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Parental Deprivation and Psychiatric Morbidity amongst Older Adults

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Abstract: ***Background: Parents are always the source of big support for human beings in all age groups. It was thought that the loss of parents may have impact on mental health. However, there is dearth of studies on parental deprivation and its effect on mental health of elderly, so the present study attempted to explore the area. Aim: To study the association of parental deprivation in pre-adulthood (0-17 yrs) and post adulthood (18 yrs and above) with psychiatric morbidity amongst rural older adults. Methods: Sample consisted of 373 subjects aged 55 years & above drawn from six villages of Malihabad block of Lucknow district. Hindi Mental Status Examination (HMSE), Survey Psychiatric Assessment Schedule (SPAS) and Mood Disorder Questionnaire (MDQ) were administered on all subjects to sieve suspects for cognitive and neuropsychiatric (functional) disorders. In depth assessment of subjects positive on HMSE, SPAS/ MDQ were done through Schedule for Clinical Assessment in Neuropsychiatry (SCAN), for diagnosis of neuropsychiatric other then cognitive disorders (functional) and through Cambridge Examination of Mental Disorders for the Elderly-R (CAMDEX-R) for diagnosis of cognitive disorders. In the semi-structured socio-demographic and personal history data, schedule questions were specially included to collect data on parental deprivation. Results: Significantly more females had psychiatric morbidity who deprived from their both parents in post adulthood years (18 yrs. and above). Males who were deprived from both parents in pre-adulthood stage had significantly more psychiatric disorders in comparison to post adult hood years.***

Keywords: Parental deprivation, psychiatric morbidity HMSE, SPAS, CAMDEX-R, Rural Elderly

1. Introduction

Developing psychopathology because of fixation at different stage of psychosexual development was a landmark contribution in the history of psychology /psychiatry by Sigmund Freud. But traumatic events or object loss at any stage of life may also precipitate psychological problem in the individuals. Parental loss or deprivation is one of the most traumatic events of one's life. It is the most difficult situation to face and cope at the pre-adulthood (0-17 year) age in comparison to post adulthood (18 year & above).

Studies in western countries reported childhood parental deprivation and psychopathology in adulthood (Furukawat, 1998; Tyrka, 2008; Finkelstein, 2009). It was also found that loss of parents during childhood significantly increased the likelihood of anxiety disorder (Tyrka, 2008), major depression (Agid, 1999; Tyrka, 2008; Finkelstein, 2009,), bipolar disorder and schizophrenia (Agid, 1999).

In India some studies have been conducted to study the relation of parental loss with psychopathology in adulthood (Srinivasan et al. 1987; Das et al.1988; Kama Raju et al.2005). Srinivasan et al. (1987) found that loss of father during sensitive period of child development significantly increase the risk of psychopathology than in case of loss of mother. Kama Raju et al, (2005) stated that psychiatric patients suffered a significantly high number of parental deaths in their formative year in comparison to medical patients (21.45% vs 8.66%) and loss of father had more significant association with it. Das et al (1988) reported 34% of psychiatric patient had parental loss before the age of 16 years. None of the study found to study the effect of parental loss in late life. Therefore, present study is an attempt to explore this area.

Aim

To study the association of parental deprivation in pre-adulthood (0-17 yrs) and post adulthood (18 yrs and above) with psychiatric morbidity amongst rural older adults..

Hypotheses

1) There will be no difference between type of parental deprivation and mental health status of the elderly.
2) There will be no difference in pre and post adulthood stage parental deprivation and mental health status of the elderly.

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2. Material and Methods

Study Sample

The sample comprised of 373 elderly subjects aged 55 year and above residing in randomly selected villages of Malihabad block of Lucknow district. The data collection was done alongwith the an epidemiological study of psychiatric disorders amongst rural elderly sponsored by Indian Council of Medical Research, New Delhi and published in detailed methodology is published elsewhere (Tiwari SC et al. 2013.)

Tools:

- House hold screening form;
- Socio demographic and personal history data sheet
- Hindi Mental Status Examination (HMSE) (Ganguli et al. 1995)
- Survey Psychiatric Assessment Schedule (SPAS) (Bond et al. 1980)
- Mood Disorder Questionnaire (MDQ) (Hirschfield, 2000)
- Schedule for Clinical Assessment in Neuropsychiatry (SCAN). WHO 2.1 version)
- Cambridge Mental Disorder of the Elderly Examination Revised (CAMDEX-R) (Roth et al. 1986)
- For eliciting data on parental deprivation, some questions were especially included in the socio demographic and personal history data schedule to collect data on parental deprivation, if in evidence and the period of parental deprivation vis-à-vis age of the subject, such as-

Are your parents alive?
If reply is' No' then asked-
What was your age, when your father expired?
What was your age, when your mother expired?

Study Procedure

All the houses of the randomly selected villages were visited from one corner and numbered. The information of age structure of family member residing permanently in these houses was obtained on house hold screening form. Houses where at least one family member, aged 55 year and above, was residing were identified and listed.

Included subjects were contacted and who has given informed consent was included in the study. Included elderlies were subjected to initial screening through Hindi - mental Status Examination and Survey Psychiatric Assessment Schedule to identify 'suspects' for cognitive and neuro - psychiatric disorder. The 'suspects' were then subjected to detailed assessment through Cambridge Mental Disorder of the Elderly Examination Revised (CAMDEX-R) for cognitive disorders and Schedule for Clinical Assessment in Neuropsychiatry (SCAN) for neuro - psychiatric disorders other than cognitive disorders. ICD –10 criteria were followed in assigning the diagnostic label. In the semi-structured socio-demographic and personal history data schedule specially included question were asked to collect data on parental deprivation. Age at the death of parents has been categorized in two categorized i.e. pre-adulthood age group (0-17 year) and post –adulthood (18 & above).

3. Results

Table 1: Age and sex wise distribution of study sample

Age group	*Sex*		*Total*	*Mean with SD*
	Male	*Female*		
55-59 (Pre-elderly)	7	36	43 (11.5%)	69.64±9.3 Years
60-69 (Young-old)	72	102	174 (46.6%)	
70-79 (Old-old)	51	61	112 (30.0%)	
80 yrs. & above (Oldest-old)	25	19	44 (11.8%)	
Total	155 (41.6%)	218 (58.4%)	373	

Table 1 shows total 373 subjects, majority of subjects were female (58.4%) than their male counterpart (41.6%), and most of the subjects belong to the 60-69 age groups (46.6%). Mean age of the study sample was found to be 69.64 years with standard deviation of 9.3 years.

Table 2: Both and single parental deprivation on mental health status of elderly

Parental deprivation	Normal group	Psychiatric morbidity n= 130			Total
		Cognitive group	Neuro-psychiatric group	Total psychiatric morbidity	
Both parental deprivation n= 257	169 (65.76%)	24 (9.3%)	64 (24.9%)	88(34.2%)	257
Single parental deprivation n = 116	74 (63.79%)	16 (13.7%)	26 (22.4%)	42(36.2%)	116
Total	243	40	90		373 chi X 1.7315Non significant

Table-2 shows that elderly subjects with single parental deprivation had slightly high psychiatric illness (36.2%) than subjects with both parental deprivation (34.2%). However, the difference is statistically not significant.

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Table 3: Sex wise parental deprivation and its effect on mental health

Parental deprivation	Sex	Normal group	Psychiatric morbidity n= 130			X2
			Organic group	Neuropsychiatry group	Total psychiatric morbidity	
Both parental deprivation N=257	Male n =124	98 (79.0%)	10 (8.0%)	16 (12.9%)	26 (20.9%)	20.7 df-2 p<.01
	Female n = 133	71 (53.4%)	14 (10.5%)	48 (36.0%)	62 (46.6%)	
Single parental deprivation N= 116	Male n = 31	18 (58.0%)	4 (12.90%)	9 (29.3%)	13 (41.9%)	1.12 Non significant
	Female n= 85	56 (65.9%)	12 (14.1%)	17 (20%)	29 (34.1%)	

Table-3 Indicates that in both parental deprivation condition females had high psychiatric morbidity (46.6%) than males (20.9%), the difference is statistically significant (p<.01). But in single parental deprivation condition males had high psychiatric morbidity (41.9%) than females but the difference was not statistically significant.

Table 4: Parental deprivation and mental health status of the study sample

Parental deprivation	Sex	Age group	Normal group	Psychiatric morbidity N=130 (34.9%)			X2
				Organic group	Neuro-psychiatric and other than organic	Total psychiatric illness	
Both parental deprivation N= 257	Male n= 124	Pre-adulthood 0-17 year	90(72.6%)	6(4.8%)	11(8.9%)	17(13.7%)	10.54 p<.01
		Post-adulthood 18& above	8(6.5%)	4(3.2%)	5 (4.0%)	9 (7.3%)	
	Female n= 133	Pre-adulthood 0-17 year	68(51.1%)	9(6.8%)	33(24.8%)	42 (31.6%)	18..02 p<.01
		Post-adulthood 18& above	3(2.3%)	5(3.8%)	15(11.3%)	20 (15.0%)	
Single parental deprivation N= 116	Male n =31	Pre-adulthood 0-17 year	11(35.5%)	2(6.5%)	5(16.1%)	7 (22.6%)	3.19 Non significant
		Post-adulthood 18& above	7(22.6%)	2(6.5%)	4(12.9%)	6 (19.4%)	
	Female n= 85	Pre-adulthood 0-17 year	44(51.8%)	7(8.2%)	10(11.8%)	17 (20%)	3.51 Non significant
		Post-adulthood 18& above	12(14.1%)	5(5.9%)	7(8.2%)	12 (14.1%)	

Table 4 shows sex, pre-and post adulthood wise distribution of parental deprivation with their mental health status (psychiatric morbidity). Statistically significant difference (p<.01 level) was found in mental health status between pre and post adulthood stage amongst male who lost their both parents. It was significantly high pre-adulthood age group (13.6%). For females (13.6%) it was also found statistically significant in comparison to males (15.0%). In single parental deprivation insignificant differences were found.

4. Discussions

The present study throws some light on the issue of parental deprivation and its association with mental health of older adults. The total elderly subjects who were deprived from both or single parents in their pre-adulthood or post-adulthood stages of life (34.9%) found to have psychiatric illness, same percentage were found by Das et al (1988) but high from the findings of Kama Raju et al 2005 (21.%).
Females had more propensities to mental illness due to parental loss. It is true reflection of socio-cultural milieu of the Indian society, where females are made more dependent on their family. The parental loss in early stages of Indian females will have more impact on the life than their male counterparts.

Results showed that subjects with parental deprivation had more psychiatric illness than the cognitive disorders. Which is uncomparable with other studies because the role of parental deprivation on the primary psychiatric disorders is studied a lot (Agid, 1999; Tyrka, 2008; Finkelstein, 2009) but there is dearth of studies on older adults. Lack of studies related to effect of parental deprivation on older subjects still remain unexplored and unexplained on psychiatric disorders as well as cognitive impairment in older adults. The question may arise why the traumatic event earlier in life predisposes a person for psychiatric disorder in late life? It means that there should be the some biological basis which expresses itself later. The studies, mostly in rodents, have recognized an array of presumed pathogenic mechanisms that contribute to the relationship between developmental stressors and later depression-like phenotypes (Sanchez et al, 2001; Ansorge et al, 2007). These include changes in the hypothalamo-pituitary-adrenal (HPA) axis (Sapolsky, 2000; Gunnar and Quevedo, 2007), the serotonin (5-HT) system (Ichise et al, 2006), neurotrophins (Duman et al, 1997), and synaptic plasticity (Manji et al, 2001; Pittenger and Duman, 2008). The present study validates the hypothesis that early life stressors may result in the psychiatric disorders. The parental deprivation may be one of the most important stressor of the human life. It may result in the phenotypic expression of any psychiatric disorder in human beings as in rodents. In our study pre-adulthood loss of the parents is more significantly associated with the psychiatric disorders. This study is an attempt to explore the association of early life stressor in the form of parental deprivation on the psychiatric and cognitive disorders in the older adults. Further studies are required to establish the result of the present study.

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5. Conclusions

Significantly more females had psychiatric morbidity who deprived from their both parents in post adulthood years (18 yrs. and above). Males who were deprived from both parents in pre-adulthood stage had significantly more psychiatric disorders in comparison to post adult hood years.

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