Sociodemographic Factors Of

Schizophrenia in Basra

By

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ABSTRACT

Background

Schizophrenia is the heartland of psychiatry and the core of its clinical practice. The onsets of schizophrenia characteristically occur between the ages of 15 and 45. There are minor sex differences in age of onset. Schizophrenia is over presented among people of lower social class. The relationship of birth order to schizophrenia has been controversial.

Objective:

To evaluate the role of social and cultural factors in schizophrenia.

Methodology:

Eighty six schizophrenic patients who were admitted to psychiatric unit of Basra General Hospital and who met DSM-1V criteria for schizophrenia were included in this study. The data was obtained by personal interview from the patients and their accompanied relatives according to the following: age, sex, marital status, social class, season of birth and birth order.

Result

This study shows high male to female ratio. Two third of the patients were single and in younger age group. The study also shows high percentage of schizophrenic patients in upper and middle social class. The season of birth of schizophrenic patients were in spring and there is no much difference between first and last born.

Conclusion:

There is certain factors, the young, single, season of birth … etc have special risk in developing schizophrenia and these should provide basis for further studies.

Key words:

Sociology, schizophrenia, Demographic factors, Basra

INTRODUCTION

Schizophrenia is a serious mental illness characterized by a disintegration of the process of thinking, of contact with reality, and of emotional responsiveness (1). It most commonly manifests as auditory hallucinations, paranoid or bizarre delusions, or disorganized speech and thinking with significant social or occupational dysfunction. Onset of symptoms typically occurs in young adulthood (2), with around 0.4–0.6% (3) (4) of the population affected. Diagnosis is based on the patient's self-reported experiences and observed behavior. No laboratory test for schizophrenia currently exists (5)

Studies suggest that genetics, early environment, neurobiology, psychological and social processes are important contributory factors; some recreational and prescription drugs appear to cause or worsen symptoms. Current psychiatric research is focused on the role of neurobiology, but no single organic cause has been found. As a result of the many possible combinations of symptoms, there is debate about whether the diagnosis represents a single disorder or a number of discrete syndromes. Despite the etymology of the term from the Greek roots *skhizein* ("to split") and *phrēn, phren-* ("mind"), schizophrenia does not imply a "split mind" and it is not the same as dissociative identity disorder (previously known as multiple personality disorder or split personality), a condition with which it is often confused in public perception(6).

Increased dopamine activity in the mesolimbic pathway of the brain is commonly found in people with schizophrenia. The mainstay of treatment is antipsychotic medication; this type of drug primarily works by suppressing dopamine activity. Dosages of antipsychotics are generally lower than in the early decades of their use. Psychotherapy, and vocational and social rehabilitation are also important. In more serious cases—where there is risk to self and others—involuntary hospitalization may be necessary, although hospital stays are less frequent and for shorter periods than they were in previous times(7).

The disorder is thought to mainly affect cognition, but it also usually contributes to chronic problems with behavior and emotion. People with schizophrenia are likely to have additional (co morbid) conditions, including major depression and anxiety disorders(8); the lifetime occurrence of substance abuse is around 40%. Social problems, such as long-term unemployment, poverty and homelessness, are common. Furthermore, the average life expectancy of people with the disorder is 10 to 12 years less than those without, due increased physical health problems and a higher suicide rate (about 5%)(9) (10).

The aims of this study are to:

1. Give a clue to the role of social and cultural factors in schizophrenia.
2. Help us to identify the more vulnerable population, so that preventive measures can be directed accordingly.

MATERIAL AND METHOD

Eighty six schizophrenic patients who were admitted to psychiatric unit of Basra General Hospital between April 2009 to February 2010 and who met DSM4 criteria(5) for schizophrenia were included in this study .

Data sheets concerning age, sex, marital status, and social class, season of birth, birth order, and family history of schizophrenia were obtained from patients and their accompanying relatives.

Social classification was not adopted according to occupational and educational standards (British Registrar General, 1966) because this may not be ideal for our society where recent changes in various aspect of our life have been continuously taking place in recent years.

However, in analyzing various variables, I found that factors most helpful in segregating social classes were occupation scale, level of education, house location and income. So social class arranged into upper, middle and lower depending on my personal judgment which based on mention factors.

The season of birth was defined as winter (December – February), spring (March- May), summer (June -August) and Autumn (September –November).Seven patients did not know their dates and patients born on first july (8) patientes were excluded because their birth dates were inaccurate , so the study sample of season of birth consisted of (71) cases .

For calculation birth order, still birth and half sibling were excluded; patients who were multiple births (2 male and 1 female twins) were excluded also. The sib size was defined as small (2-4 persons), medium-sized (5-8 persons) and large (9-or more persons). The only children in their families were excluded from first and last birth positions.

RESULT

1. Age and sex distribution:

Table 1

The distribution of schizophrenic patients according to age and sex

Schizophrenic patients (86)						
Age group	Male	%	Female	%	Total	%
15-24	12	13.9%	11	12.8%	23	26.8%
25-34	21	24.4%	15	17-.4%	36	41.9%
35-44	14	16.3%	7	8.2%	21	24.4%
45-46	5	5.8%	1	1.2%	6	6.9%
Total	52	60.4%	34	39.6%	86	100%

Table 1 shows that 52 patients (60.4%) are male and 34 patients (39.6 %) are female .The range of age were between 15 and 64. About two third of all patients of both sexes were between 15-34 years of age and only 6 patients (6.9 %) were above the age of 45. In all age groups the disease was more frequent in male than females. Male / Female ratio was 1.5:1.

2. Marital status:

Table 2

Marital status of schizophrenic patients

Marital status	Male	Female	Total	%
Single	36	22	58	67.4%
Married	10	4	14	16.3%
Divorced	3	3	6	7.0%
Separated	3	4	7	8.2%
Widowed	-	1	1	1.1%
Total	52	34	86	100%

Table 2 shows that 67.4% of the patients were single, 16.3% were married, 7.0% were divorced, 8.2 % were separated and 1.1 % was widowed. Single / Married ratio was 3.6:1.

3-Social Class:

Table 3

The distribution of schizophrenic patients according to social class

Social Class	NO. Of Patients	%
Upper	5	5.8%
Middle	33	38.4%
Lower	48	55.8%
Total	86	100%

Table 3 shows that 48 schizophrenic patients (55.8%) in the lower social class and 38 patients (44.2 %) in the upper and middle social classes

4-Season of Birth:

See table 4 and table 5:

Table 4

Monthly distribution of schizophrenic births

Month	No. of patients	%
January	7	9.9%
February	7	9.9 %
March	12	16.9%
April	9	16.9%
May	8	11.2%
June	5	7.0%
July	5	7.0%
August	2	2.8%
September	4	5.7%
October	3	4.2%
November	5	7.0%
December	4	5.7%
Total	71	100 %

Table 4 shows that peak months for schizophrenic births include March (16.9 %) , April (12 .7 %) and May (11.2 %) , while the less month for schizophrenic births was August (2.8 %) .

Table 5
Distribution of patients according to Season of birth

Season	No, of patients	%
Winter (Dec.-Feb.)	18	25.4%
Spring (Mar.-May)	29	40.8%
Summer (June .August)	12	16.9%
Autumn (sept.-Novem.)	12	16.9%
Total	71	100%

Table 5 shows that more schizophrenic births were in spring 29 (40.8 %), followed by winter 18 (25.4 %) and less number of schizophrenic births were in summer and autumn, each of them was 12 (16.9 %

5-Birth order

Table 6

Distribution of schizophrenic patients by birth rank and family size

Family size	Birth rank												
	1	2	3	4	5	6	7	8	9	10	11	12	
1	3												3
2	1												1
3	5	1	1										7
4	1	1	1										3
5	2	1	1		6								10
6	3		1	3	2	2							11
7		2	1	1		4	3						11
8	1	3		1	2	2	1	2					12
9	2	1	4	2	1				1				11
10			2						2	1			5
11	1					1				1			3
12				1	2					1	1	1	6
Total	19	9	11	8	13	9	4	2	3	3	1	1	83

Table 6 gives the birth position distribution of 83 schizophrenic patients .Each horizontal row represents a separate sib size, the vertical columns designate the different ordinal position among families of the same size.

DISCUSSION

The incidence of schizophrenia is believed to be approximately equal among males and females (11) although other studies suggest slightly excess of male patients (12) .In our study; the male to female ratio was 1.5:1. This high male preponderance could be due to either family attitude toward admission of female patients, or may be a real differnce in the ratio.

Our study shows 68% of all patients of both sexes were between 15-34 year of age. This finding is similar to al – M aghazaji et al (13) who found two – third of our patients were below age of 34. Also our results are supported by the finding of Varma et al (14) who found that most of the schizophrenic patients were young patients.

Two third of our patients were single and single / married ratio was 3.6: I. This finding is similar to Eaton (15) who found the incidence of schizophrenia is several times higher in single patients than in the married of like age. This high percentage of single patients could be due to either that most of our patients were young adults and adolescents, schizophrenics may be less likely to marry even on reaching the marriage age, Or marriage provides protection against development of schizophrenia .

Regarding social class, several studies have shown that schizophrenia is over presented among people of lower social class (16). In our study high percentage (44.2%) of patients in upper and middle social class, this is largely due to financial policy rather than real distribution in various social classes in our society.

Regarding season of birth, our study show more schizophrenic patients were in spring (March-May) 40.8% and the peak month for schizophrenic births was March 16.9%. The peak of our schizophrenic births is later than those found in philipin (December- Feeberuary) , (17) ; and in England and Wales (,January- March) (18) .But our study is similar to the peak in united state and Japan which is predominately March and April (19) (20).

Regarding birth order , inspection of the table 6 reveal no much difference found between first and last born ,18 first born were compared to 19 who were last born . This finding is similar to the finding of Birtchnell, J. (21) and Malama et al (22) but contrast with those of Hare and Price (23) who found higher incidence of schizophrenia in the later birth orders. Our study also reveals considerable inequality of the distribution with toward over presentation of first born in small families (7 first born were compared with one who was last born), and a tendency toward over presentation of last born than first born in medium -sized and large families ,16 last born were compared to 9 who were first born.

This study is similar to the finding of Baryy and Barry (24) but contrast with those of Sanda rarja (25), who found over presentation of first born among patients from large families in India . The explanation of our result, that in small families , the childiren are likely to receive more individualized parental attention and to be subjected to more sever pressur of parental l expectation , this pressure would usually be more intense for older than younger , while last born of larag families may suffer from parental rejection and competitive disadvantage in sib ship

CONCLUSION

This study has thrown some light on sociodemographic characteristics of schizophrenic patients

There are certain factors the young, single. Season of birth s ……. etc. have special risk in developing schizophrenia

I hope these factors must be taken seriously and this study should provide basis for further studies to assess the rule of these factors as a risk factors for schizophrenia

REFERENCES

1. "Schizophrenia" Concise Medical Dictionary. Oxford University Press. Oxford Reference Online. Oxford University Press. Maastricht University Library. 29 June 2010
2. Castle D, Wessely S, Der G, Murray RM... "The incidence of operationally defined schizophrenia in Camber well. *The British Journal of Psychiatry 1991,* 159: 790–47.
3. Bhugra D. "The global prevalence of schizophrenia". *PLoS Medicine* 2005, 2 (5): e151; quiz e175.
4. Goldner EM, Hsu L, Waraich P, Somers JM."Prevalence and incidence studies of schizophrenic disorders: a systematic review of the literature". *Canadian Journal of Psychiatry 2002,* 47 (9): 833–43.
5. American Psychiatric Association."Schizophrenia". *Diagnostic and statistical manual of mental disorders: DSM-IV*. Washington, DC: American Psychiatric Publishing, Inc. 2002
6. Rathus, Spencer; Jeffrey Nevid. *Abnormal Psychology*. Prentice Hall.1991, p. 228.
7. Becker T, Kilian R."Psychiatric services for people with severe mental illness across western Europe: what can be generalized from current knowledge about differences in provision, costs and outcomes of mental health care?" *Acta Psychiatric Scandinavian Supplement 2006,* 429 (429): 9–16.
8. Sim K, Chua TH, Chan YH, Mahendran R, Chong SA . "Psychiatric co morbidity in first episode schizophrenia: a 2 year, longitudinal outcome study". *Journal of Psychiatric Research* 2006, 40 (7): 656–63.
9. Brown S, Barraclough B, Inskip H. "Causes of the excess mortality of schizophrenia". *British Journal of Psychiatry* 2000 ,177: 212–7.
10. Palmer BA, Pankratz VS, Bostwick JM. "The lifetime risk of suicide in schizophrenia: a reexamination". *Archives of General Psychiatry 2005,* 62 (3): 247–53.
11. Bland, R.C. Demograhaphic aspect of functional psychoses in Canada .Acta .psychiat .Scand 1987, 55, 369-380.

12. Levine, R.R.J. Strauss, J.S. and Gift, T.E .Sex differences in Age at first Hospital Admission for schizophrenia! Fact or Artifact? American journal of psychiatry 1981, 138,440-444.
13. AL- Maghazji, H., Tajeldin, M. And Al-alwan M. Preliminary study of schizophrenia in Iraq Journal of Faculty Medicine .Baghdad 1978, No2, 224-230
14. Varma, v.k, wig, N.N, srinivasa , M.R etal .Sociodewographic correlates of schizophrenia, affective psychoses and neurosis in a clinic in India .Acta psychiat Scand 1995, 61, 404-412.
15. Eaton ,W.W .Marital status and schizophrenia. Acta . Psychical , Scand 1985, 52,320-329.
16. Eaton, W.W. .Epidemiology of schizophrenia. Epidemiol Rev1995, 7, 105-156.
17. Parker, G and Balsa .B. Season of birth and schizophrenia- an equatorial study. Acta psychiat – Scand 1997, 56,143-146
18. Hare .E.H.and Slater. Mental disorder and season of birth. British Journal of psychiatry 1994, 124, 18
19. Torrey, E.F. and Peterson, M..R Seasonality of schizophrenic births in U.S. Arch Gen psychiatry 1997, 43, 1065-70.
20. Shimua .M.Nakamura. I. and Miura.T. Season of birth and schizophrenia in Tokyo. Japan. Acta psychiat. Scand 1997, 55, 225-232
21. Birtchnell, j. Birth order and mental illness – a control study. Social psychiatry 1995 , 7, 167-179
22. Malama, I.M, Papaioannou, D.J, kaklamni, E.P. et al. Birth order, sib ship size and Socio – Economic Factors in risk of schizophrenia in Greece. British journal of psychiatry 1988, 152,482-486.
23. Hare, E.H and Price, J.S. Birth Rank in Schizophrenia with a consideration of the bias due to changes in birth rate. British journal of psychiatry 1980, 116,404-420-
24. Barry. H and Barry H. Birth order .Family size and Schizophrenia .Arch Gen psychiat. 1967 17,435 –440
25. Sanda raja, N. and Rao, B.S. Order of birth and schizophrenia. British Journal of psych.1966, 112, 1127-1129