Research Article

Prevalence of Single Child (Individuals without Siblings) in Our Society: A Cross-Sectional Study from Puducherry

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Abstract: The rise in single child families in developing nations is considered as a new trend in population. The prevalence study for single child in Puducherry has been done as a cross sectional study involving engineering students. Along with prevalence, which was found to be 9.3, associated factors that determine single child prevalence in society were analyzed. The factors emerged important among them were parents' education, especially females' education and mothers working status. Other factors like type of family (joint family and nuclear family) and area of resident (rural and urban) were not significantly associated with the prevalence of single child in the society.

Keywords: Single child, working mother, parents' education, mothers' education, nuclear family.

INRTRODUCTION

India is undergoing a subdued demographic change which is not exclusive to India alone, as it is palpable in other countries too. The traditional large joint family, which was a significant demographic feature of most of the Asian countries, has succumbed to small nuclear families. Over the past few decades the nuclear families have mutated into single-child families, which is the new demographic trend seen worldwide. The reason for couples adopting single-child norm is economy based, according to Alaka Basu, visiting professor at Jawaharlal Nehru University in Delhi, and Sonalde Desai of the University of Maryland in the US, as they intend to invest their whole fortune on one child so that he/she turns out successful in his/her life. Declining fertility, late marriage, postponement of first pregnancy, education, job opportunities, promotion, increasing cost of living, etc., are some of the other reasons for rising percentage of single-child families. The characteristics of children of these families, has been studied from various dimensions by researchers all over the world, though most of the studies in the earlier period emanated from China, where the concept of single-child family was made mandatory by the Chinese government in 1979 in order to curb the population explosion in China.Studies have explored various cognitive, psychosocial and academic parameters to compare the ones without siblings with the ones with siblings in order to show which one will grow into normal adults, socially as well as psychologically. But the results are mixed. Some studies have showed that single-child is independent, highly competitive, goal oriented, academically successful and socially adjustable[1, 2] whereas other studies projected single-child as selfish, dependent, spoilt, demanding, depressed, stressed and socially maladjusted[3]. Studies on single-child in India are few and far and factors associated with it are not reported adequately, which formed the basis of this study.

MATERIALS AND METHODS

This is a part of questionnaire based cross-sectional study, conducted during the month of April, 2014, to study the prevalence of single child in the society and to assess their stress level. The study was conducted after securing permission from Research and Ethical committees. First year engineering students of our sister Institute were recruited after they were apprised about the study. Written permission from the Principal of the sister Institute was taken. Written consent was obtained from each student. A qualified clinical psychologist helped us with administration of questionnaire and clarified students' doubts regarding certain terms in the questionnaire. DASS questionnaire was used for assessing the negative emotional states like depression, anxiety and stress in the subjects. While

analyzing their stress level, the factors contributing to emergence of single child in our society were also analyzed using the bio-data of the students. This article discusses the important demographic factors, found in the bio-data of students, which determine the increasing prevalence of single child family in our society.Microsoft excel worksheet was used for entering the data and to arrange data for comparison and express data in actual numbers and percentage in descriptive statistics.GraphPadInStat version 3.10 software was used for inferential statistics. Fischers Exact test was used to ascertain the significant difference between groups, keeping the p value < 0.05.

RESULTS

The table-1 shows the demographic details of the subjects. The prevalence of single child in Pondicherry is 9.3 which are in accordance with previous studies conducted in India. In addition to age distribution, it also shows that single child is mainly from urban nuclear families.

Table 2 & 3 show the level of their parents' education and its association with the distribution of single and non-single child. As the education level increased, couple preferred single child.

It brings out the important determinant of the prevalence of single child in our society. It is the mothers' status of working. Working women preferred single child when compared to non-working women as shown by Fischer'sexact test with p value which is significant (Table-4).

Table 5 & 6 show yet another important determinant of single child preference in the society. It is the educational level of parents. More educated parents stop with single child as shown by Fischer'sexact test with p value which is significant.

Table 7 & 8 show the influence of factors like family type and resident area on the prevalence of single child in our society. Even though Table 1 showed that most of the single child comes from urban nuclear families, these are not important determinants as shown by Fischers Exact test with p value which is not significant.

Table 1:Shows the demographic features of single and non single child

Sl.No.	Parameters	Single Child (N=27)	Non-Single Child (N=262)
1	**Sex**		
	Male	20(6.9)	145(50.2)
	Female	7(2.4)	117(40.5)
2	**Age (years)**		
	17	2(0.6)	60 (20.8)
	18	22(7.6)	173(59.9)
	19	3(1)	27(9.3)
	20	0(0)	2(0.6)
3	**Family**		
	Joint family	11(3.8)	83(28.9)
	Nuclear family	16(5.5)	179(61.9)
4	**Residence**		
	Rural	8(2.7)	94(32.5)
	Urban	19(6.6)	168(58.1)

Table 2: Difference in mothers' level of education between single and non single child

Sl. No.	Mothers Education	Single Child (N=27)	Non-Single Child (N=262)
1	Nil	0(0)	17(6.7)
2	≤5th std	2(o.6)	57(19.7)
3	Upto 8th std	4(1.2)	63(21.8)
4	Upto 10th std	4(1.2)	92(31.8)
5	Upto & above 12th std*	17(6.7)	33(11.4)

*includes UG and PG degrees

Table 3: difference in fathers' level of education between single and non single child

Sl. No.	Fathers Education	Single Child (N=27)	Non-Single Child (N= 262)
1	Nil	0(0)	8(1.4)
2	≤5th std	0(0)	19(6.6)
3	Upto 8th std	4(1.2)	56(19.3)
4	Upto 10th std	7(2.4)	97(33.6)
5	Upto & above 12th std*	16(5.5)	82(28.4)

*includes UG and PG degrees

Table 4: Influence of status of mothers' employment on distribution of single and non single child

Sl.No.	Mothers Employment	Single Child (N=27)	Non-Single(N=262)	Fischers Exact Test
1	Working	18(6.2)	117(40.5)	p=0.04*
2	Non Working	9(3.1)	145(50.2)	

*significant p value

Table 5: Influence of mothers' level of education on distribution of single and non single child

Sl.No.	Mothers Employment	Single Child (N=27)	Non-Single(N=262)	Fischers Exact Test
1	Less than 12th std	10(3.5)	229(79.2)	p=0.0001*
2	More than 12th std	17(5.9)	33(11.4)	

* significant p value

Table 6: Influence of fathers' level of education on distribution of single and non single child

Sl.No.	Mothers Employment	Single Child (N=27)	Non-Single(N=262)	Fischers Exact Test
1	Less than 12th std	11(3.8)	180(62.3)	p=0.051 *
2	More than 12th std	16(5.5)	82(28.4)	

* significant p value

Table 7: Influence of family type on distribution of single and non single child

Sl.No.	Mothers Employment	Single Child (N=27)	Non-Single(N=262)	Fischers Exact Test
1	Joint family	11(3.8)	83(28.7)	p=0.38 *
2	Nuclear family	16(5.5)	179(61.9)	

*non-significant p value

Table 8: Influence of resident area on distribution of single and non single child

Sl.No.	Mothers Employment	Single Child (N=27)	Non-Single(N=262)	Fischers Exact Test
1	Rural	8(1.4)	94(32.5)	p=0.67 *
2	Urban	19(6.6)	168(58.1)	

*non-significant p value

DISCUSSION

This study has brought out the prevalence of single child in our society and associated factors determining its prevalence. Prevalence of 9.3 is well above the national average of 3.8, according to the National Family Health Survey (NFHS-3). The state that tops the list of single child families in India is West Bengal, where the prevalence of single child in urban and rural population is 9.7 and 3.7 respectively. This prevalence (9.3) is midway between what is seen in developing nations and developed nations, where the prevalence of single child is about 7% and 15%

respectively. High prevalence of single child is seen particularly in communist countries like China (21%)and Hungary (27%) [4, 5].In fact most of the studies related to single child were done from China, because in 1979, One Child Policy was introduced there to decrease the Total Fertility Rate (TFR) from 5.9 to 2.7 in order to curb the population explosion in that country [6]. Another significant finding of this study is that the prevalence of single child in the society is strongly associated with the working status of mothers. Working mothers prefer single child, as shown in table 5, where 6.2% working mothers had single child as compared to 3.1% non-working mothers having single child. This finding is in accordance with other studies which state that single child give more freedom for the parents, especially to mothers, to fulfill their occupational milestones [7]. Apart from this, due to single child, mothers are freed from many, frequent, unplanned pregnancies with associated mortality and morbidity. With more time available, mothers have chance to develop required knowledge and skills, making them employable, contributing to the household income with resulting benefits in terms of independence and self-esteem [8]. In addition to working status of mothers, their educational level also significantly determines single child prevalence, as shown in table 5. Highly educated females are strongly associated with single child as do highly educated males, but association is stronger in case of females (p value 0.0001 vs. 0.054). The influence of these two factors, female education and working status of mother, on the prevalence of single child, has been reported similarly by other researchers. Children are seen as impediment to women's employment, especially in the formal sector[9]. A way out of this is to restrict childbearing to a single child so that women can achieve socially valued motherhood goals, while at the same time managing competingthe demands of a career [10]. In this era of consumerism with rising materialism, limiting the family size may be one way of ensuring higher consumption [11]. Bringing up children is a time consuming process which may curtail ones freedom, reducing their ability to achieve personal goals and enjoy leisure times [12]. These restrictions are greater for women as burdens of marriage and parenthood curtail women's freedom far more than that of men [13]. The negative aspect of single child in society is that it may lead to gender imbalance, which is aptly represented in this study showing 6.9% male singles as compared to 2.4% female singles. Parents were ready to stop with single child if the first born is a male child, leading to skewed female to male ratio in the population, 940 females for 1000males, as shown by Population Census 2011, India[13]. The influences of family type and resident area on the prevalence of single child were not statistically significant, even though most of the single child is from urban nuclear families.

CONCLUSSION

There is an emerging trend in the population, where single child families are on the rise. This is especially seen in urban nuclear families. Parents level of education, especially females level of education and working status of mother have a significant influence over the prevalence of single child in our society.

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