخاص المصابين بالفصام في مملكة البحرين باستخدام

مقياس المهارات الحياتية 39

Haitham Jahrami, Zahraa Saif, Shubbar Qaheri, Ahmad Asad, Gnanavelu Panchasharam

هيثم علي جهرمي، زهراء سيف، شبر القاهري، احمد اسد، جنانا فيلو بنشاشرم

Abstract

Aim: The primary objective of the present study is to describe the disability profile of individuals with schizophrenia in the Psychiatric Hospital Bahrain as measured by the Life Skills Profile 39 (LSP 39). Secondary objective to this research is to compare the disability profile of individuals with schizophrenia in Bahrain with other countries as measured by LSP 39. **Method:** The LSP 39 was administered to a convenient sample of those individuals with schizophrenia who were admitted to the Psychiatric Hospital, Bahrain during the period 2009-2012. Three registered occupational therapists completed all questionnaires with the patients. Overall, N= 279 participants were considered for the research. **Results:** N=247 participants with schizophrenia were recruited to the study. Total mean score of LSP 39 for the entire subjects 110.59 (SD= 13.19). Maximum subscales scores were for communication; minimum subscales scores were for social contact. Women generally functioned better than men; differences however were not statistically significant. Bahrain scores were higher than Singapore and India but lower than Australian, American and United Kingdom. **Conclusion:** Findings suggest the general disability profile of all subjects at inclusion showed that a moderate level of functioning is maintained. Gender differences in term of life skills functioning seem to be non-significant. Regional differences in the disability profile of individuals with schizophrenia are influenced by the manner in which health and social services are delivered through a complex network of organizations and people.

Keywords: Life Skills Profile 39, Bahrain, schizophrenia, disability, function

Declaration of interest: None

Introduction

Schizophrenia is viewed as one of the most debilitating and disabling illness in psychiatry¹. Schizophrenia affects both men and women equally, with men having a greater precedence and at earlier ages than women^{2, 3}. The illness is characterized by a breakdown of thought processes commonly manifested as auditory hallucinations, paranoid or bizarre delusions, disorganized speech and thoughts³.

The disability level of a person increases when the disease is present at young age^{1,3}. It has been estimated that more than 60% of people with schizophrenia have severe disability, which usually appears in the first five years after onset¹.

Relapses, poor functioning and social dysfunction are therefore key features in schizophrenia³. Poor functioning has been attributed to four elements: (1) acute positive symptoms, (2) negative symptoms, (3) secondary handicaps, e.g. institutionalization, stigma and discrimination, and (4) extrinsic disadvantages, e.g. lack of social support and unemployment⁴.

Although the negative symptoms of schizophrenia are considered to be one of the prominent factors affecting functioning, it has been found that cognitive functioning has the most significant correlation with functional state and adaptive functioning namely amongst chronically hospitalized patients with poor outcomes^{5,1}. This supports the view that cognitive functioning is a determinant of life skills and that real world disability is the product of a complex array of ability, deficits and symptoms¹.

The Disability Profile of Individuals with Schizophrenia in Bahrain

Life skills are the set of human skills acquired via learning or direct experiences that are used to handle problems and questions commonly incorporated in daily life. The World Health Organization (WHO, 1997) has defined life skills as “the abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life”⁶. Individuals with schizophrenia have shown relatively lower competence and are dependent on their daily living skills because of their prolonged illness and most of them experience detachment from their reality living⁷.

Life skills training is a common intervention used in psychosocial rehabilitation with persons with schizophrenia⁸. Occupational therapists mainly interested in the assessment of daily living skills, leisure activities, and work related tasks⁹.

In the late 1980's, Alan Rosen and his colleagues studied and developed the Life Skills Profile (LSP 39) as a measure for schizophrenia and initially focused on different aspects of the functions that affect survival and adaptation in the community⁴. Later, it was been applied in hospital-based setup to study the level of disability. The LSP provides greatly improved coverage of especially psychotic problems, which contribute significantly to disability¹⁰. The LSP has high inter-rater reliability and high test-retest reliability among the individuals with schizophrenia and it has been applied with both hospital-based and community settings^{11,12}. The five dimensions assessed by the LSP 39, which are: (1) self-care, (2) non-turbulence behavior, (3) social contact, (4) communication, and (5) responsibility for disease management correspond very well to the three activities domains emphasized by occupational therapists (1) self-care, (2) leisure and (3) work related activities¹³.

The primary objective of the present study was to examine the disability profile of individuals with schizophrenia in Bahrain using the LSP 39. The secondary objective was to compare the disability profile of individuals with schizophrenia in Bahrain with other countries using the LSP 39.

The authors performed an electronic search using several databases (Google Scholar, PsycINFO, OT Seeker, Cochrane Database, PubMed, CINAHL, and ProQuest medical) about the disability profile of persons with schizophrenia in Bahrain. On careful review, it was found that there were no studies related to this subject, thereby adding strength to the need for this particular research.

Methodology

The main purpose of the present study was to examine the disability profile of individuals with schizophrenia using the LSP 39. The research had two formal objectives as below:

Study objectives:

- To examine the disability profile of people diagnosed with schizophrenia using the LSP 39
- Compare the disability profile of individuals with schizophrenia in Bahrain based on participants gender
- Compare the disability profile of individuals with schizophrenia in Bahrain with other countries using the LSP 39

Participants were chosen by convenience sampling method by three qualified occupational therapists responsible for the administration of the tool. The three therapists were informed about the aim of the research because they were on the research team.

Participants were selected among the in-patients of the acute and sub-acute men and women wards of The Psychiatric Hospital, Bahrain. All patients admitted to hospital from 2009-2012 with schizophrenia were included along with patients attending occupational therapy services on the outpatient basis who had the life skills assessment specified in their doctor referrals.

Participants also had to satisfy the inclusion criteria:

- Willingness to participate in the research.
- Adults aged between 18 years to 65 years.
- Persons with a diagnosis of schizophrenia of any type.
- No intellectual disabilities.
- No co-existing alcohol or drug abuse or psychosis due to alcohol or drug abuse.
- No physical disability.

Setting

This present study was conducted at the Occupational Therapy Department, Psychiatric Hospital, Bahrain over the period of three years (2009 – 2012).

Bahrain is a small island state near the western shores of the Arabian Gulf. The Psychiatric Hospital was established in the capital Manama in 1948. The Psychiatric Hospital is the only public center specialized for providing mental health services on the island. There is an outpatient department, 13 inpatient wards, community psychiatric services, child and adolescent psychiatry, a day care unit, long-stay wards, two psychogeriatric wards and a rehabilitation department.

A mental health act is still under study by the Ministry of Health, Bahrain. Patients are admitted to the Psychiatric Hospital mainly on voluntary basis or at the request of their families and relatives. Fewer cases are admitted at the request of court or police for assessment and report.

Instrument

The measurement scale used in the present study was the Life Skill Profile 39 developed by Rosen and colleagues (1989). The scale was developed mainly for individuals with schizophrenia and is valuable for assessing their function and disability¹⁴. It focuses on different aspect of functions that affect survival and adaptation in the community and thereby of considerable use when assessing functional status of the patients. This enables the therapists to assess the areas of disability and plan treatment strategies.

The LSP 39 is a 39-item scale with five subscales/domains. The five subscales/domains of LSP are self-care, non-turbulence, social contact, communication and responsibility.

Each item is scored on a four point ordinal rating and the anchor points added to each item are: “four” (4) no difficulty; “three” (3) slight difficulty; “two” (2) moderate difficulty and “one” (1) extreme difficulty. Higher score means lesser the disability and greater functioning and vice versa. Potential total scores range from 39 to 156 and in which lower scores suggests lower function and higher score for better function¹⁴.

Below is the presentation of number of total items, and two sample items for each domain:

Self-care (10 items): “Is this person generally well groomed, e.g., neatly dressed, hair combed?” and “Does this person wash himself or herself without reminding?” Non-turbulence (12 items): “Is this person generally angry or prickly towards others?” and “Does this person generally take offence readily?”

Social contact (6 items): “Does this person generally withdraw from social contact?” and “Does this person generally show warmth to others?”

Communication (6 items): “Does this person generally have any difficulty with initiating and responding to conversation?” and “Does this person generally intrude or burst in on others’ conversation, e.g. interrupts you when you are talking?”

Responsibility (5 items): “Does this person generally look after and take her or his own prescribed medication (or attend for prescribed injections on time) without reminding?” and “Is this person willing to take psychiatric medication when prescribed by a doctor?” Brief versions of the Life Skills Profile (20-items) and (16-items) were available, but a decision was taken to proceed with the LSP 39 because it is more comprehensive as an outcome measure. The LSP 39 has been closely studied and the instrument has been used in several studies around the world allowing comparison later on ^{15, 16, 17, 18}.

The LSP 39 items are framed with examples and are free from jargon and hence can be administered by either professionals or non-professionals with equal ease. The scale has to be completed by an objective rater who has close association with the client and has observed his or her behavior for at least three months. The scale was administered to the participants by his/her respective occupational therapist after developing rapport and trust. The LSP 39 takes 20-25 minutes to administer.

Three therapists who spoke Arabic and English fluently were involved in the data collection process. The English language version of the LSP 39 was administered for English language speakers. For the Arabic language speakers, the therapists used a standard translation version from English to Arabic of the LSP 39 items. The researchers used the standard protocol of translation

The Disability Profile of Individuals with Schizophrenia in Bahrain

and back translation in developing the Arabic translations of the original LSP 39 questions. The Arabic translation was tested on a small number of patients before using it in the research. For all of the patients, the therapists completed the LSP 39 when evaluating the patient's life skills.

Ethical Approval

Ethical approval was sought and granted from the appropriate authorities (Research Committee, Ministry of Health, and Bahrain) on 15 July 2009. The relevant consultants were informed about the research and verbal consent obtained from the patients to use their information.

Anonymity of the patients was safeguarded during the study by the following mechanisms:

- Each subject was coded and there were no names or identification information attached to the survey.
- Demographic data included only the age and gender details and these were used only for the purposes of research.

Data Analysis

The collected data was analyzed using the Statistical Package for Social Science version 18 for windows (PASW/SPSS 18.0) and the demographic data analysis was completed on the following variables: age and gender and it was subjected to the following analysis: mean standard deviation, maximum, and minimum.

Inferential statistics in the form of independent samples t-test was used to test statistical differences between men and women.

Results

Overall, 279 potential participants were considered for the research. Six patients were excluded because of significant physical disability, e.g. amputation and 26 persons with schizophrenia did not wish to participate in the research; of the 26 persons who did not wish to participate 24 were women.

For the current study, N=247 participants with schizophrenia were recruited of which 61.1% were men and 38.9% were women (n=151 men, n=96 women). It was found that 89 36% patients were between the ages of 20 to 30 years, 79 32% were between the ages of 31 to 40 years, $M= 34.6$ years ($SD= 11.1$).

Approximately 40% were diagnosed with paranoid subtype of schizophrenia; approximately 10% were diagnosed with hebephrenic subtype of schizophrenia and the 50% remaining cases were undifferentiated subtype of schizophrenia. Diagnoses were made in accordance to the ICD-10 criteria.

Item responses were checked for normality by analyzing the skewness and kurtosis for each item in the LSP 39. Scores were within the ± 1 acceptable range; therefore no items were eliminated from the analysis due to distribution normality.

Procedure Cronbach alpha, a measure of internal consistency, was used to test the reliability of the obtained data. Cronbach alpha measures how well a set of items or variables measures a single construct. Alpha statistic for the entire 39 items was above 0.90 indicating an excellent level of internal consistency. For the five subscales an alpha measure greater than 0.75 was obtained for all of the five subscales indicating an acceptable-good level of internal consistency. Statistic "scale if item deleted" was computed during the Cronbach alpha procedure, no critical change in alpha was achieved if items were removed.

Reporting reliability is very important in any research, reliability is defined simply as the instrument ability to be coherent with itself. Several approaches are usually used in reliability measurement. First, internal consistency, which is defined as the degree to which responses to individual items in a multiple-item measure are consistent with each other. Second, test-retest reliability, which is defined as the measurement ability to produce same results over time under the same conditions. Third inter-rater reliability, which is interrater agreement or concordance, is the degree of agreement among raters. In the present research study internal consistency approach was used by computing the coefficients of items defining on single domain in the LSP 39. The test-retest reliability and the inter-rater reliability were not computed because they were beyond the original aims of the research. Nonetheless, the authors acknowledge other papers focusing on

the psychometric properties of the LSP 39 should focus on the test-retest reliability and the inter-rater reliability.

Gaski approach to construct validity was followed in this research. Convergent validity was judged by correlating all of the items under each domain of the LSP 39, e.g. under the domain responsibility we correlated the items “Does this person generally look after and take her or his own prescribed medication (or attend for prescribed injections on time) without reminding?”, “Is this person willing to take psychiatric medication when prescribed by a doctor?”, “Does this person co-operate with health services (e.g. doctors and/or other health workers)?”, “Does this person lose personal property?” and “Does this person take things which are not his or hers?”. Correlation coefficients provided evidence that the items all converged on the same domain with different correlation strengths and significance for the five domains.

The five domains were also correlated to judge their convergent validity of the LSP 39 as an instrument. The results were generally positive significant relationships.

See Table 1.

Table 1: Correlations between the domains to verify construct validity

		Self-care	Non-Turbulence	Social Contact	Communication	Responsibility
Self-care	r	1				
	Sig.					
Non-Turbulence	r	0.233**	1			
	Sig.	0.000				
Social Contact	r	0.577**	0.247**	1		
	Sig.	0.000	0.000			
Communication	r	0.525**	0.272**	0.353**	1	
	Sig.	0.000	0.000	0.000		
Responsibility	r	0.444**	0.472**	0.397**	0.395**	1
	Sig.	0.000	0.000	0.000	0.000	

The total mean score of LSP 39 for the entire subjects $M=110.59$ ($SD=13.19$), minimum score 81 and maximum score 149.

Overall, LSP 39 scores of entire subjects demonstrated an above average function in all the five subscales: (1) self-care (27.04 out of a maximum possible of 40.00), (2) non-turbulence (35.79 out of a maximum possible of 48.00), (3) social contact (12.85 out of a maximum possible of 24.00), (4) communication (19.25 out of a maximum possible of 24.00), and (5) responsibility (15.38 out of a maximum possible of 20.00). See Table 2.

The total mean score of men LSP 39 were slightly higher than women $M=111.00$ ($SD=13.94$), $M=109.94$, ($SD=11.98$), respectively. Men had greater dispersion of values than women as shown by the larger standard deviations. Nonetheless, differences between men and women on the entire LSP 39 scores were statistically non-significant. See Table 2.

Table 2: Life Skills Profile 39 for the entire sample

Life Skill Profile 39	Entire Sample n=247				
	M	SD	Min	Max	CI 95% (Low, High)
Self-care	27.04	4.82	13.00	39.00	26.44, 27.65
Non-turbulence	35.79	5.73	16.00	48.00	35.06, 36.51
Social Contact	12.85	3.20	7.00	24.00	12.45, 13.73
Communication	19.25	2.77	11.00	24.00	18.90, 19.60
Responsibility	15.38	2.12	11.00	20.00	15.12, 15.65
Overall LSP 39	110.59	13.19	81.00	149.00	108.66, 112.02

The Disability Profile of Individuals with Schizophrenia in Bahrain

On a detailed comparison of the mean scores between men and women diagnosed with schizophrenia, using procedure independent samples t-test, it was found that women had higher LSP 39 score on four sub scales out of the five; these were self-care, non-turbulence, social contact, and responsibility. The difference between women and men on the above four subscales were however not statistically significant at the 0.05 level. For the subscale “communication” men had higher scores. Independent samples t-test showed that the differences between men and women on this domain were significant. See Table 2.

Table 3: Significant differences between men and women

Life Skill Profile-39 Components	Men (n=151)				Women (n=96)				Independent Samples t-test
	M	SD	Min	Max	M	SD	Min	Max	
Self-care	26.99	5.01	13.00	39.00	27.13	4.55	14.00	37.00	0.82
Non-turbulence	35.56	6.47	16.00	48.00	36.14	4.36	26.00	47.00	0.44
Social contact	12.64	3.27	7.00	24.00	13.17	3.07	7.00	21.00	0.20
Communication	19.87	2.54	14.00	24.00	18.30	2.84	11.00	24.00	*0.001
Responsibility	15.42	1.98	11.00	20.00	15.33	2.32	12.00	20.00	0.74
Overall LSP 39	111.00	13.94	81.00	149.00	109.94	11.98	84.00	140.00	0.81

*P<0.05

Discussion

Our findings for the sample of 247 individuals with schizophrenia shows that the total percentage of male participants (61%) was higher compared to women 39%.

More than two-third of our participants were below the age of 40 years, with one-third of them below the age of 30 years. This shows that our participants were having an early age of schizophrenia onset¹. In the context of Arab region people have stigma of going to a psychiatric hospital in the early stage of any mental illness,¹⁹ but our sample suggests that there are an increasing number of patients seeking earlier treatment and rehabilitation. The majority of our samples were diagnosed to have paranoid type of schizophrenia, with 40% of them having this diagnosis²⁰. For rehabilitation therapists this can be important data because the prognosis for paranoid type is the best. These individuals have impaired thoughts and atypical thinking; they are however better able to function in life than other subtypes of schizophrenia²¹. Paranoid schizophrenia generally tends to have more of the positive rather than the negative symptoms. Therefore, therapists should intervene with this subtype as soon as they are admitted to prevent disability and improve rehabilitation outcomes.

The present research aimed to study the level of disability of individuals with schizophrenia; for all 247 participants LSP 39 mean scores were $M=110.59$ ($SD=13.19$), (Confidence Interval 95%, lower limit 108.66, upper limit 112.02). Potential total scores range from 39 to 156 and in which lower scores suggests lower function and higher scores for better function. Our results were higher than a Singapore study $M=108.8$ ²⁵ and an Indian study $M=101.69$ ($SD=23.04$) for men and $M=95.74$ ($SD=16.53$) for women¹¹. Our mean scores for all participants was shown to be lower than that reported in an Australian study $M=118$ ($SD=17.7$)⁴, an American study sample $M=124.41$ ($SD=14.97$)²² and a United Kingdom study $M=128$ ($SD=18$)²³.

The researchers infer that regional differences in the disability profile of individuals with schizophrenia is influenced by the manner in which health and social services are delivered through a complex network of organizations and people. Developed countries appear to have the advantage as shown clearly in UK and US studies having the best functioning profile for schizophrenia. In rehabilitation practice planning an individually tailored program of therapeutic activities and validation of treatment modality being adopted is essential. It attains prioritizing of goals concerning performance.

The LSP 39 score would serve as a guide for goal setting and helps justifying the choice of interventions by focusing directly on areas of insufficient skills. Skills’ training is a commonly

used occupational therapy intervention in the rehabilitation of people with schizophrenia that has proven to be associated with statistically significant improvement in the living skills of adults with persistent schizophrenia²⁴. The life skills profile can form the basis for planning skills training programs for patients within the hospital setting to facilitate their reintegration into the community and it can act as a predictor of their readiness to be discharged. Detailed examination of the five subscales that make up the LSP 39, for the entire Bahrain sample (N=247) reveals that our sample has a “moderate” level of functioning in all five subscales (self-care, nonturbulence, social contact, communication, and responsibility).

The total mean score of non-turbulence, social contact, and communication skills was lower when compared with the Indian and Singapore study results, but the overall results of the LSP 39 subscale is close to similar value of Australian results except non-turbulence (35.79).

The present study suggests that men $M=111.0$ ($SD=13.94$) are slightly better in life skills than women $M=109.94$ ($SD=11.98$). The finding concur previous findings from India, Singapore, Australia, UK and USA. For example, Eu and colleagues concluded that men have lower disability profiles than women²⁵.

The use of LSP 39 as an outcome measure would contribute to demonstrating therapeutic outcomes gained post-intervention and it can be considered as an indicator of the effectiveness of therapeutic interventions that have been offered, hence ensuring the credibility of psychosocial rehabilitation as an intervention. It has been found that basal level of functioning seems to be a reliable predictor of later functioning. Besides, a higher level of functioning at follow up was predicted by decrease in the severity of acute symptoms at baseline²⁶. Additionally, the life skills profile scores can indicate the likelihood of re-hospitalization and indicate their patient's level of reintegration within the community. According to Granholm and colleagues, it has been found that social dysfunction is closely related to relapse and re-hospitalization and been reported as important factors affecting prognosis²⁷.

The rationale behind the current study is not only about focusing on the psychiatric disability in persons with schizophrenia as measured by competence in life skills. The authors acknowledge that the philosophy and goals of psychiatric rehabilitation goes far beyond independent living assistance. True, psychosocial rehabilitation is all about recovery and leading successful and satisfactory life¹³. Thus, rehabilitation program of independent living, supported education program and supported employment need to be collated together to drive rehabilitation efforts²⁸.

Most of our understanding about the disability profile of persons with schizophrenia and their rehabilitation needs comes from developed countries particularly North American and Western Europe where the concept of psychosocial rehabilitation is well applied and well researched.

In developing countries, the emphasis on extended psychosocial rehabilitation as an important component of managing severe and persistent mental illnesses is often overlooked in favor of instituting expensive newer generations of anti-psychotics with the premise that these medicines will produce dramatic improvements in symptoms and function²⁹. Therefore, in developing countries rehabilitation is focused mostly on interventions in the hospital's services with very few programs in the community.

To use imported literature from developed countries and cultures to make decisions or recommendations for designing modern psychosocial rehabilitation programs in developing countries one needs to be cautious in making conclusions and generalizations. For example, the Australian second national survey concluded that up to 60% of people with schizophrenia have employment goals and another substantial proportion want help with mainstream education. These findings, while very much helpful in designing a rehabilitation program in Bahrain, evidence that more basic rehabilitation needs for persons with schizophrenia is warranted to make an evidencebased conclusion. Obtaining data about the present situation of the disability level and rehabilitation needs for persons with schizophrenia can be used as a tool to persuade policymakers to raise the bar and move to more advanced rehabilitation interventions and programs.

The Disability Profile of Individuals with Schizophrenia in Bahrain

On a comparison of the mean scores between the two genders on the five subscales comprising the LSP 39, women appeared to score higher in four subscales (selfcare, non-turbulence, social contact, and responsibility) than men.

Results of independent samples t-test between men and women for the LSP 39 subscales show a single significance on communication skills. Men subjects had better functioning compared to women on communication possibly because in general men are better able to become task-oriented than women. The international studies show similar results^{25,11}.

Ocha and colleagues, and Dickinson and associates suggest that early onset of illness negatively influences psychosocial function especially in the areas of communication skills^{1,30} and their influence on the general quality of life experience³¹. Although it is clear that real time of social interaction or communication among the acute schizophrenics needs three stages of sensory perceptions (receiving, processing, and information). It has been well documented by the other studies and Erikson's theory of psychosocial development that individuals with early onset of schizophrenia have a greater disability in language abilities³⁰.

Findings from our study have implications for rehabilitation therapists at psychiatric hospitals with regard to further development of therapeutic interventions and strategies in dealing with communication skills. Although the current research was carefully prepared, the researchers would like to highlight some limitations and shortcomings.

First, the research was conducted in one setting only that is a 'hospital' setting and did not include 'community' or 'aftercare' settings for example. Unfortunately, this limitation was beyond the researchers' control because the Psychiatric Hospital is the only center in Bahrain for providing professional mental health services.

Second, evaluation of the disability using LSP 39 was not done through independent blind examiners; rather the therapists themselves who were researching the topic did it.

Third, translation of the LPS 39 to Arabic might have some influence on the reliability and validity of the original scale. Having said that, the authors have followed standard protocols of translating the LSP 39 and demonstrated its psychometrics by reporting Cronbach alpha coefficients and commenting on its construct validity.

Fourth, few questions from the LSP 39 cannot be assessed in hospital based setup and it is due to community restriction, but the researchers have taken valid information based on participants' past three months of overall functioning. Eu and colleagues established that some LSP items could not be validly rated in hospitalized patients²⁵.

Fifth, the life-skills measures were not correlated with the symptom profile of the patients. Correlating the scores of LSP with the measures of Positive and Negative Syndrome Scale (PANSS) or Psychotic Symptoms Rating Scale (PSYRATS) would have yielded more meaningful data since negative symptoms in schizophrenia are likely to influence the LSP. Future studies may be conducted taking this into account so that it could help rehabilitate people with schizophrenia.

Conclusion

The current study suggests the general disability profile of all participants at inclusion showed that a moderate level of functioning was maintained. Women generally functioned better than men; nonetheless, differences appeared to be non-significant. The disability level for individuals with schizophrenia in Bahrain is higher than the disability profile reported in India and Singapore, but lower than the disability profile reported in Australia, United States and United Kingdom. It appears that regional differences in the disability profile of individuals with schizophrenia are influenced by the manner in which health and social services are delivered through a complex network of organizations and people.

References

1. Ochoa S, Usall J, Villalta-Gil V, Vilaplana M, Márquez M, Valdelomar M, Haro JM. Influence of age at onset on social functioning in outpatients with schizophrenia. *European Journal of Psychiatry*. EDES Group. 2006; 20(3):157-163.
2. Canuso CM, Pandina G. Gender and schizophrenia. *Psychopharmacology Bulletin*. 2007; 40(4):178-190.
3. Sadock BJ, Sadock VA. Schizophrenia in Kaplan and Sadock's *Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry*. 10th ed. Philadelphia: Lippincott Williams and Wilkins; 2007; pp.467-497.
4. Rosen A, Hadzi- Pavlovic D, Parker G. The life skills profile: A measure assessing function and disability in schizophrenia. *Schizophrenia Bulletin*. 1989; 15(2).
5. McGurk SR, Moriarty PJ, Harvey PD, Parella M, White L, Freidman J, Davis KL. Relationship of cognitive functioning, adaptive life skills and negative symptom severity in poor outcome geriatric schizophrenia patients. *Journal of Neuropsychiatry and Clinical Neurosciences*. 2000; 12(2): 257-264.
6. World Health Organization (WHO). Life skills education for children and adolescents in schools: Introduction and guidelines to facilitate the development and implementation of life skills programmes. 2007 Geneva, Switzerland: WHO Programme on Mental Health.
7. Stanghellini G, Ballerini M. Values in persons with schizophrenia. *Schizophrenia Bulletin*. 2006; 33(1):13141.
8. Tungpunkom P, Nicol M. Life skills programmes for chronic mental illnesses. *Cochrane Database of Systematic Reviews, Cochrane Reviews*. 2008; (2).
9. Filson P, Kendrick T. Survey of Roles of Community Psychiatric Nurses and Occupational Therapists. *Psychiatric Bulletin*. 1997; 21: 70–73.
10. Rosen A, Trauer T, Hadzi-Pavlovic D, Parker G. Development of a brief form of the life skills profile: the LSP-20. *Australian and New Zealand Journal of Psychiatry*. 2001; 35:677–683.
11. Manickam L, Chandran R. Life skills profile of patients with schizophrenia and its correlation to a feeling of rejection among key family carers. *Indian Journal of Psychiatry*. 2005; 47:94–98.
12. Parker G, Rosen A, Emdur N, Hadzi-Pavlov D. The Life Skills Profile: psychometric properties of a measure assessing function and disability in schizophrenia. *Acta Psychiatr Scand*. 1991; 83(2):145-52.
13. Mairs, H.; Bradshaw, T. Life Skills Training in Schizophrenia. *British Journal of Occupational Therapy*. 2004; 67(5), pp. 217-224.
14. Rosen A, Trauer T, Hadzi-Pavlovic D, Parker G. The life skills profile background, items and scoring for the LSP–39, LSP–20 and the LSP–16. 2006; [Online] Available at http://www.blackdoginstitute.org.au/docs/LifeSkillsProfil_e.pdf [Accessed 4th December 2011]
15. Afuwape SA, Johnson S, Craig TJK Miles H, Leese M, Mohan R. Ethnic differences among a community cohort of individuals with dual diagnosis in South London. *Journal of Mental Health*. 2006; 15(5): 551-567.

The Disability Profile of Individuals with Schizophrenia in Bahrain

16. Burgés V, Fernández A, Autonell J, Melloni F, Bulbena A. Spanish adaptation and validation of the brief form of the life skills profile-20: an instrument to assess daily living skills in real clinical settings. *Actas Espanolas de Psiquitria*. 2007; 35(2):79-88.
17. Huang CY, Sousa VD, Tsai CC, Hwang MY. Social support and adaptation of Taiwanese adults with mental illness. *Journal of Clinical Nursing*. 2008; 17(13):1795802.
18. Mohr S, Simon A, Favrod J, Fokianos C, Ferrero F. Validation of the French Version of the Life Skills Profile with people suffering of schizophrenia. *L'Encephale*. 2004; 30(4):343-51.
19. El-Islam MF, Abu-Dagga SI. Illness behavior in mental ill-health in Kuwait. *Scandinavian Journal of Social Medicine*. 1990; 18(3): 195-201.
20. McGrath J, Saha S, Chant D, Welham J. Schizophrenia: A concise overview of incidence, prevalence, and mortality. *Epidemiologic Reviews*. 2008; 30:67–76.
21. American Psychiatric Association. Task force on DSMIV. Diagnostic and statistical manual of mental disorders: DSM-IV-TR. American Psychiatric Publication. 2000; p: 314.
22. Keller S, Hayes R. The relationship between the allen cognitive level test and the life skills profile. *American Journal of Occupational Therapy*. 1998; 52 (10).
23. Aoyama N, Drost JJ, Manchanda R, Northcott S, Neufeld RWJ, Ravi S, Nagalingam R, William P, Maria D, Betsy S, Williamson PC. Grey matter and social functioning correlates of glutamatergic metabolite loss in schizophrenia. *British Journal of Psychiatry*. 2011; 198: 448-456.
24. Kopelowicz A, Zarate R, Gonzalez Smith V, Mintz J, Liberman RP. Disease management in Latinos with schizophrenia: a family-assisted, skills training approach. *Schizophrenia Bulletin*. 2003; 29(2):211-27.
25. Eu PW, Lee C, Parker G, Loh J. The disability profile of patients with schizophrenia in psychiatric hospital and community settings in Singapore. *Singapore Medical Journal*. 2001; 42(12):559-562.
26. Siegel SJ, Irani F, Brensinger CM. Prognostics variables at in-take and long-term level of function in schizophrenia. *American Journal of Psychiatry*. 2006; 163:433–441.
27. Granholm E, McQuaid JR, McClure FS, Auslander LA, Perivoliotis D, Pedrelli P, Patterson T, Jeste DV. A randomized, controlled trial of cognitive behavioral social skills training for middle-aged and older outpatients with chronic schizophrenia. *American Journal Psychiatry*. 2005 Mar; 162(3):520-9.
28. Morgan VA, Waterreus A, Jablensky A. People living with psychotic illness in 2010. The second Australian national survey of psychosis. *Australian and New Zealand Journal of Psychiatry* 2012, 46:735-753.
29. Deva, P. Psychiatric Rehabilitation and its Present Role in Developing Countries. *World Psychiatry*. 2006; 5 (3) 164-165.
30. Dickinson D, Bellack AS, James M. Social/communication skills, cognition, and vocational functioning in schizophrenia. *Gold Schizophrenia Bulletin*. 2007; 33(5): 1213–1220.
31. Alshowkan A, Curtis J, White Y, Self-Reported Quality of Life for People with Schizophrenia in a Psychiatric Outpatient Department in Saudi Arabia. *Arab Journal of Psychiatry*, 2013; 24 (2), 93 – 101.

الملخص

الهدف: الهدف الرئيسي من هذه الدراسة هو وصف لمحات الإعاقة للأفراد المصابين بالفصام في مستشفى الطب النفسي بمملكة البحرين حسب مقياس المهارات الحياتية (Life Skills Profile 39 (LSP 39) الهدف الثانوي لهذا البحث هو مقارنة خصائص الإعاقة للأفراد المصابين بالفصام في مملكة البحرين مع الدول الأخرى حسب المقياس نفسه. **الطريقة:** تم تطبيق استمارة مقياس المهارات الحياتية (LSP (39 مع الافراد الذين يعانون من الفصام وتم إدخالهم مستشفى الطب النفسي في مملكة البحرين خلال الفترة 2009-2012. تم جمع المعلومات من قبل ثلاث أخصائيين علاج مهني متمرسين على استخدام الاستمارة. تم رصد 279 حالة خلال الثلاث سنوات. **النتائج:** تم اعتماد نتائج 247 حالة وذلك حسب شروط البحث. تشير النتائج إلى ان متوسط مقياس المهارات الحياتية هو 59.110 نقطة بانحراف معياري 19.13، أفضل النتائج كانت لصالح مهارات الاتصال وقل النتائج لمهارات المشاركة الاجتماعية. كان اداء النساء بشكل عام افضل من اداء الرجال، ولكن لم يكن الفارق بدلالة احصائية. اشارت نتائج مملكة البحرين لأداء أعلى من سنغافورة والهند ولكن أقل من استراليا وأمريكا والمملكة المتحدة.

استنتاج: تشير دراستنا إلى ان اداء المهارات الحياتية بشكل عام متوسط في العينة التي تم دراستها بدون فرق يذكر بين الجنسين. وتتأثر الاختلافات الإقليمية في خصائص الإعاقة للأفراد المصابين بالفصام من الطريقة التي يتم بها تقديم الخدمات الصحية والاجتماعية في الدول المختلفة .

Corresponding Author Dr. Haitham Jahrami, PhD Head Rehabilitation Services, Ministry of Health, Psychiatric Hospital, P.O Box 5128, Manama, Bahrain
Email: hjahrami@health.gov.bh

Authors

Dr. Haitham Jahrami, PhD Head Rehabilitation Services, Ministry of Health, Psychiatric Hospital, P.O Box 5128, Manama, Bahrain Email: hjahrami@health.gov.bh

Ms. Zahraa Saif, BSc Occupational Therapist, Ministry of Health, Psychiatric Hospital, P.O Box 5128, Manama, Bahrain

Dr. Shubbar Qaheri, MD Consultant Psychiatrist, Ministry of Health, Psychiatric Hospital, P.O Box 5128, Manama, Bahrain

Dr. Ahmad Asad, MD Consultant Family Physician, Ministry of Health, Psychiatric Hospital, P.O Box 5128, Manama, Bahrain

Mr. Gnanavelu Panchasharam MSc Occupational Therapist, Ministry of Health, Psychiatric Hospital, P.O Box 5128, Manama