Self-Esteem among Malay Children of Parents with Schizophrenia in Kelantan, Malaysia

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ABSTRACT

Background: Studies have demonstrated that children of parents with schizophrenia have low self-esteem. However, only scant data exist for the local population.

Objectives: The objective of this study was to evaluate self-esteem of Malay children of parents with schizophrenia and to determine the associated socio-demographic and clinical factors.

Methods: A total of 118 children of parents with schizophrenia who attended Hospital Universiti Sains Malaysia (HUSM) between May-September 2012 participated in the study. The children's self-esteem was measured using the Malay version of Rosenberg self-esteem scale (RSES). Patient's psychopathology and level of functioning were measured using the positive and negative syndrome scale (PANSS) and global assessment of functioning (GAF), respectively.

Results: The RSES mean score was 23.86 ± 5.31 and low self-esteem (RSES score < 20) was reported by 32.2% subjects. In multivariate analysis, the independent factors associated with low self-esteem were girls (OR 6.29), poor academic achievement (OR 5.49), school attendance/ stopped schooling (OR 9.43), awareness of parental mental illness (OR 5.12) and parent was divorced/widow/separated (OR 3.56). Psychopathology and level of functioning of parents were not significantly associated with self-esteem of the children.

Conclusion: Malay children, particularly girls, of parents with schizophrenia had low self-esteem. Children with school problems and whose parents divorced/separated also had low self-esteem.

KEY WORDS

self-esteem, Malay, children, schizophrenia

INTRODUCTION

Patients with non-affective psychosis, particularly schizophrenia, have long been reported to have reduced fertility[1] and this is most marked in men[2]. The general fertility rate among women with schizophrenia appears to have increased modestly over the years[3]. Recent advances in mental health care and access to community-based care, paralleled by aggressive treatment of first-episode psychosis, may have improved opportunities for affected women to engage in relationships and to become pregnant[4]. In many Asian countries, it is popular belief that marriage is a cure for different forms of mental disorders ranging from hysteria to psychoses[5-7]. In a cohort study, nearly 70% of marital rate was observed, with women had higher rate than men with 40% of them facing marital discord, separation and divorced after marriage[8].

The National Mental Health Registry (NMHR) found eighty percent of the patients with schizophrenia in Malaysia were single, divorced, widowed or separated[9].

A significant proportion of parents living with psychosis have impairments in parenting and general functioning that could have adverse consequences for both the parent and children. They face challenges such as low educational attainment, unemployment, poverty, and social isolation[10]. Children growing up with parents with mental illness have to endure negative experiences in social and emotional aspects, lack of support from the parent[11]. Most of the children born to female parents with severe mental illness (SMI) were brought up by others, commonly the child's father of adoptive family[12]. Besides that, relatives of the children, particularly, grandparents and aunts were more likely to replace function as caretakers and became the more significant nurturing figures than their own biological parents[13].

Table 1. Socio-demographic characteristics of subjects (n = 118)

Characteristics of subject	Frequency (%)
Age (mean ± SD)	12.72 ± 3.10
7-12 years	52 (44.1)
13-17 years (adolescent)	66 (55.9)
Gender	
Boys	65 (55.1)
Girls	53 (44.9)
Number of siblings (mean ± SD)	4.47 ± 1.71
3 or less	38 (32.3)
4 or more	80 (67.8)
Staying together with affected parents	
Yes	99 (83.9)
No	19 (16.1)
Other caretaker besides parents	
Yes	40 (33.9)
No	78 (66.1)

Table 3. Simple logistic regression to determine factors associated with low self-esteem

	Crude OR (95% CI)	P-value
Child characteristics		
Age	1.09 (0.95, 1.23)	0.212
Adolescent (13-17 years)	0.76 (0.35, 1.66)	0.489
Female	2.17 (0.99, 4.76)	0.053
≥ 4 siblings	2.27 (1.01, 5.12)	0.042
Staying together with affected parent	1.28 (0.46, 3.56)	0.637
Other caretaker besides parents	0.83 (0.37, 1.85)	0.642
Poor Academic achievement	1.33 (1.15, 1.74)	0.007
Poor school attendance or stopped schooling	1.07 (1.02, 1.25)	0.001
Poor awareness about parent's illness	2.20 (0.97, 4.87)	0.041
Parental characteristics		
Age	0.99 (0.94, 1.04)	0.692
Gender	0.98 (0.44, 2.15)	0.956
Divorced/widow/separated	3.86 (1.71, 8.72)	0.001
Mother is employed	0.65 (0.29, 1.48)	0.305
Father is employed	0.74 (0.31, 1.75)	0.496
Parental illness characteristics		
Duration of illness (month)	1.02 (0.99, 1.07)	0.494
Number of psychiatric admission	1.22 (1.02, 1.45)	0.030
Currently inpatient	0.94 (0.38, 2.33)	0.886
GAF	0.98 (0.96, 2.01)	0.215
PANSS Total	1.09 (0.99, 1.03)	0.261
PANSS Positive	1.05 (1.01, 1.10)	0.048
PANSS Negative	0.92 (0.91, 1.04)	0.726

Table 2. Self-esteem of subjects according gender and age groups (n = 118)

Variable	RSES score Mean ± SD	Mean difference (95% CI)	P-value
Gender			
Boys (n = 65)	24.65 ± 5.44	1.74 (-0.18, 3.66)	0.076
Girls (n = 53)	22.91 ± 5.02		
Age group			
7-12 years	24.46 ± 5.48	1.06 (-0.88, 3.01)	0.280
13-17 years	23.39 ± 5.15		

Table 4. Multiple logistic regression to determine factors associated with low self-esteem

	Adjusted OR (95% CI)	P-value
Female (child)	6.29 (1.92-20.63)	0.002
Poor Academic achievement	5.49 (1.63-18.51)	0.006
Poor school attendance or stopped schooling	9.43 (2.16-41.08)	0.003
Poor awareness about parent's illness	5.12 (1.09-37.06)	0.025
Divorced/widow/separated (parents)	3.56 (1.32-9.56)	0.012

The model fits well, with Hosmer-Lemeshow test P-value 0.810. There are no interaction and multicollinearity problems.

The model can accurately discriminate 76.2% of the cases

Malaysia Peninsular. Since, Malay constitutes 95% of the state population; we intentionally limit our study population to Malay children.

METHODOLOGY

Participants

The study protocol was approved by the Human Research Ethics Committee of USM. 132 Malay children (7-17 years) of consenting parents with DSM-IV TR diagnosis of schizophrenia under HUSM treatment were contacted and 126 agreed to participate in the study. Children were excluded due to mental retardation (3 children), bilateral eye blindness (1 child) and cerebral palsy with physical disability (1 child). A total of 118 of the children were interviewed and completed the questionnaire. Three (2.4%) children did not complete the self-rated questionnaire and were excluded from the analysis. The overall response rate was 89.4%. Interview session with the children was conducted separately to ensure more accurate response and confidentiality, unless the children wanted to be accompanied by the parents/caregivers. The session was done via individual appointment, either at the psychiatric unit, HUSM or at the children's house by the first author. Participants who were found to have low self-esteem with significant impairment of their school functioning were referred to child psychiatric unit for proper assessment and management.

Instruments

The Rosenberg self-esteem scale (RSES) is an instrument to measure global self-esteem. Originally the measure was designed to measure the self-esteem of high school students[19]. However, since its development, the scale has been used with a variety of groups including adults. RSES Malay version with Cronbach's alpha 0.8[20] was used in this study. The scale consists of 10 items scored on 5-point likert scale. In this study, low self-esteem was defined as RSES scores < 20.

The positive and negative syndrome scale (PANSS) scale is a 30-item semi-structured clinical interview rated on a 7-point scale (1 = absent, 7 extreme) specifically developed for typological and dimensional assessment of schizophrenia. It consists of 3 subscales: positive

Children of parents with SMI are at increased risk for a range of psychiatric disorders and one third of them may develop a SMI by early adulthood[14]. Studies have shown that adult children of schizophrenia patients have poorer self-esteem[15] in addition to social adjustment problems in employment and marriage[16]. Quality of family relation has strong influence on self-esteem[17] which is an important determinant of psychological well-being that is crucial during adolescence. Low self-esteem have been associated with smoking and illegal drug abuse like heroin, pills, alcohol, and other substances[18]. However, scant data exist regarding the self-esteem of children of schizophrenia patients in the local population. The objective of this study, therefore, was to evaluate self-esteem of Malay children of parents with schizophrenia in Kelantan and to determine the associated socio-demographic and clinical factors. Kelantan is a rural state situated at the northeastern of

(7 items); negative (7 items); and general psychopathology (16 items). Rating is based upon information related to the past week. Total score for each group of symptoms were calculated by adding all the scores for the items in each group. It has good psychometric properties with coefficients ranging from 0.73 to 0.83 for each of the scale[21].

The global assessment of functioning (GAF) is a quick and simple measure (0 to 100) of overall social, occupational and psychological functioning of patients with psychiatric disorder. The score is often given as a range[22]. In this study, highest score for the patient were used for analytical purposes.

Statistical analysis

Collected data were analyzed using SPSS version 20 software. Descriptive statistics were performed for socio-demographic and clinical characteristics. The associations between socio-demographic and clinical variables with children self-esteem outcome were analyzed using simple logistic regression (SLR) analysis. Factors with P-value < 0.25 were further analyzed using multiple logistic regression (MLR) to control confounding factors.

RESULTS

A total of 118 children of parents with schizophrenia participated in the study. Most of the participants were boys (55.1%), staying together with the affected parents (83.9%) and offspring of female patient with schizophrenia (60.2%). The mean ± SD of participant's age and number of siblings were 12.72 ± 3.10 and 4.47 ± 1.71, respectively. About one third of the children had other caregiver besides the parents, typically grandparents, aunts or older siblings. As for school status, 85.6% had good attendance and 3.4% (4 children) had dropped out of school. Half (50%) of the children were aware that their parents suffered from a disabling emotional illness. However, their level of general knowledge and attitudes towards the disorder varied considerably. For instance, the children knew that their parents had mental disturbances but almost all of them did not know about the actual diagnosis or whether the parents need long term medication and follow up.

All the children had only one parent with mental illness i.e., none had both parents with mental illness. Mean age for schizophrenia patients in this study was 44.71 years. Most of the patients (63.6%) were married and staying together with the spouse, while the remaining 36.4% of them were either separated, divorced or the spouse had passed away. About two-thirds of mothers (66.9%) and fathers (69.5%) of the participants were educated up to Form 3. Most of the mothers were housewife/unemployed (69.5%) while 51.7% of fathers were working as professional, government staffs or running their own business. The total, positive and negative PANSS score of patients were 77.75 ± 25.07, 21.52 ± 8.33 and 15.66 ± 8.54, respectively. The duration of illness was 106.86 ± 79.10 months, number of psychiatric admission 2.74 ± 2.23, and 22.9% of them were currently inpatient.

Low self-esteem (RSES score < 20) was reported by 32 (32.2%) subjects with overall RSES mean 23.86 ± 5.31. The RSES scores according to gender and age group were shown in table 2. Socio-demographic factors age, female gender, number of siblings 4 or more, poor academic achievement, poor school attendance/stopped schooling, poor awareness about parent mental illness, parent's marital status divorced/widow/separated, number of psychiatric admission, GAF and positive PANSS score emerged as significant factors with P-value < 0.25 in SLR analysis. Further MLR analysis showed 5 factors remained significantly associated with low self-esteem in this sample. The independent factors of low self-esteem in this study were girls (OR 6.29), poor academic achievement (OR 5.49), school attendance/stopped schooling (OR 9.43), awareness of parent mental illness (OR 5.12) and parent was divorced/widowed/separated (OR 3.56) as shown in table 4.

DISCUSSION

This study found nearly one third of the children had low self-esteem. The RSES mean scores of Malay (27.47 ± 3.08), male (27.99 ± 3.47) and female (27.31 ± 3.47) subgroups in general adolescence population age 12-20 years in Klang district, Selangor[17] were considerably higher compare to this study with respective scores of 23.86 ± 5.31,

24.65 ± 5.44 and 22.91 ± 5.02. In both studies, female gender and adolescence age group demonstrated slightly lower self-esteem compared to their counterparts. In multivariate analysis, female gender had 6 times the odds to have lower self-esteem compared to male which is generally in agreement with the trend seen in the general population[17]. In contrast, the parents being divorced/widowed/separated emerged as significant factor of low-self-esteem in this study compared to non-significant in general adolescence population[17] even though there was moderate (r = 0.478, p < 0.05) relationship between family function and self-esteem. This finding suggested that children of parents with schizophrenia are more vulnerable to the effects of their parental marital problems. As many schizophrenia patients and their family are already facing multiple challenges such as poor socio-economic status, stigma[23], low educational attainment, unemployment, poverty, and social isolation[10], additional blow to the precarious situations could have profound effect on the children psychological wellbeing, notably the closely intertwined self-esteem and depression. High prevalence of depression during pre-psychotic states[24] and high prevalence of psychological distress[25] and gender role conflict[26] among adolescent in high school in previous studies suggest that children of parents with schizophrenia with low self-esteem are at high risk of developing mental illness.

Other independent factors of poor self-esteem identified in this study were poor academic achievement and school attendance. Many studies have found self-esteem to be positively correlated with academic achievement and school attendance[27]. When a child is motivated, he/she will perform better in class. In another study, children who attended school felt less lonely and had higher self-esteem than those who did not attend school regularly[28]. Children of parents with schizophrenia have poor attendance compared to normal children possibly due to lack of parental supervision leading to poor school function[29]. This study also found that child awareness about parental mental illness was strongly related to self-esteem. Children tend to form misconceptions about their parent's mental illness. Therefore, it is important to provide ongoing opportunities for child to express themselves about illness; provide age appropriate education about parental mental illness and mental illness generally[30]. Parental psychopathology as measured by PANSS was not significant associated with self-esteem. This was probably due to PANSS being a measure of psychopathology over the preceding week, which is relatively brief duration.

CONCLUSION

In conclusion, Malay children of patients with schizophrenia had low self-esteem affecting nearly one third of them. Female gender, poor academic achievement, school attendance/stopped schooling, awareness of parent mental illness and parental marital divorce or separation were independently associated with low self-esteem in Malay children of parents with schizophrenia. It is hoped that this study will benefit those working with the patients with schizophrenia and their children. The findings underscore the importance low self-esteem and possible early intervention in psychosis.

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