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Abdul Abyad

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In this first issue this year we have several papers from different areas of the World. A paper from the Social Welfare University of Tehran, looked at whether cognitive Executive function distinguishes schizophrenia from Bipolar Disorder. The objective of the authors was to compare the executive function of B1D and schizophrenic patients. They matched two groups of participants. The authors concluded that schizophrenic patients had more dysfunction, of executive function than Bipolar type 1 disorder patients. Although, both disorders may show impairment in executive function, the dysfunction in schizophrenia is greater than in bipolar type 1 disorder patients. 

A paper from Egypt looked at the Reliability of the Arabic version of the Young Schema Questionnaire-Short Form among orphanage residents. The Young Schema Questionnaire-Short Form (YSQ-SF) consists of 75 items measuring 15 cognitive subscales and 5 domains. The purpose of the present study was to translate YSQ-SF, to Arabic and to test the reliability of its scores. The authors concluded that despite the sample size of their study population (n=20), the Arabic version of YSQ-SF appears to be a reliable instrument with high internal consistency to be used in normal population. An Arabic copy of the schema is available as an attachment. A paper from Iran looked at the Psychometric Properties of Brief Illness Perception Questionnaire in Pacemaker Patients. Psychometric evaluation of the BIPQ was applied in two stages. In validity testing, to test the content validity of the questionnaire, 12 selected experts were asked to judge the relevance, clarity and simplicity of the items based on content validity index (CVI). Face validity was ascertained by administering it to 12 experts and pacemaker patients. In reliability testing, to determine the stability of the instrument, a test-retest was assessed in pacemaker patients and then the Spearman coefficient was calculated. The authors concluded that it is imperative to understand pacemaker patients’ perception of their illness/health using a valid and reliable questionnaire, which has led to our evaluating of the psychometric properties of BIPQ on a sample of Iranian pacemaker patients. Generally, findings confirmed that validity and reliability of the BIPQ in socio-cultural background of Iranian Pacemaker patients were satisfactory. A paper from Bangladesh looked at Burden on Families, and Attitudes towards Mental Retarded: The Role of a Social Worker in Bangladesh’s Perspective. In Bangladesh most of the mentally retarded are deprived of their rights. Not only the rights, they have practically no job opportunity and there still exists some negative and apathetic attitude towards persons with mental retardation. The paper explores the extent of burden on families and problems faced by the parents in looking after their retarded children and how the expected role could be played by the Social Worker in this regards to the context of Bangladesh. The present author personally interviewed some parents and there were other observation methods used in this study. The author reviewed and consulted some secondary sources such as books, journals, research papers etc, for furnishing the study. A review paper from Saudi Arabia raised the question whether a Psychological evidence based approach could convince smokers to quit Smoking in the community? The author stressed that passive smoking is one of the important health issues which needs to be considered in health planning, and to convince smokers psychologically to quit. Recent evidence based research data confirms that tobacco smoke is a major, if not the major, indoor source of fine particulate pollution in developed countries. The author concluded that it is highly important to educate all families and communities about the importance of avoiding smoking in front of others, and to convince active smokers to quit smoking in both active and passive manners especially in front of the elderly, children, families at home, workplaces, and public places. 

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FROM THE EDITOR

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Reliability of the Arabic version of the Young Schema Questionnaire - Short Form among orphanage residents

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Abstract

The Young Schema Questionnaire-Short Form (YSQ-SF) consists of 75 items measuring 15 cognitive subscales and 5 domains. The purpose of the present study is to translate YSQ-SF, to the Arabic and to test the reliability of its scores.

Two persons proficient in English independently translated the original scale into Arabic and a consensus version was generated. Another two translators performed a back transformation. Discrepancies were discussed and solved by a panel. The final Arabic version was then tested on ten male and ten female orphans during interview. Reliability of the measure was assessed twice by one researcher (with one-week interval between assessment) and once by another researcher. Respondents rated items in terms of how they have felt throughout their lives on a 6-point Likert scale ranging from 1 (completely untrue of me) to 6 (describes me perfectly).

The Cronbach’s a of the total scale is 0.85. It ranges from 0.55 to 0.89 in different subscales. The overall score ranged from 196 to 369 with a mean of 283±37.7. The intra-and inter-rater correlation coefficients of the total score are the same and equals 0.88. The intra-rater correlations of different subscales ranges from 0.71 to 1.0 and the inter-rater correlations of different subscales ranges from 0.70 to 0.99.

In conclusion, despite the sample size of our study population (n=20), the Arabic version of YSQ-SF appears to be a reliable instrument with high internal consistency, to be used in the normal population.

Keywords: Young Schema Questionnaire-Short Form - Arabic Version - Reliability

Introduction

In its most general sense, a schema can be defined as a structure, framework, or outline which organizes and makes sense of an individual’s life experiences. While schemas are generally believed to develop early in life, it was argued that schemas continue to be elaborated on through life experiences. Early maladaptive schemas (EMS) are deep cognitive structures constituted by beliefs about self, others, and the environment. EMS are unhealthy patterns of behavior and thought processes; attempts during early life to fulfill basic needs such as safety, autonomy, and sense of belonging. If the child’s needs are not met, EMS will be formed. The schemas are trait constructs or coping tools that can be activated at any time. They are most likely to be triggered by events in the individual’s life.

The Young schema questionnaire (YSQ) was based on observation by experienced clinicians. This 205 item self-reported inventory was originally designed to measure 16 primary
EMS.(4) Each item is rated from 1 to 6. The subscales of YSQ have demonstrated adequate test-retest reliability and internal consistency as well as convergent and discriminant validity.(5) The schema Questionnaire-Short Form (YSQ-SF) was developed in order to have a shorter assessment to measure EMS. The YSQ-SF included a subset of 75 items from the original 205-items YSQ. These 75 items are thought to represent 15 EMS.(3) The results of factor analysis provided support to the 15 schema subscales. Furthermore, these 15 subscales demonstrated good internal consistency of the English version of YSQ-SF.(6) Research(7) suggested that the short version has very similar levels of internal consistency, reliability and validity compared with the longer version.

The YSQ-SF is an inventory designed to measure 15 EMS(1,3): emotional deprivation, abandonment, mistrust/abuse, social isolation, defectiveness/shame, failure, dependency/incompetence, vulnerability to harm/illness, enmeshment, subjugation of needs, self-sacrifice, emotional inhibition, unrelenting standards, entitlement, and insufficient self-control/self-discipline. The higher scores indicate a greater presence of that maladaptive schema for the respondent.(5)

The YSQ-SF has been translated into many languages e.g. French(5), Turkish(8), Romanian(9), Dutch(10) and Spanish(11). To the best of the author’s knowledge YSQ has not been translated into the Arabic language. The aim of the present study was to translate YSQ-SF to Arabic and to test the reliability of its scores.

Population and Methods

Study locality:

This small-scale study was done in three orphan homes in Dakahlia Governorate, Egypt as a pilot study for an ongoing large-scale study on mal-adaptation of children resident in the orphanage. These homes were purposively selected because the number of resident children was less than 10 in each home and they will be excluded from the full-scale study.

Subjects:

The study subjects included ten male and ten female children residents in three orphanages (9 in Tahseen Elseha, 3 in Elkalema El-kebtya and 8 in Elamal of Met Ghamer) affiliated with the Directorate of Social Affairs.

Tool:

The YSQ-SF was initially independently translated by two researchers proficient in English whose native language was Arabic. The two translations were compared and when differences were identified, the texts were modified to obtain consensus between the two translations regarding the initial translation. The consensus Arabic version was again translated back into English by the other two researchers who were unaware of the original version. The two English versions were compared with the original English version. The differences were analyzed, and questions and/or response choices were rewritten when necessary, thus proving a second Arabic version. All the misunderstood items were replaced and discrepancies were resolved by the four authors. (See the appendix for the final Arabic version).

The YSQ-SF(4) is a 75-items instrument and consists of 15 subscales, each consisting of five items. Respondents rated items in terms of how they have felt throughout their lives on a 6-point Likert scale ranging from 1 (completely untrue of me) to 6 (describes me perfectly). Each item has a minimum of one and a maximum of six. The total score ranges from 75 to 450 and each subscale ranges from 5 to 30.

The subscale of enmeshment is not applied to the respondents as all children live in the orphanage away from their parents, so the response to its five items is constant with a total subscale of 5 thus the Cronbach’s a and correlation coefficient are not possible to calculate.

Approach:

Researchers interviewed children at the orphanage and the schema was completed after building rapport with children. No supervisor was present during the interview.

To test the reliability of the YSQ-SF, the final version was applied to the 20 children during three assessments. The first two assessments were performed consecutively on the same day by two observers (inter-observer reliability), at an interval of approximately 15 minutes, with either observer 1 or observer 2 applying the first assessment, thus preventing a habituation bias in terms of the tasks performed by the children obeying immediately the voice of the observer. The third assessment was applied after seven days by observer 1 (intra-observer reliability).

Ethical consideration: The study was approved by the College of Nursing and the Directorate of Social Affairs. An official letter was given to the directors of the orphanages. Before the interview children were informed about the objective of the study and assured about confidentiality of data. The participation was voluntary.

Data analysis:

Data was analyzed using SPSS (Statistical Package for Social Sciences, version 16). Descriptive statistics were presented for participating children and for the total YSQ and its different subscales. The inter-and intra-observer reliability of the final Arabic version of the YSQ-SF was determined by Pearson correlation coefficient. The internal consistency (reliability) of the schema was assessed by Cronbach’s a . A P<0.05 was considered statistically significant.

Results

The age of the children ranged from 11 to 18 years with a mean of 14.4 years (SD=2.2). The duration of residence in the orphanages ranged from 1-16 years with a mean of 7.2 (SD=4.3). Three children read and write; 2 are enrolled in primary education, 11 in preparatory education and 4 in secondary education.
In Table 2 (next page) the intra-and inter-rater correlation coefficients of the total score are the same and equals 0.88. The intra-rater correlation of different subscales ranges from 0.71 to 1.0 and the inter-rater correlation of different subscales ranges from 0.70 to 0.99. All the correlation coefficients are statistically significant.

<table>
<thead>
<tr>
<th>YSQ subscales</th>
<th>Cronbach’s α</th>
<th>Min-Max</th>
<th>Mean ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional deprivation</td>
<td>0.80</td>
<td>5-28</td>
<td>16.6±5.9</td>
</tr>
<tr>
<td>Abandonment</td>
<td>0.69</td>
<td>13-30</td>
<td>24.1±5.5</td>
</tr>
<tr>
<td>Mistrust/abuse</td>
<td>0.64</td>
<td>10-26</td>
<td>18.1±7.1</td>
</tr>
<tr>
<td>Social isolation</td>
<td>0.89</td>
<td>5-29</td>
<td>18.5±7.1</td>
</tr>
<tr>
<td>Defectiveness/shame</td>
<td>0.75</td>
<td>7-27</td>
<td>16.1±6.1</td>
</tr>
<tr>
<td>Failure</td>
<td>0.63</td>
<td>9-26</td>
<td>16.9±4.5</td>
</tr>
<tr>
<td>Dependence/incompetence</td>
<td>0.67</td>
<td>10-29</td>
<td>19.4±5.7</td>
</tr>
<tr>
<td>Vulnerability to harm/illness</td>
<td>0.55</td>
<td>9-29</td>
<td>18.5±5.2</td>
</tr>
<tr>
<td>Enmeshment</td>
<td>*</td>
<td>*</td>
<td>5±0.0</td>
</tr>
<tr>
<td>Subjugation</td>
<td>0.68</td>
<td>11-29</td>
<td>20.9±4.7</td>
</tr>
<tr>
<td>Self-sacrifice</td>
<td>0.59</td>
<td>13-28</td>
<td>21.3±3.5</td>
</tr>
<tr>
<td>Emotional inhibition</td>
<td>0.64</td>
<td>12-28</td>
<td>21.1±4.1</td>
</tr>
<tr>
<td>Unrelenting standards</td>
<td>0.55</td>
<td>10-28</td>
<td>21.1±4.5</td>
</tr>
<tr>
<td>Entitlement</td>
<td>0.69</td>
<td>13-29</td>
<td>24.1±6.7</td>
</tr>
<tr>
<td>Insufficient self-control/ self-discipline</td>
<td>0.57</td>
<td>14-30</td>
<td>22.1±5.2</td>
</tr>
<tr>
<td>Total YSQ-S score</td>
<td>0.85</td>
<td>197-369</td>
<td>283.0±37.7</td>
</tr>
</tbody>
</table>

*Not possible to calculate because this variable is constant.

Table 1: Cronbach’s α and descriptive statistics of subscales and the total score

**Discussion**

Previous findings showed that the YSQ short and long forms are quite compatible, with the same psychometric properties and both were reported to be appropriate for use in research and clinical setting.(7,12)

The correlation coefficients of the test-retest (intra-rater) and inter-rater scores of the total scale and its subscales were evaluated to assess the stability of the schema.

The internal consistency of the Arabic version of YSQ-SF was adequate in the present study. The Cronbach’s α of the total scale is 0.85. It ranges from 0.55 to 0.89 in different subscales. Thus the findings regarding the scale’s reliability supports previous studies conducted with the original form in different languages ((6,7,11,13,14,15,16,17,18,19,20).

Our results of reliability compare favorably with the reliability of the YSQ-SF in other languages. The Cronbach’s coefficients of the total scale or the subscales run between 0.74 to 0.89 for the Spanish version(20), 0.73 to 0.95 for the Dutch version(10), 0.64 to 0.87 for the French version(5), 0.68 and 0.96 for the Romanian version(9), and 0.63 and 0.80 for the Turkish version(8).

Although the Cronbach’s alpha of some subscales are relatively low, the stability and consistency of the scale and subscale was significant. The results showed that the coefficients obtained are significant and in the acceptable range. Most of the coefficients are high. The Intrarater correlation coefficients of the subscales ranged from 0.71 to 1.0 and inter-rater correlation coefficients ranged from 0.70 to 0.99, and all are
### Table 2: Intra- and inter-rater correlation coefficients of subscales and the total score

<table>
<thead>
<tr>
<th>YSQ subscales</th>
<th>Intra-rater (test-retest)</th>
<th>Inter-rater</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>P</td>
</tr>
<tr>
<td>Emotional deprivation</td>
<td>0.97</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Abandonment</td>
<td>0.88</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Mistrust/abuse</td>
<td>0.82</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Social isolation</td>
<td>1.0</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Defectiveness/shame</td>
<td>1.0</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Failure</td>
<td>0.99</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Dependence/incompetence</td>
<td>0.99</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Vulnerability to harm/illness</td>
<td>0.99</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Enmeshment</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Subjugation</td>
<td>0.71</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Self-sacrifice</td>
<td>0.85</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Emotional inhibition</td>
<td>0.95</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Unrelenting standards</td>
<td>0.82</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Entitlement</td>
<td>0.72</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Insufficient self-control/self-discipline</td>
<td>0.75</td>
<td>≤0.001</td>
</tr>
</tbody>
</table>

Total YSQ-S score: 0.88 ≤0.001 0.88 ≤0.001

*Not possible to calculate because this variable is constant

The Pearson’s correlation coefficient of the test-retest for the subscales of the Turkish version varied between 0.66 and 0.82. The Intra-rater and inter-rater correlation coefficients of the whole schema are the same (r=0.88). Test-retest coefficients seem to indicate an acceptable degree of temporal consistency (r=0.76).

The small sample size is the main limitation of this study. The subscale of enmeshment is not applied to the respondents as all children living in the orphanage are away from their parents, so the response to its five items is constant with a total subscale of 5 thus the Cronbach’s a and correlation coefficient are not possible to calculate. This necessitates a large scale study to test the reliability and validity of the Arabic version of the YSQ-SF in both the clinical and non-clinical population.

Appendix

The Appendix is too large to fit within the journal but can be downloaded from: www.mejpa.com/WEB/April2011/Appendix.htm

**References**

Psychometric Properties of Brief Illness Perception Questionnaire in Pacemaker Patients

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Abstract

Background: Implantation of a cardiac Pacemaker is expected to alter an individual's personality including illness perception, which can influence device acceptance and adjustment. Therefore it is imperative to understand the pacemaker patient's perception while considering the related questionnaire with acceptable psychometric properties with regard to the socio-cultural background and experiences of patients with pacemaker. The purpose of this study was to evaluate psychometric properties of the “Brief Illness Perception Questionnaire (BIPQ)” in pacemaker patients.

Methods: Psychometric evaluation of the BIPQ was applied in two stages. In validity testing, to test the content validity of the questionnaire, 12 selected experts were asked to judge about the relevance, clarity and simplicity of the items based on content validity index (CVI). Face validity was ascertained by administering it to 12 experts and pacemaker patients. In reliability testing, to determine the stability of the instrument, a test-retest was assessed in pacemaker patients and then the Spearman coefficient was calculated.

Results: According to expert judgments and based on content validity index, BIPQ demonstrated good content validity (CVI>90%) and also face validity. Correlation coefficient of all items in test-retest reliability was greater than $r = 0.88$.

Conclusion: It is imperative to understand pacemaker patients' perception of their illness/health using a valid and reliable questionnaire, which has led to our evaluating of the psychometric properties of BIPQ on a sample of Iranian pacemaker patients. Generally, findings confirmed that validity and reliability of the BIPQ in socio-cultural background of Iranian Pacemaker patients were satisfactory.

Key words: Illness perception, Pacemaker, Psychometric properties, Validity, Reliability
Introduction
Cardiac pacemakers are biotechnical devices which have been used therapeutically since 1960 (1). Almost 600,000 pacemakers are implanted worldwide annually (2). Despite the fact that the pacemakers are implanted to resolve some disorders and thus improve the patients’ quality of life (3), their presence may cause some certain problems, as well (4). Undoubtedly previous studies show some data regarding the patients’ reactions to pacemaker (3-5), however, few studies have been conducted to address the mental aspects of this issue (4, 6).

Research dealing with coping with chronic illnesses has paid particular attention to the patients’ perception of the illness (7). There is evidence indicating that the quality of a patient’s perception of their illness influences different aspects of their experience such as seeking possible therapies, quality of life, and their adherence to the physician’s orders (5, 8). For instance, Astin and Jones (9) conducted a study to indicate that knowledge of a patient’s perception will provide better understanding of the factors influencing the patient’s coping and acceptance of the illness, improving the patient supporting programs. The findings of another study by Broadbent et al. (10) indicated that the healthcare interventions based on illness perception would prove beneficial for improving the patient’s health and recovery. A study by Deaton et al. (11) concluded that analyzing the patient’s perception of living with a pacemaker is the first important step toward developing efficient and significant intervention. Therefore, considering the importance of heart function, cost of implanting the device, toleration of a foreign body into the heart and other associated challenges (12), it is essential to study the illness perception while considering the combination of a person and the pacemaker device (13).

According to Leventhal et al., patients organize their behavior and emotional reactions to illness based on their perception of the identity, cause, consequences, cure/control, and timeline of the illness (14). Based on the Leventhal theory, the “illness perception” questionnaire was developed by Weinman et al. in 1996 in order to ameliorate our understanding of the process of coping with the illness as well as developing interventions to facilitate self-regulation in chronic disorders. Psychometry of the illness perception questionnaire was performed with factor analysis studies, concurrent validity, predictive validity, discriminant validity, and reliability with Cronbach’s a and test-retest (15). Although this questionnaire was used in many studies and proved successful in predicting the different domains of coping and resolution, the feedback resulting from experiences of researchers using the “illness perception questionnaire” led to the development of its revised version, improving the psychometric aspects of the questionnaire and expanding its domains. Psychometry of the revised version of the illness perception questionnaire was performed using factor analysis studies (considering the added phrases and domains of the questionnaire), discriminant validity, predictive validity, known group validity, and internal and external consistency (16). Subsequently, the development of the brief version of the illness perception questionnaire by Broadbent et al. in 2006 enabled rapid analysis of the patients’ perception in a broad range of diseases. The brief illness perception questionnaire (BIPQ) covers all the aspects of Leventhal’s theory with nine items. Patients find the BIPQ easy to understand and to complete. The results from the scale can be easily scored and are readily interpretable by researchers and clinicians (17). Its advantages include the brevity and speed of completion as well as easy interpretation, which enables the researcher to analyze the patients’ illness perception quickly with as little burden imposed on the patients as possible (18). Each item of the questionnaire, except item nine, is graded from zero to ten. Item nine deals with the patient’s opinion of the cause of their disease and they are required to list the top three causes (17). Psychometry of the brief version of the illness perception questionnaire was performed using factor analysis studies, concurrent validity, predictive validity, discriminant validity, and internal and external consistency. The brief illness perception questionnaire has been translated to 23 languages and its data is accessible on its website (19). The Persian language version of the questionnaire was prepared by Bagherian Sararudi et al. in 2009 and its psychometric properties were studied using content validity, internal and external consistency in a sample of patients with myocardial infarction (18).

On the other hand, researchers have indicated that people with different experiences and different socio-economic backgrounds manifest different cognitive beliefs (concerning a disease) and emotional (fear and anxiety of health risks) presentations in face of illnesses (20). Furthermore, there is evidence suggesting that coping, coherence and acceptance of the pacemaker device is a complicated personal experience (1, 5). It is possible that implanting a pacemaker will affect body image, psychosocial coping, and the quality of life, resulting in affect disorders (3, 6).

Therefore, it may be concluded that in order to analyze the perception of patients with pacemakers, it is initially necessary to analyze the questionnaire with regard to the socio-cultural background and experiences of Iranian patients with pacemakers. Thus, considering the advantages of the brief illness perception questionnaire and the fact that it has not been used for patients with pacemakers, we analyzed the questionnaire with regard to the socio-cultural background and experiences of Iranian patients with pacemakers. Therefore, the purpose of this study is psychometric evaluation of the brief illness perception questionnaire in patients with a pacemaker.
Method and Materials
The present study is the analysis conducted on part of the data derived from the study titled “Evaluation of Educational Intervention Based on Leventhal’s Model on Illness Perception of Patients with Pacemaker”. The above-mentioned study was approved by the research committee of the School of Nursing-Midwifery at Shaheed Beheshti University of Medical Sciences in Iran, and its protocol was found consistent with the criteria of the ethical committee. The objective of our present study is psychometric evaluation of the brief illness perception questionnaire in patients with a permanent cardiac pacemaker.

The following stages describe our work:

Stage 1- Measuring the validity of the questionnaire:

A) Determining the content validity: For this purpose, 12 instructors of nursing and clinical psychologists were invited to judge the content validity of the brief illness perception questionnaire for patients with pacemaker using the Waltz and Bausell content validity index (1983) (21). These experts were selected due to their experience with the concept in question and their training in psychometry of tools. Thus, one copy of the questionnaire alongside the objectives of the study and guideline of content validity index were submitted to the participants and all necessary explanations were made. The experts evaluated the questionnaire based on three criteria of “relevancy”, “clarity” and “simplicity” in a four-degree scale. In addition, the experts could make notes concerning each of the criteria in a space particularly intended for their opinion.

B) Evaluating the face validity: In order to assess the face validity, the questionnaire was distributed to 12 experts from schools of nursing and midwifery as well as the patients with pacemakers. Subsequently, the opinions were collected and the necessary changes were made.

Stage 2- Determining reliability:

In order to determine the stability of the questionnaire, a test-retest was carried out. Thus, the questionnaire was submitted to 15 pacemaker patients referred to healthcare centers of Shiraz University of Medical Sciences. The patients participating in the study gave their written informed consent. Subsequently, the patients completed the questionnaires twice with an interval of 10 days. The patients were required to respond to each phrase of the questionnaire in a 10-points Likert-type scale, based on their opinion.

Results
Stage 1, In order to determine the content validity, the collected data were analyzed. “Relevancy” of the phrases was studied first. In the content validity index, phrases scoring 75% or higher are preserved and other phrases scoring lower than 75% are omitted. In this stage, all phrases scored higher than 75% and were therefore retained. Subsequently, “clarity” and “simplicity” were analyzed. Thus, phrase number 5 was removed because it scored lower than 75%. Using the experts’ suggestions, a new phrase replaced the old one and some other phrases underwent small changes as well. Afterwards, the experts were asked to re-evaluate the amended phrases in terms of “relevancy”, “clarity” and “simplicity” using the 4-grade scale. Ultimately, all the phrases scored higher than 90%. Table 1 depicts the results of the questionnaire evaluated using the content validity index. In order to determine the face validity, the opinions of the 12 experts and the pacemaker patients were used to make the necessary amendments (Table 2).

Stage 2, Spearman’s correlation coefficient was calculated for all phrases of the questionnaire in test-retest. The minimum correlation coefficient calculated for all phrases of the questionnaire was 0.88. Table 3 lists the results of test-retest for each item of the questionnaire.

Discussion and Conclusion
As science and technology expand, newer and more varied methods come into use for cardiac rehabilitation conditions. Pacemakers are one such method (22) implanted to resolve a variety of disorders and improve the patients’ quality of life (13). This novel method, however, may produce new challenges for the patients as well (11).

Using an appropriate and indigenous tool, it is possible to recognize the perception, of patients with pacemakers, of their illness and consequently the factors influencing their coping and acceptance (5). In this way, supportive plans are improved and more efficient aid is provided for these patients (14).

In a study conducted for designing and psychometric evaluation of the brief illness perception questionnaire, the concurrent validity and predictive validity was studied and the correlations were reported >75% and >44%, respectively. Furthermore, studying the discriminant validity indicated a significant difference among different groups of the illness. Moreover, internal reliability was reported 0.79-0.89 with Cronbach’s α; the test-retest conducted at intervals of 3 and 6 weeks reported a Pearson correlation coefficient of 0.50-0.75 (17). In another study conducted for preparing the Persian version of the questionnaire, the content validity was assessed using the comments of 15 experts, indicating satisfactory results. Moreover, the value of Cronbach’s α was 0.84 and the result of test-retest reliability in a 3-week interval was reported 0.68 (19).

Considering the fact that psychometric evaluation of the illness perception questionnaire...
Table 1: Results of the questionnaire evaluated using the content validity index

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Relevance</th>
<th>Clarity</th>
<th>Simplicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- How much does your illness affect your life?</td>
<td>95.8</td>
<td>95.8</td>
<td>91.6</td>
</tr>
<tr>
<td>2- How long do you think your illness will continue?</td>
<td>100</td>
<td>95.8</td>
<td>95.8</td>
</tr>
<tr>
<td>3- How much control do you feel you have over your illness?</td>
<td>91.6</td>
<td>91.6</td>
<td>83.3</td>
</tr>
<tr>
<td>4- How much do you think your treatment can help your illness?</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>5- How much do you experience symptoms from your illness?</td>
<td>87.5</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>6- How concerned are you about your illness?</td>
<td>95.8</td>
<td>95.8</td>
<td>91.6</td>
</tr>
<tr>
<td>7- How well do you feel you understand your illness?</td>
<td>91.6</td>
<td>79.1</td>
<td>91.6</td>
</tr>
<tr>
<td>8- How much does your illness affect you emotionally?</td>
<td>95.8</td>
<td>91.6</td>
<td>87.5</td>
</tr>
<tr>
<td>9- Please list in rank-order the three most important factors that you believe caused your illness.</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on Leventhal’s model has been performed repeatedly (18), we performed the psychometric evaluation of the brief illness perception questionnaire using content validity, face validity, and external consistency with regard to the social and cultural background of Iranian patients with a pacemaker. Content validity was evaluated using the content validity index which yielded results of 90% and higher. In addition, face validity was determined using the experts’ opinions. The findings resulting from this analysis indicate a satisfactory validity. The test-retest reliability of the questionnaire with a 10-day interval.
demonstrated acceptable results (r=0.88).

The brief illness perception questionnaire which contains 9 items in a 10-points Likert type scale (17) has been designed for rapid analysis of cognitive and emotional representation of illness (10). The BIPQ provides a rapid assessment of illness perceptions, which could be particularly helpful in ill populations, large scale studies, and in design of repeated measures research (14).

Acknowledgement
We wish to extend our cordial gratitude to the Deputy of Research at School of Nursing-Midwifery in Shaheed Beheshti University of Medical Sciences for their sincere collaboration with this research, as well as patients and all those who aided us greatly in our study.

References
Table 3: Results of test-retest for each item of the questionnaire

<table>
<thead>
<tr>
<th>Items</th>
<th>Spearman’s correlation coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consequences</td>
<td>0.97</td>
<td>0.103</td>
</tr>
<tr>
<td>Timeline</td>
<td>0.906</td>
<td>0.131</td>
</tr>
<tr>
<td>Personal control</td>
<td>0.94</td>
<td>0.132</td>
</tr>
<tr>
<td>Treatment control</td>
<td>0.89</td>
<td>0.206</td>
</tr>
<tr>
<td>Identity</td>
<td>0.88</td>
<td>0.083</td>
</tr>
<tr>
<td>Concern</td>
<td>0.96</td>
<td>0.107</td>
</tr>
<tr>
<td>Understanding</td>
<td>0.95</td>
<td>0.206</td>
</tr>
<tr>
<td>Emotional responses</td>
<td>0.97</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Is cognitive Executive function distinguishing schizophrenia from Bipolar Disorder?

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Anahita khodabakhshi Koolaee (PhD)
Mohammad Kamran Derakhshan (MD)

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Abstract

Objectives: There is evidence for differential executive function in bipolar type 1 disorder (B1D) and schizophrenia that may tend to display different cognitive deficits and abnormalities. The objective of this study was to compare the executive function of B1D and schizophrenic patients.

Method: We studied 50 patients with B1D, and 50 schizophrenic participants. All participants completed the Wisconsin Card Sorting Test (WCST) of the Persian version. The participants were matched in three basic variables which had most contributions in cognitive conditions in patients. They were Age, educational status and period of illness.

Results: The two patient groups had compared performance on the WCST. In the WCST, schizophrenic patients showed impairment executive function more than B1D patients.

Conclusions: Findings indicated that schizophrenic patients had more dysfunction of executive function than the Bipolar type 1 disorder patients. Although, both disorders may show impairment in executive function, the dysfunction in schizophrenia is greater than bipolar type 1 disorder patients.

Keywords: Cognitive Executive function, schizophrenia, Bipolar Disorder.

Introduction

Chronic and severe mental disorders cause a substantial psychological morbidity that frequently affects the patient’s marriage, children, occupation, and other aspects of the patient’s life.

Cognitive impairments impact on several cognitive abilities but; most importantly on attention, memory and executive functions leading to great difficulties in everyday life, (Sablier et al, 2009). Cognitive dysfunction, is a symptom in the domain of severe mental disorders like schizophrenia and bipolar disorder, but few studies have examined the cognitive dysfunction in patients with affective disorder, particularly in patients with bipolar type 1 disorder.

However, many studies on cognitive dysfunction have been conducted in schizophrenic patients (Zarate et al, 2000). Affective disorders typically have better outcomes than schizophrenia, although recent evidence suggests that some patients with affective disorder have a relatively poor outcome (Tohen et al, 2000; Frangou et al, 2006).
In addition, Frangou et al (2006) found that patients with bipolar type 1 disorder had more cognitive impairment than the normal population, but not as severe as patients with schizophrenia. Most recent estimates suggest that as many as 75 percent of schizophrenic patients have some form of cognitive deficits on neuropsychological test batteries, with the pattern ranging wildly between patients (Palmer et al, 1997; Kurtz et al, 2005, and Raffard et al, 2009).

Furthermore, Zarate et al (2000) reported a high rate of functional impairment in bipolar disorder patients. As noted before, one of the important cognitive dysfunctions which interfere in the social and daily life of patients with severe mental disorder is executive function. Executive function is a multidimensional concept which includes; control of response, working memory, cognitive set shifting, planning fluency (Frangou et al, 2006) and Problem solving (Kurtz et al, 2005).

Cognitive dysfunction has been identified as an important measurement of outcome in the treatment of severe mental disorders (Hawkins et al, 1999). Thus, patients characterized by different patterns of executive function deficits may show quite different patterns of psychological deficits over time (Kurtz et al, 2005).

Understating the relationship between executive dysfunction and the psychosocial deficits outcome is highlighted; 1) the value of cognitive and psychoeducational programs and cognitive assistive technologies may be warranted to improve the long term outcome for patients and 2) lead to exploring new pharmacological treatments and rehabilitation interventions for patients.

Therefore, the purpose of the present study was twofold: 1) to study of the executive function in schizophrenia and bipolar type 1 disorder, and 2) to compare the executive performance in schizophrenia and bipolar type 1 disorder.

Methods
Participants
100 people were chosen to participate from out-patients at Rozzbe psychiatric clinics in Tehran. 50 of them with a DSM-IV diagnosis of Bipolar type 1 disorder (APA, 1994) and the other 50 subjects with a DSM-IV diagnosis of schizophrenia (APA, 1994) were included. After written informed consent was obtained, participants underwent standard comprehensive screening and assessment procedures (Gur et al, 1991). This included the structured clinical interview for DSM-IV (SCID; first et al, 1997). Detailed medical history, physical examination, and laboratory tests were obtained for all participants (Kurtz et al, 2005).

Entrance criteria for schizophrenia participants included;
1) a diagnosis of schizophrenia or schizophrenia-form disorder by DSM-IV criteria (APA, 1994);
2) no concomitant axis I or II disorder, including past or present substance abuse or dependence;
3) no neurological disorder (e.g., epilepsy, migraine, head trauma with loss of consciousness); and
4) They received the same dose of antipsychotic drugs and in the last 3 months had a stable state.

Entrance criteria for bipolar type 1 disorder included;
1) A diagnosis of bipolar type 1 disorder by DSM-IV criteria (APA, 1994);
2) No other current axis I or II diagnosis;
3) No neurological or medical conditions;
4) No history of substance abuse; and
5) No previous history of electroconvulsive therapy (ECT) in the past year.

Statistical analyses
Analyses were conducted using the statistical package for the social sciences, version 16 (SPSS, 2008). Data were first examined to see whether they fulfilled the assumptions for parametric analyses. Variables fulfilling these assumptions were analyzed by independent samples t-test with two groups of patients (Schizophrenia and bipolar type 1 disorder).

Results
Demographic characteristics
The sample included 100 participants which were divided into two groups of participants (50 subjects with schizophrenia and the other 50 with bipolar type 1 disorder).

Thirty eight percent of the participants (N=38) were male. Sixty two percent of subjects (N=62) were females. Furthermore, the schizophrenia group represented a diverse range of patients in terms of...
Table 1: Demographic characteristics in two groups of participants

<table>
<thead>
<tr>
<th>Measure</th>
<th>Schizophrenia (N=50)</th>
<th>BDI (N=50)</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Age, years</td>
<td>37.6</td>
<td>2.59</td>
<td>37.6</td>
</tr>
<tr>
<td>Education, years</td>
<td>8.48</td>
<td>3.38</td>
<td>8.9</td>
</tr>
<tr>
<td>Period of illness, years</td>
<td>12.52</td>
<td>1.7</td>
<td>12.62</td>
</tr>
</tbody>
</table>

All t tests were significant (P< 0.05)

*P<0.05

Table 2: Mean scores and standard deviations, and t-test for the Schizophrenic patients and bipolar type 1 disorder based on the Wisconsin Card Sorting Test (WCST).

<table>
<thead>
<tr>
<th>Measure</th>
<th>Schizophrenic Patients (N=50)</th>
<th>BDI Patients (N=50)</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Wisconsin Card Sorting Test (WCST)</td>
<td>31.5</td>
<td>3.4</td>
<td>25.7</td>
</tr>
<tr>
<td>Perseverative errors</td>
<td>4.32</td>
<td>3.4</td>
<td>5.54</td>
</tr>
<tr>
<td>Categories completed</td>
<td>13.1</td>
<td>2</td>
<td>10.4</td>
</tr>
</tbody>
</table>

There was no significant between-groups difference across the demographic characteristics.

There was no significant between-groups difference across the demographic characteristics.

Wisconsin Card Sorting Test

Two-tailed independent t test results showed that there were significant differences between the schizophrenic patients and bipolar type 1 disorder patients in terms of number of Perseverative errors (t =7.35, df = 98, P=0.11), number of Categorized completed (t =-4.14, df = 98, P =0.09), and number of perseverative responses (t = 5.83, df = 98, P = 0.31). In fact, the results indicated that in terms of the number of perseverative responses, and number of perseverative errors, scores of schizophrenic patients were higher than that of the bipolar type 1 disorder patients, while, the number of categories completed score of the schizophrenic patients, was lower than of bipolar type 1 disorder patients (Table 2).

Conclusion

There are several findings of interesting results in this study. First, there was evidence of substantial difference between the numbers of categorized completed among schizophrenic patients and bipolar type1 disorder patients. The number of categorized completed in Wisconsin Card Sorting Test (WCST) indicates concept formation. In our research, results showed that the schizophrenic patients’ had lower scores than the bipolar type 1 disorder patients. Impairment in concept formation in schizophrenic patients indicates cognitive dysfunction performance. In other words, dysfunction in concept formation leads to some weakness in these patients. For example, when...
they encountered new situations or conditions, like social relationships or performing social skills, they had difficulties in dealing with them.

This is noteworthy as Frangou et al (2006) indicated that the two groups of patients had lower scores than normal controls. They were number of categorized completed they responded to were four or five categories, while, the normal controls answered five or six categories (Frangou et al, 2006). This finding revealed that the two groups of patients had a weaker performance than normal controls. Goodwin and Jamison 1990, generally, found that patients with affective disorders had more neurpsychological impairment than normal controls, but not as severe as patients with schizophrenia. Furthermore, Frangou et al, 2006, found that performance of “concept formation” stems from “abstract thinking”. So, patients with schizophrenia had weaker performances in this area than patients with bipolar type 1 disorder.

Our findings are consistent with a growing body evidence that people with schizophrenia disorder and bipolar type 1 disorder experience a range of cognitive deficits and impairment (Zarate et al, 2000; Thompson et al, 2005; Kurtz et al, 2005; and Frangou, 2006).

A second finding of the current study indicated that there was evidence of significant differences between the number of perseverative errors and perseverative response between patients with schizophrenia disorder and patients with bipolar disorder.

The numbers of perseverative errors and perseverative response are appraised as “cognitive flexibility” in WCST. The results of the current study revealed that patients with schizophrenia had greater perseverative errors and perseverative response than the patients with bipolar type 1 disorder.

In other words, the findings from this study indicated that schizophrenia patients had lower ability to create new concepts in their daily life. So, when they encountered new conditions, they were not able to make new decisions. Thus, they always used the “old fashion” or “stereotype” behaviors or actions when they are faced with new situations.

Furthermore, Zarate et al (2000) revealed that, “cognitive flexibility” in patients with bipolar type 1 disorder, had more impairment than normal controls, but not as acute as schizophrenic patients. The findings from this hypothesis were consistent with previous research that people with schizophrenia disorder and B1D disorder, experience a range of impairment executive functions (Green, 1996; Zarate et al, 2000; Kurtz et al, 2005; and Frangou, 2006).

Neuro-cognitive deficits are evident in patients with B1D and Schizophrenic patients. These deficits are often a cause of considerable distress and can lead to impairment of psychosocial and occupational functioning (Martinez-Aran et al, 2004; Thompson et al, 2005).

Our study confirms that these deficits are of both statistical and clinical significance. The results of the current study are part of a growing body of research designed to help us understand the effect of “executive function” in BID and schizophrenic patients’ everyday life.

Although, our study revealed the role of “executive function” in these patients, a few studies have indicated the effectiveness of cognitive remediation treatment for deficits in executive function, working memory and other functions evident in mental chronic disorders (e.g. bell et al, 2001, Kurtz et al, 2005).

One of the most important aims of future research should therefore be the identification of the key role of neurobiology and structure of neuro-cognitive deficits in patients with BID and schizophrenic patients. Thus, this research could be providing useful therapeutic interventions like cognitive and psycho-educational rehabilitation programs, psychological treatment for instance, cognitive - behavioral therapy and family psycho-education to fit each disorder.

Limitation
There were a number of limitations to this study:

1- The result from the current study was limited to outpatient participants.
2- All participants were referred to Rozze clinics in Tehran.

Acknowledgements
This project was made possible by the generous support of the Rozze psychiatric clinics in Tehran. We thank all of the staff of these clinics for assistance with our research.

References


Can a Psychological evidence base approach convince smokers to quit Smoking in the community?

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Introduction
Passive smoking is one of the important health issues which needs to be considered in health planning, and convincing smokers psychologically to quit Smoking, especially at home, in the workplace, and public places. Passive smoking is linked with cancer, heart disease, respiratory illness, and is the leading source of indoor air pollution. In the United States, passive smoking has been linked to the deaths of at least 53,000 non-smokers each year, about one non-Smoker for each eight smokers that tobacco kills (Fichtenberg C & Glantz S (2002). Exposure at work might contribute to up to one fifth of all deaths from Passive smoking in the general population aged 20-64 years, and up to half of such deaths among employees of the hospitality industry. Adoption of smoke free policies in all workplaces and reductions in the general prevalence of active smoking would lead to substantial reductions in these avoidable deaths (Jamrozik K (2005). Environmental tobacco smoke is by far the most significant indoor air quality issue in health terms and it is a well-known health threat and has been classified as carcinogenic to humans (Bolte G, etal (2008)).

Many developed countries have moved to the phase in which smoking has dropped and disease rates are declining. By contrast, rates of smoking are still rising in many developing countries, and a goal of tobacco control for these countries is to avoid the predicted rise in tobacco-related disease over the course of this century (Wipfli H & Samet J (2009). More than 1 billion people, or one-sixth of the world’s population, continue to smoke, and half the world’s children are involuntarily exposed to smoke (Stampfli M & Anderson G (2009)).

However, exposure to Passive Smoking at home could not be effectively addressed only by legislation and educational interventions targeting parents, especially those who are smokers, could substantially reduce the exposure of adolescents to second hand smoke at home (Rachiotis G, et al (2010). The aim of this literature review is to highlight Tobacco Smoke’s health impact on Non-Smokers, and to convince smokers to quit smoking at home, in the workplace, and in public places.

In 1986 the Surgeon General of the United States published a landmark report, based on epidemiological evidence, asserting a direct link between exposure of non-smokers to environmental tobacco smoke and disease, most notably, lung cancer. In the same year, the National Academy of Sciences reported a similar conclusion regarding the adverse effects of exposure to environmental tobacco smoke. In 1997, the California Environmental Protection Agency published the final draft of a report regarding all known health effects of exposure to environmental tobacco smoke. More than 50 studies on passive smoking and lung cancer risk in never-smokers, especially spouses of smokers, have been carried out and published within the past 25 years.

These studies show that there is a statistically significant and consistent association between lung cancer risk in spouses of smokers and second-hand smoke from the spouse who smokes. This excess risk is on the order of 20% for women and 30% for men. The excess risk increases with increasing exposure. It has been described that there is an increased risk of lower respiratory diseases in children of smoking parents and an increased risk of asthma. The results from these reports have increased the debate on smoking and environmental tobacco smoke’s health impact on non-smokers and set off controversy regarding smoking in the workplace and public buildings.

Tobacco combustion results in the formation of mainstream smoke and sidestream smoke. Cigarette smoke
that is drawn through the tobacco into an active smoker’s mouth is known as mainstream smoke. Sidestream cigarette smoke is the smoke emitted from the burning end of a cigarette. Environmental tobacco smoke results from the combination of sidestream smoke (85%) and a small fraction of exhaled mainstream smoke (15%) from smokers. For the most part, the chemical compositions of sidestream smoke and mainstream smoke are qualitatively similar and most toxic carcinogens are present in both of them but in different concentrations because of ageing and dilution with ambient air (Lodovici M & Bigagli E (2009).


Health benefits can be expected if people are protected from passive smoking (Dietrich D, et al (2007). Passive smoking prevalence is very high in children with lower respiratory tract infections and in healthy children. A higher discordance was present between parental self-reports and urine nicotine levels. Severe exposure to passive smoking in children was correlated positively with lower respiratory tract infections. It was concluded that passive smoking was an important risk factor for lower respiratory tract infections in children (Keskinoglu P, Cimrin D & Aksakoglu G (2007). Exposure to parental smoking has been repeatedly associated with reduced lung function among children in both cross-sectional and cohort studies. Maternal smoking, compared with smoking by other household members, has been most strongly linked with deleterious effects on childhood respiratory health (Eisner M & Forastiene F (2006).

Children’s exposure to secondhand smoke remains a widespread and severe public health problem. Recent estimates suggest that 40% of US children live with a smoker. It is now well established that second hand smoke contributes to pediatric ear infections, asthma, respiratory infections, and other respiratory disorders with evidence that it impairs neurodevelopment (Ealkbrenner A, et al (2010).

Conclusion
Recent evidence based research data confirms that tobacco smoke is a major, if not the major, indoor source of fine particulate pollution in developed countries. On a global scale, a large burden of obstructive lung disease symptoms is attributable to indoor combustion. Obstructive lung disease appears to predispose to a higher risk of adverse health effects from indoor particulate pollutants, especially second hand smoke(Eisner M(2007). It is highly important to educate all families and Communities about the importance of avoiding smoking in front of others, and to convince active smokers to quit smoking in both active and Passive manners especially in front of elderly, children, families at homes, workplaces, and public places.

The Physical evidence shows a great need for a psychological and educational based approach as current methods are not working.

References

(continued page 18)
Burden on Families and Attitudes of the Mentally Retarded: The Role of a Social Worker in Bangladesh: Perspective

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Abstract
Mental retardation and mentally retarded persons have been of concern to the Social Worker, Psychologist, physicians, medical scientists and educationalists. It is now well-known that persons with mental retardation can learn a lot and do many things and need to be given the time and help they need, in an appropriate way. They need to be encouraged for the same. Some of them may need a little assistance to maintain a livelihood. In Bangladesh most of the mentally retarded are deprived of their rights; not only their rights, they have practically no job opportunities and there still exists some negative and apathetic attitude towards persons with mental retardation. The paper will find out the extent of burden on families and problems faced by the parents in looking after their restated children and how the expected role could be performed by a Social Worker in regard to the context of Bangladesh. The present author personally interviewed some parents and observation method is used in this study. The author reviewed and consulted some secondary sources like books, journals, research papers etc, for furnishing the study.

Key Words: Mentally Retarded, Attitudes, Burden, Family, Social Workers and Bangladesh

Introduction
Considering WHO's estimate of 3% as the incidence of mental retardation among the world population, it could be estimated that 2.7 million people of Bangladesh are suffering from mental retardation in some form or the other (BSS,2010). But no serious attempt has yet been made to identify these unfortunate individuals, or how to assist persons with mental retardation able to live a healthy, active and meaningful life in a developing country like Bangladesh, is an important question in the present day world. In many countries of the world, particularly in Bangladesh abuse and discrimination against the mentally retarded are common and widespread.

People with mental retardation (MR) have disablement of an exceptional category. They are intellectually handicapped and their behavior pattern does not conform to their age level. As such, others treat them, as abnormal. Disabled children tend to place greater demands on parents and the parents are likely to get relatively little gratification from their interaction with the child, and they may find the interaction increasingly stressful. To minimize the stress, parents often become over protective which may also be a defence against hostility and guilt associated with the child. Robinson and Robinson (1976), and Farber (1959, 1972) exploring the family dynamics, found that the birth of a handicapped child has far reaching effects upon the family. In many instances families of handicapped children are faced with emotional, social and financial problems (Schild, 1976), which significantly affects the structure, function and development of the entire family.

The men, women and children with mental retardation can no longer be suppressed to silence or live on charity. To change the attitude and
beliefs of the common people needs some firm action on behalf of mentally retarded people, and recognize the challenge they are mounting for their rights. The mentally retarded seem to have realized that in order to become fully integrated; the prevailing definitions of mental retardation must be changed. This dichotomy of views and perception creates a gulf of difference between the disabled and non-disabled and widens the situation of scarcity of resources. The present study, is to determine the extent of attitudes and the burden on families of mentally retarded people.

**Definition**
Mental retardation is not a disease. It is a disability, and this disability is of a permanent nature. Retarded children constitute a very heterogeneous group both in their behavior and cause of their deficiency. Some children are happy in their homes; others are difficult to manage and impossible to supervise at home; some have relatively minor handicaps which interfere primarily with school achievement; others are so grossly defective physically and mentally that even in adolescence they do not learn to sit up, to talk or to play. However, the majority of retarded children have normal physical growth but retarded mental growth. A mentally retarded child’s span of attention is less and ability to learn and ability to retain what is learnt, is also less. Speech is also retarded because speech is something learnt from what one hears and comprehends. Therefore because of their limited ability, they learn to speak late at a slower rate. What they speak may also be defective because their ability to discern is faulty.

Mental sub-normality or retardation has been defined in terms of a score that a person obtains on a standard intelligence test. The test exact score is somewhat arbitrary. In 1959, the American Association on Mental Deficiency (AAMD) and later World Health Organization (WHO) used an intelligence quotient (IQ) of 85 as the cut-off point for the definition of normal intelligence. Anyone with an IQ below this level is considered retarded or subnormal. The formula for calculating the IQ is:

\[
\text{IQ} = \frac{\text{Mental age} \times 100}{\text{Chronological age}}
\]

---

<table>
<thead>
<tr>
<th>IQ Interval</th>
<th>WHO Classification</th>
<th>Educational capacity and capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>85-68</td>
<td>Border line (level-1)</td>
<td>Educable in normal schools with special attention</td>
</tr>
<tr>
<td>67-52</td>
<td>Mild (level-2)</td>
<td>Educable in special schools or classes</td>
</tr>
<tr>
<td>51-36</td>
<td>Moderate (level-3)</td>
<td>trainable in day training, and industrial centers</td>
</tr>
<tr>
<td>35-20</td>
<td>Severe (level-4)</td>
<td>trainable in day training centers, but low industrial potential</td>
</tr>
<tr>
<td>&lt; 20</td>
<td>Profound (level-5)</td>
<td>Completely dependent through all ages</td>
</tr>
</tbody>
</table>

**Table 1: Assess the child’s Education Capacity and Capability**

<table>
<thead>
<tr>
<th>Age group and sex</th>
<th>Percentage total population</th>
<th>Types of disability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All disability</td>
<td>Blind</td>
</tr>
<tr>
<td>Bangladesh total</td>
<td>0.47</td>
<td>100.00</td>
</tr>
<tr>
<td>0-4</td>
<td>0.17</td>
<td>100.00</td>
</tr>
<tr>
<td>5-14</td>
<td>0.30</td>
<td>100.00</td>
</tr>
<tr>
<td>15-29</td>
<td>0.35</td>
<td>100.00</td>
</tr>
<tr>
<td>30-49</td>
<td>0.45</td>
<td>100.00</td>
</tr>
<tr>
<td>50-64</td>
<td>1.10</td>
<td>100.00</td>
</tr>
<tr>
<td>65 and above</td>
<td>3.23</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**Table 2: Disability by Types and Age Groups**

Source: BSS 2010
Those with an IQ of below 70 are considered to be mentally retarded. The below average IQ scores obtained are categorized as below to assess the child’s educational capacity and capability.

At the time of birth, it is not possible to predict whether the child will be normal or retarded until, and unless, some complications developed during delivery. But within 6 months of life, we can judge normality or sub-normality. At the end of 6 months, a normal child can do the following:

1) Lifts his head while lying on his back
2) Holds his head for short time
3) Enjoys taking bath
4) Tries to crawl
5) Follows a moving light
6) Plays with his hands and fingers
7) Can hold an object in his hands
8) Turns his head towards sound
9) Recognises parents and those coming into contact with his/her daily life
10) Produces different sounds

Normally a child should be able to stand without support from 9 months to 18 months and walk from 20 months. During the period, 8 months to 5 years, a child should be able to perform the following:

Learning to eat and drink - 8 to 14 months with support
Learning to eat and drink - 14 to 24 months without support
Eating without much spilling, speech - 16 to 26 months
Monosyllables Ta-Ta-Da-Da - 6 to 12 months
One word - 12 to 21 months
Approximately 10 words - 18 to 27 months
Learning to dress - 2 to 3 years
Put on shoes - 3 to 4 years
Dress completing except tying - 4 to 5 years

If a child is not able to do above, there is a reason to think that his/her ability to learn is limited and may be subnormal or mentally retarded (S. Zaman, 1990).

Scenario of the Mentally Retarded in Bangladesh
Bangladesh is a South Asian country with continuing hard-core poverty, over-population, unemployment, lack of sufficient education and health and sanitation facilities and so on.

It is a country of about 160 million people and with a density of over 800 persons per square kilometre. The economy of the country is mostly dependent on agriculture. The unemployment rate is very high. Bangladesh is one of the most densely populated countries in the world with a growth rate of 3.2%, of the total population 85% live in the rural areas and 48% of these are women.

In Bangladesh, about 12 million (1 core and 20 lac) people are disabled (WHO 1997). The number of mentally retarded, therefore, in Bangladesh based on the rough estimate of 3% of the total population, that is 3.8 million (38 lac) are mentally retarded. The number could be much higher as other relevant factors such as poverty, malnutrition, diseases lack of treatment facilities, health care services and awareness etc.; are pre-dominant in this country.

Bangladesh Bureau of Statistics (BBS, 2010) states the present situation of disability by types and by broad age groups, which may be seen in Table 2

It is evident from the above statistics that the problem of mental retardation in Bangladesh is not less significant than other disabilities and the highest concentration of mental retardation is found in the age group of 5-14, 15-29, and 30-49 respectively. So the concerned authorities and institutions should take that fact into consideration when devising policy and services for the mentally retarded.

Several researchers have found possible connections between nutritional status and learning ability.

Severe malnutrition may cause permanent central nervous system damage which could impair their ability to learn (Cravito and Robles 1995; Monckebwerg 1968). In Bangladesh where infant mortality is as high as 140 per thousand (WHO puts it at 170, 1976 report) and 265 per thousand die before the age of 5 years the picture for the mentally retarded could be more grim.

Education in Bangladesh is neither universal nor free, nor compulsory. Though 40% of the total populations are below 12 years of age, only 34% of the children can go to school as no school exists to accommodate the rest of the children; 70% of children entering school drop out in the first five years. In an agrarian society, like Bangladesh where 92% of the population is rural identifying the mentally retarded is a difficult problem, as large numbers of individuals survive by engaging in simple repetitive activities of farming, demanding very little intellectual ability. (Zaman 1990)

In Bangladesh services for the mentally retarded handicapped, have a history of less than a decade, and have developed with much difficulty. Generally, qualified Psychiatrists who do treat mentally retarded persons, do it mostly by issuing some psychotic drugs. But unfortunately in Bangladesh Homeopathy and Ayurvedic treatment are widely practiced. The people in Bangladesh usually consult these people first, when the illness appears. When the illness takes a serious turn, or involves a surgical operation, only then will the people approach allopathic doctors.

Attitudes and Family Burdens towards Mentally Retarded
Mental retardation is primarily considered a mental problem. The most difficult problem faced in this endeavor was changing attitudes of parents. In a recent study in Bangladesh regarding attitudes the majority of parents, perceived it as a burden looking after their children with mental retardation. (Sufi, 1996) The mentally retarded people in Bangladeshi society are being wrongly bracketed with the lunatics.
or the mentally ill. They are intellectually handicapped; their intellectual ability does not develop at par with their age level; their behavior, therefore, seems not normal; as a result, many people out of ignorance treat them as mad. Mentally retarded persons are neglected, humiliated and even oppressed in most of houses and places.

It was mentioned earlier that about 3% of the population and about 38 million people of Bangladesh are mentally retarded. From the societal view point, the mentally retarded persons of upper and middle class families of the urban areas live generally in more unfavorable conditions than the rural mentally retarded persons, as there are restrictions in their movements and social contacts; they remain confined in their residences and cannot move freely. Those who attend special education classes (negligible parentage), can come out of their residence during school hours and get a little opportunity to make social contact with other persons. The lives of the adult female mentally retarded persons in the urban areas are far more miserable.

There is a general tendency to hide their mentally retarded children from others in the higher socio-economic group. They usually try to appoint nurses or servant to attend their mentally retarded child. These mentally retarded persons in the towns get the least opportunity for social interpersonal interactions. The middle class people also possess similar attitudes towards their mentally retarded children as the upper class socio-economic groups. But they cannot always afford attendants for children. Whether mild or moderately retarded, these children are sent to the normal schools at the beginning. And in most cases they become dropouts. On being dropouts these mentally retarded either loiter around their neighborhoods or remain confined in their houses. The metal retarded of lower socio-economic groups enjoy more freedom in loitering during day hours.

Many mentally retarded children of the urban slums beg in the roads, loiter aimlessly or work casually as a day labourer. Many of these children may become involved with delinquency. Rural mentally retarded persons get enough opportunity for free movements. They get the opportunity of being day labourers in agricultural work and in the cattle minding. The female mentally retarded persons get many job opportunities in household activities. If they become adult they get married in many cases. Arrangement of such marriage is not a serious problem. In the long run they become absorbed in household work. But for the mentally retarded females, the marriage may not last long. On separation from their husbands these female retarded persons come back to their parental houses. In the rural areas, most of the mentally retarded children die in the infancy period, due to diseases, faulty handling, wrong diagnosis, ignorance, etc. Fortunately in the rural areas the mental retarded get relatively better scope for socialization and enjoy more social acceptance in comparison with urban mental retarded.

Marriage of mentally retarded children is less common among educated groups and apparently high among illiterate families. The frequency of marriage is higher among the rural people. Parents usually give a good portion of parental assets to their mentally retarded children. There is much evidence that the parents, usually of the mentally retarded females, offer good incentives to poor persons to marry the rich mentally retarded females.

Although Bangladesh is mainly a Muslim country, people of various cast and creed live in this country. The family laws are different for the Muslims and Hindus in the court of justice. The laws are quite old and these were introduced during British rule of India. Muslim laws preserve equal rights of the mentally retarded persons to parental property. But there are many drawbacks in the law that finally fails to protect underhand transfers of the properties of the mentally retarded person. The culture and customs under Muslim laws and conventions emphasize provision of food and shelter for mentally retarded persons and responsibility for care taking is laid on the shoulders of the elder brothers or sisters or other near relatives in the absence of the parents. Hindu law does not recognize any right of the mentally retarded persons on parental properties. Under this law only those who can inherit the parental properties are those who are allowed by religious rules, to put fire on the dead body of the father. Usually a profound or severely regarded Hindu person is not allowed by rule to put fire on a dead father and thus is deprived of the mercy of their siblings. In India, the Hindu Disposition of Property Act 1995 was amended which now reserves equal rights of the mentally retarded persons as their siblings. The same act in Bangladesh was not amended and therefore, the Hindu mental retarded are still deprived of their parental property in Bangladesh.

In Bangladesh, mentally retarded persons live with their families. There is no Institution, like the Institutions found in Europe and many other neighbouring countries. They live with their parents when the parents are alive and with some other relation after the death of the parents. The parents try to provide some treatment for their retarded children other than begging but after some time they give up all attempts. Religious healing, Ayurvedic and Homeopathic treatments are very common practices both in the rural and urban areas. In the urban areas the parents try some psychiatric treatments if they get opportunity, in the hospitals. Parents are not aware of either the importance or the existence of special education and training programs for mentally retarded children. Their faulty attitude and misconceptions about mental retardation further worsens the situation.

Role of Social Worker
Social workers utilize a range of interventions based on a social and
interpersonal understanding of the mental retarded. Mental health social workers are located in a variety of settings; the organizational, the professional and the therapeutic. In order to meet new demands in the implementation of Rights of the Mentally Retarded, people, we will need to acquire new skills, training and expertise. Assisting persons with physical, mental and developmental disabilities is a field of practice in which basic Social workers are most likely to be the primary service providers. Social workers are concerned with such disabling conditions as mental retardation, visual and hearing impairment, communication disability, learning disability, and cerebral palsy, which affect not only the person’s physical and intellectual functioning but also interaction with others, that is, social functioning. The special role of Social workers is to help these persons and their families learn to live as successfully as possible in a society structured for the more fully functioning individual. Social work, from its inception, has been involved in helping people to deal with a wide variety of life’s problems, including those which come from disability. In fact, a close look at early Social work history shows a clear involvement with people impacted by disability. Social workers have long played prominent roles in advocacy and service delivery for people with mental disability.

Social Work is a profession concerned with solving personal and social problems (Fischer, 1981). Social work attempts to solve social problems for individuals groups and families, and Social work practice involves intervention in the social situation as well as the personal situation (Germain and Gitterman, 1980; Compton and Galaway, 1994). Social work can make a contribution by working with these people and their families.

Social workers will encounter people with mental handicap in all aspects of their lives, as friends, colleagues, clients, and even in the mirror. All service settings should provide access to people with disabilities, and social workers should not assume that a client with a disability is seeking services in relation to the disability. Some service systems, however, are designed to address issues specific to disability. Social workers can play active roles within these systems of services. Their practice roles, however, are directly related to public and the government programs in which they are employed.

The need for services will also increase dramatically. Medical professionals will continue to address the biological issues, and vocational rehabilitation counselors will focus on the issues of employment, but Social workers will bring a unique focus that includes interventions at all system levels. Social workers must join hands with the disability rights movement in recognizing that disability issues should not focus exclusively on the medical problem or the individual’s skills for a particular job. Disability issues are civil rights issues. Social workers must ensure that public policies and service programs are made more responsive. They must help individuals, families and their communities to find room within their own cultural framework to value the lives and contributions of people with disabilities. In this way, Social workers can truly work with people with disabilities, enhancing their lives and enriching society.

Social workers are not immune from the widely held stereotypes of the mentally retarded. They may be just as fearful and uneasy about dealing with mentally retarded people as many of the general public. And yet in the course of their work, they will be called upon to talk with and assist many people who are formally diagnosed as mentally retarded or who show signs of mental distress as part of some other problem. However, this must be backed up by regular supervision so that the Social worker is encouraged to examine his or her own response to situations and some self-awareness developed. Nevertheless, reasonable apprehension about the profession will occur if the worker has not learnt to recognize and come to terms with his or her own culturally induced fears and prejudices about mentally retarded people (Butler, 1983).

The Social workers have also to deal with a number of other pressures from other sources. The Social worker has to perform a number of different roles as the following diagram indicates (Figure 1, next page).

The general public, for example, may have unrealistic ideas about how Social workers can deal with certain problems related to the mentally retarded. There is often the expectation that Social workers will arrange hospital admission (agency select) at the first signs of distress and the Social worker may have to resist pressure from the family to do so. Similarly, the local agency may be making conflicting demands by expecting the Social worker to arrange a discharge quickly and find accommodation for ex-retarded in an unrealistic period of time. The Social worker may be subject to variety of agency pressures. Keeping the balance between these sometimes competing forces is often essential if the best interest of the client is to be served. The Social worker may have to resist demands, which are made out of the desire for administrative tidiness or bureaucratic self-defensiveness.

In the present day context of Bangladesh, the Social workers should perform the following activities while working for the protection and implementation of the rights of the mentally retarded:

a) They can organize the parents of the children with mental retardation into action groups for their training for building awareness and the capacity to deal with the problem more effectively;

b) The Social workers should try to mobilize community resources and facilities for the well-being of mentally retarded persons with the help of the members of civil society, institutions and different nation-building departments working at local level.

c) By using mass-media, NGOs and other positive social forces.
Social workers can launch a Social movement for protecting and implementing the rights and interests of the mentally retarded and building a caring society for them.

Social workers, along with nurses and rehabilitation professionals, often fill roles in medical case management as part of the workers compensation service system.

Conclusion
No nation can claim to be free from the problem of mental retardation. The mental handicaps issue cannot be handled as an isolated phenomenon. There has been a phenomenal development in the concern of the handicapped both in developing and developed countries in recent times. Many nations are still engaged in the continuous process of strengthening of detection and care. Educational rehabilitation planning and integration of detection of the mentally retarded in society have emerged as some of the major areas of interest in all civilized nations of the world. Only through proper education and training will a handicapped child be able to overcome his/her handicap and to use their remaining potentialities. Parents, Educators, Social scientists, Administrators, Social worker and Voluntary workers must work hand in hand to develop the limited potentialities of mentally retarded children. People with mental retardation should be afforded their rights of education, rightful guardianship, rehabilitation etc.; if those are not protected by the law. In the absence of proper governmental measures, mentally retarded people will not only be deprived of their rights, they may also be exploited and persecuted by the vested interests of groups of the society. The Social workers in Bangladesh with the help of other nation building departments can play a vital role in satisfying the aspirations of mentally retarded persons and fulfill their role.

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