

Impact of Kangaroo Father Care (KFC) on Father Baby Attachment

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Abstract:-

➤ Introduction:

Skin-to-skin contact between father and newborn baby engenders strong feelings, increases the infant's environmental stimulation, provides critical emotional support, and encourages the father to become actively involved in infant caring responsibilities. Today, it is common for expectant fathers to actively participate in the childbirth process as well as to reminisce on the experience with their spouse or others. Research findings shown that the emotional bonding between father and baby also enhanced by KFC. It also strengthen the confidence of fathers on new born care.

➤ Aim:

Evaluate the effectiveness of Kangaroo father care on attachment between the Father and baby among the baby born by Lower Segmental Caesarean Section in experimental and control group.

➤ Hypothesis: H₁:

There is a difference in attachment between Father and baby after the implementation of KFC in the experimental & control group at 0.05 level of significance.

➤ Methodology:

Quantitative research approach with true Experimental randomized control research design was used. Non probability, total enumeration sampling technique was used to select 100 fathers had first babies born by LSCS in SVBCH, Silvassa. Modified father baby attachment scale was used. It has three components such as Patience & Tolerance, Enjoyment in interacting, Love & Pride. Bio-Physiological measurement technique was used to collect the Neonatal Outcomes.

➤ Results:

Effectiveness of KFC on attachment between the father and baby was evaluated by using the independent 't' test. Study finding shown that the obtained t value [t(98, 0.05) = 4.8; 0.000: p<0.05] was significant at 0.05 level of significance.

➤ Conclusion:

Present study shown that KFC is highly effective to enhance the bondage between the father and baby which can be practiced and to be implemented at various health facilities.

Keywords:- Kangaroo Father Care (KFC), Father Baby Attachment Scale, Independent 'T' Test, Paired 'T' Test.

I. INTRODUCTION

Kangaroo Father Care helps to strengthen the paternal confidence toward child care and creates a emotional relationship at a very nascent stage. The father first experience creates the self-awareness for the father, decreases paternal anxiety and increases feelings of protectiveness.¹ Postpartum father-neonate SSC engenders strong feelings in the father for his new-born, increases the infant's environmental stimulation, provides critical emotional support, and encourages the father to become actively involved in infant caring responsibilities. Touching, massaging and hugging an infant as well as learning to respond appropriately to an infant's crying each of these behaviours help new father properly interpret changes to infant appearance and behaviour, provide appropriate information, reduce parenthood discomfort and anxiety, better prepare for parenting role responsibilities; and increase infant's confidence.² Today, it is common for expectant fathers to actively participate in the childbirth process as well as to reminisce on the experience with their spouse or others.³ Only handful of studies are investigated KFC and found it to be like KMC in regard to limited set of infant physiologic parameters⁴. Research findings depict that baby's immune system is stimulated when placed skin to skin. Father's mature immune system passes antibodies through his skin to baby. Studies shown that KFC enhance the Emotional attachment between Father and Baby Father can also pass on the same benefits as mothers do in terms of helping to regulates their baby's temperature and heartbeat.^{5,6}

A. Aim:

- Evaluate the effectiveness of KFC on Paternal Outcome.

B. Objectives:

- Evaluate the effectiveness of KFC on Attachment between the Father and Baby among the babies born by Lower Segmental Caesarean Section in experimental and control group.

C. Hypothesis:

- **H₁:** There is a difference in attachment between the Father and Baby after the implementation of KFC between the experimental & control group at 0.05 level of significance.

D. Assumptions:

KFC increase the attachment between the Father and Baby.

E. Inclusion Criteria:

In this study inclusion criteria includes

- *Fathers*
 - ✓ Who had baby first time
 - ✓ Of full-term babies (38-42 weeks) delivered or admitted in Shri Vinoba Bhave Civil Hospital, Silvassa.
 - ✓ Willing to participate in the study
 - ✓ Can co- operate & come for continuous 3 days for follow up
 - ✓ Of single baby.

F. Exclusion Criteria:

Exclusion Criteria In this study exclusion criteria includes:

- Father with any bad habits like smoking, tobacco and alcohol drinking at the time of intervention
- Father with psychiatric illness
- Father of baby with congenital defect
- Father who do not understood English and Hindi
- Father of baby admitted in NICU.

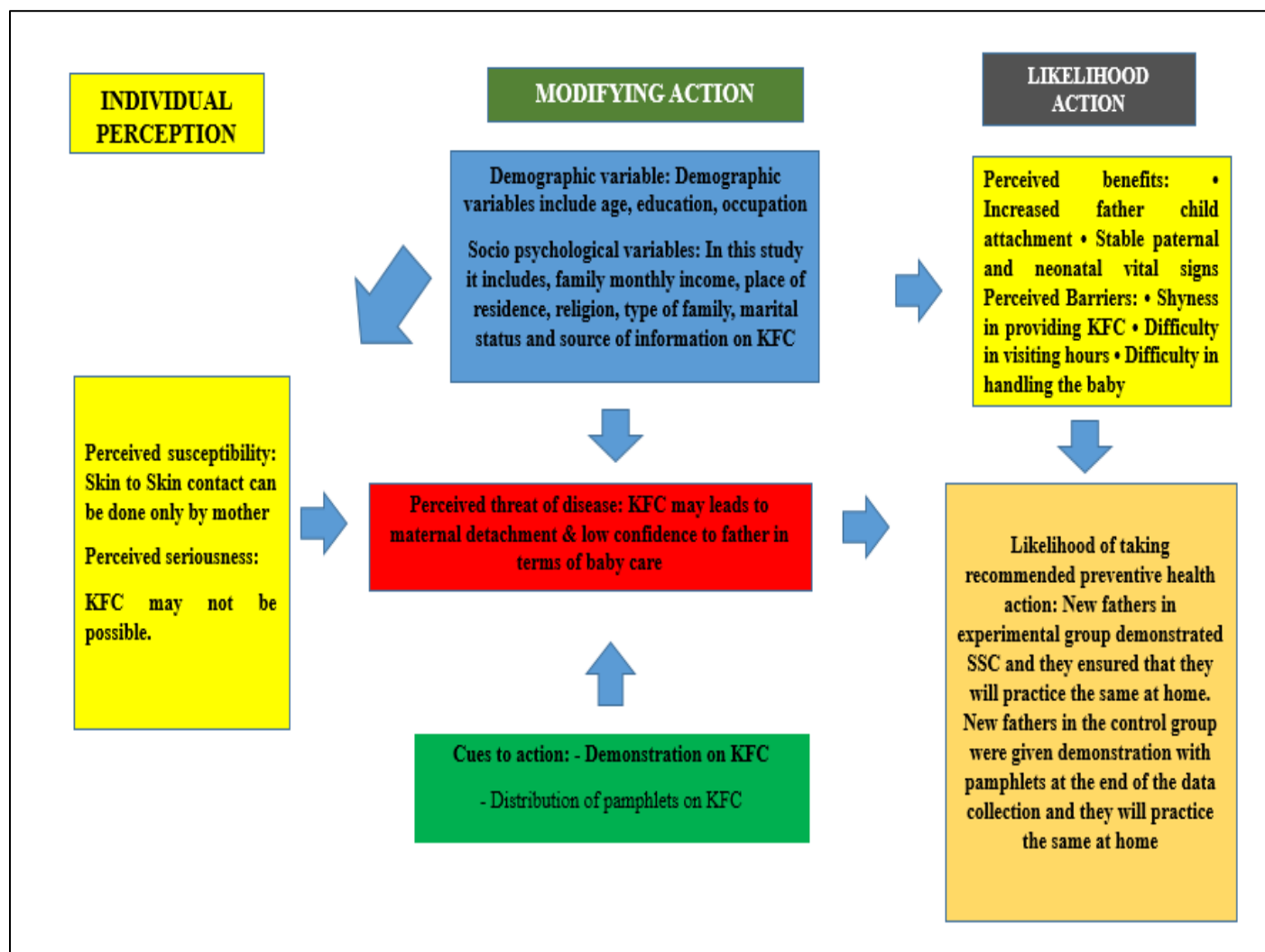


Fig 1: Conceptual Framework by using Rosenstock's Health Belief Model

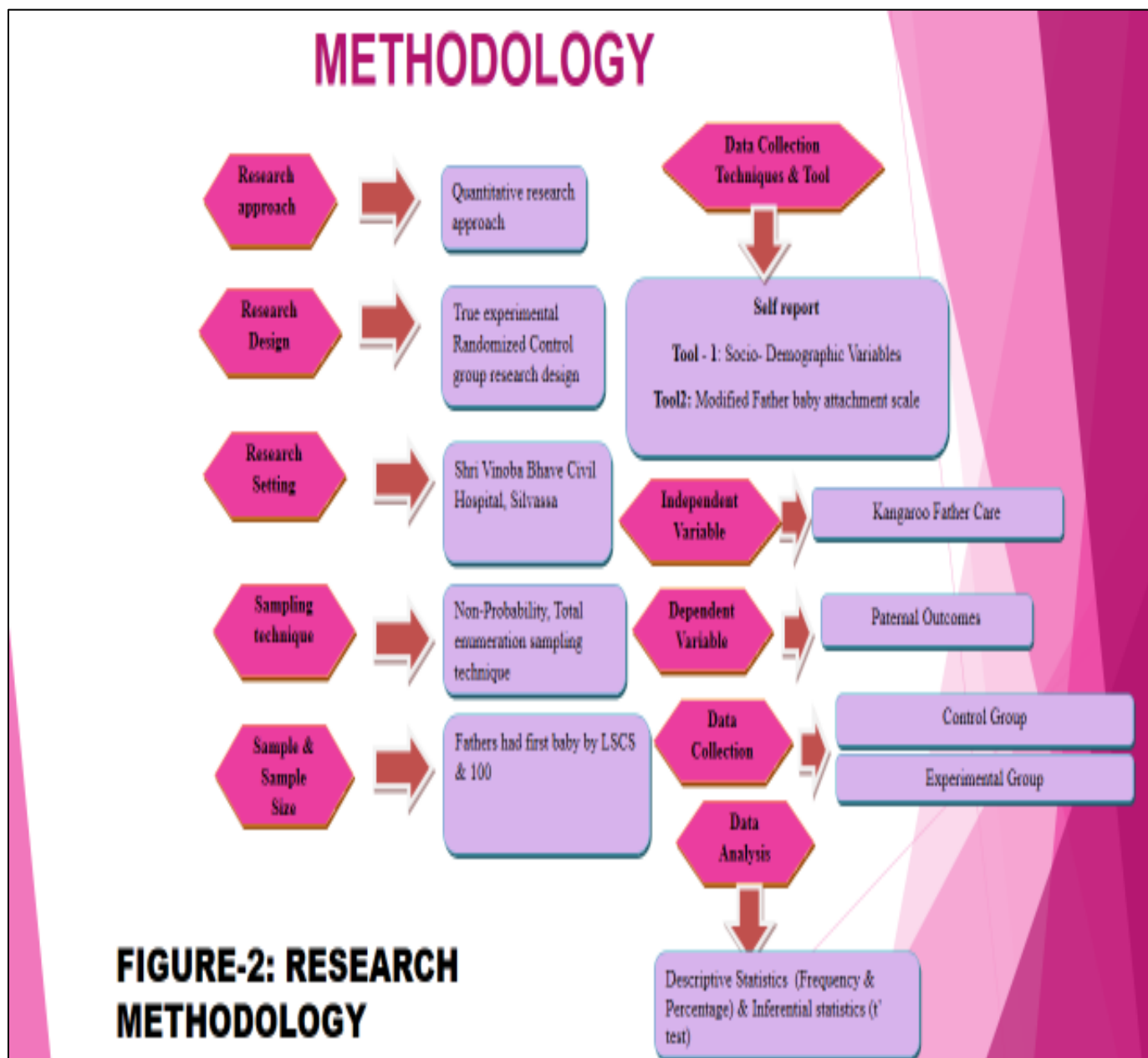


Fig 2: Research Methodology

II. RESULTS

Table 1: Homogeneity, Frequency and Percentage Distribution of Fathers According to their Socio-Demographic Variables. n=100

SR. NO	SOCIO DEMOGRAPHIC VARIABLES	EXPERIMENTAL GROUP		CONTROL GROUP		TOTAL		HOMOGENEITY (χ^2 , pVALUE INFERENCE)
		f	%	f	%	f	%	
1	Age in year							
	≤19	2	4.0	1	2.0	3	3	4.105, 0.2502,NS
	20-25	15	30.0	21	42.0	36	36	
	26-30	26	52.0	17	34.0	43	43	
≥31	7	14.0	11	22.0	18	18		
	Educational Qualification of Father							
	No formal education	2	4.0	4	8.0	6.0	6.0	11.030, 0.137,NS
	Primary School Education	9	18.0	6	12.0	15	15	
	Middle School Education	13	26.0	20	40.0	33	33	
High School Education	11	22.0	12	24.0	23	23		

2	Intermediate or post High School	0	0	2	4.0	2	2	
	Diploma Education	5	10.0	1	2.0	6	6	
	Graduation	10	20.0	4	8.0	14	14	
	Postgraduate	0	0	1	2.0	1	1	
3	Occupation of the father							15.408, 0.017,NS
	Unemployed	5	10.0	0	0	5	5	
	Unskilled worker	4	8.0	3	6.0	7	7	
	Semi-skilled worker	11	22.2	19	38.0	30	30	
	Skilled worker	17	34.0	15	30.0	32	32	
	Clerical farmer, Shop owner	3	6.0	10	20.0	13	13	
	Semi professional	6	12.0	1	2.0	7	7	
	Professional	4	8.0	2	4.0	6	6	
Postgraduate	0	0	1	2.0	1	1		
4	Family Monthly Income (Rs.)							8.188, 0.146,NS
	≥41430/-	1	2.0	1	2.0	2	2	
	20715-41429/-Rs	7	14.0	2	4.0	9	9	
	15536-20714/-Rs	16	32.0	11	22.0	27	27	
	10357-15535/-Rs	13	26.0	20	40.0	33	33	
	6214-10356/-Rs	13	26.0	13	26.0	26	26	
	2092-6213/-Rs	0	0	3	6.0	3	3	
≤2091/-Rs	0	0	0	0	0	0		
5	Type of Family							0.760, 0.683,NS
	Nuclear	27	54.0	22	44.0	49	49	
	Joint	21	42.0	25	50.0	46	46	
	Extended	2	4.0	3	6.0	5	5	
6	Marital Status							6.060, 0.013,NS
	Married	48	96.0	40	80.0	88	88	
	Engaged	2	4.0	10	20.0	12	12	
	Non- Engaged	0	0	0	0	0	0	
	Widow	0	0	0	0	0	0	
7	Religion of Father							2.011, 0.570,NS
	Hindu	43	86.0	44	88.0	87	87	
	Muslim	4	8.0	4	8.0	8	8	
	Christian	3	6.0	6.0	2.0	4	4	
	Other	0	0	1	2.0	1	1	
8	Place of residence							3.119,0.538,NS
	Urban	28	56.0	27	54.0	55	55	
	Rural	18	34.0	19	38.0	37	37	
	Semi urban	4	10.0	4	8.0	8	8	
9	Previous knowledge on SSC							NS
	Yes	50	100.0	50	100	100	100	
	NO	0	0	0	0	0	0	
10	Sources of information on Skin-to-Skin Contact							9.005, 0.060,NS
	Mass media	6	12.0	2	4.0	8	8	
	Printed materials	7	14.0	1	2.0	8	8	
	Health personnel's	32	64.0	37	74.0	69	69	
	Family and relatives	5	10.0	9	18.0	14	14	
	Friends & peer group	0	0	1	2.0	1	1	

*Significant at 0.05 level,

** Highly Significant 0.01 level,

*** Very Highly Significant at 0.001 Level and NS: Non-Significant

Table 2: Effectiveness of KFC on Father Baby Attachment by using Independent ‘T’ Test n = 100

SR.NO.	ASPECTS OF FATHER BABY ATTACHMENT	EXPERIMENTAL GROUP		CONTROL GROUP		INDEPENDENT ‘t’ TEST, df, p
		MEAN	SD	MEAN	SD	
1	Patience & Tolerance	61.94	56.18	60	10.25	0.98, 98, 0.166, NS
2	Enjoyment in Interacting	64.65	20.24	60.65	14.74	2.788, 98, 0.004**
3	Love and pride	69.88	10.52	60.94	13.8	7.25, 98, 0.000***
4	Total	65.4	39.06	60.52	12.54	4.8, 98, 0.000***

*Significant at 0.05 level,
 ** Highly significant at 0.01 level,
 *** Very highly significant at 0.001 level and NS: Non Significant

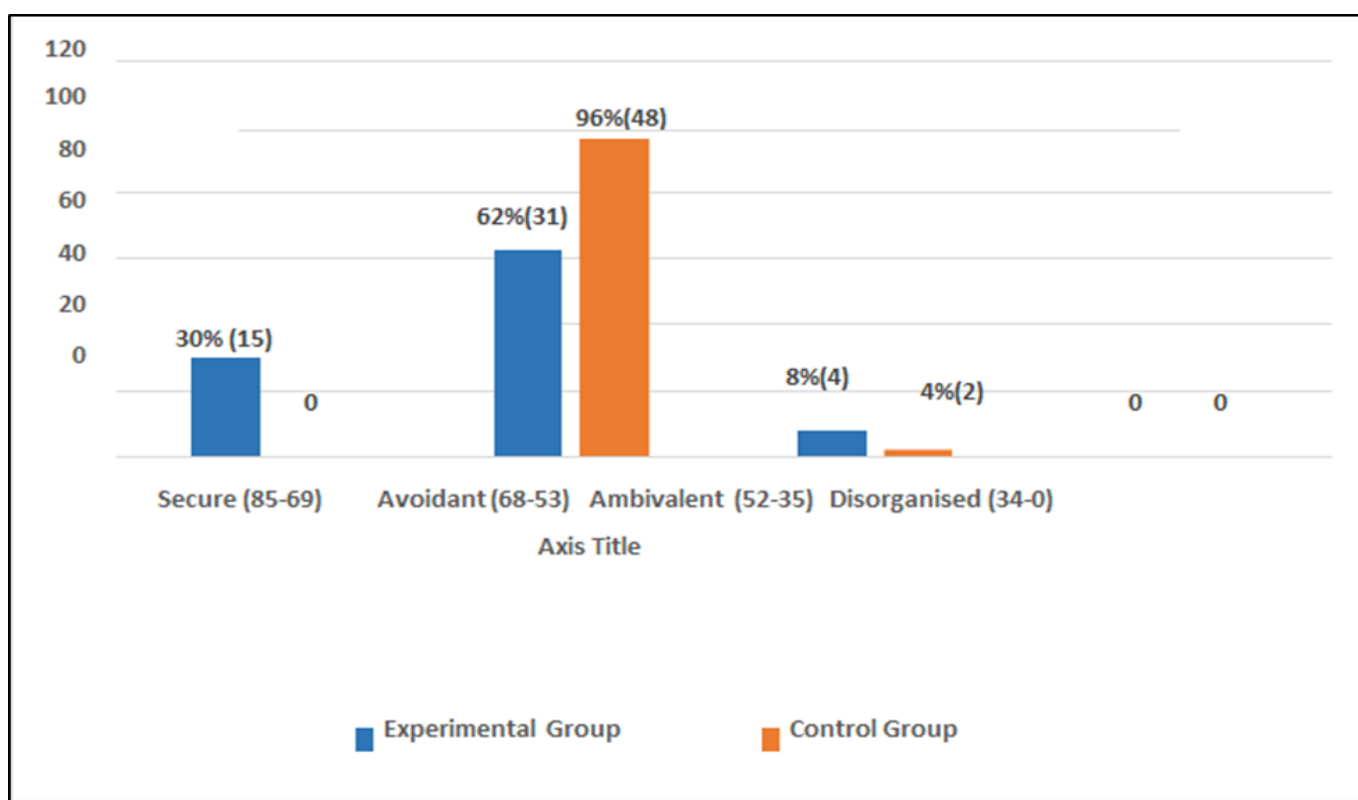


Fig 1: Comparison of Level of Father Baby Attachment in Experimental and Control Group

III. DISCUSSION

Present study shows that KFC significantly increase the attachment between father and baby [t (98,0.05) = 4.8; 0.000: p<0.05]. It shows that KFC helps to rise the attachment between father and baby. Similar findings were obtained from the study shown that the average PIAS scores of the fathers in the study was 62.97 ± 8.94. Significant difference was found between the birth weight, clinical picture, and length of stay in the Neonatal Intensive Care Unit (NICU) and PIAS total score of preterm infants (p < 0.01). There was a significant difference between the unplanned hospitalization of the baby after discharge and the father's changing the baby's clothes and the PIAS score (p < 0.05). Birth weight and unplanned hospitalization explained 31% of PIAS total score.

IV. IMPLICATION

- *Nursing Education:*
 Nursing curriculum should include KFC, since Sustainable development goal insisting on Gender Equality. Fathers need to take responsibility in baby care and reduce the burden on mothers.
- *Nursing Practice:*
 Nursing practice should motivate the father to practice KFC with demonstration.
- *Nursing Research:*
 Very few studies are available on KFC. Impact of KFC can be evaluated on different parameters like Father Baby attachment and paternal outcomes etc.

➤ *Nursing Administration:*

There can be KFC unit in hospital that helps the father to practice KFC and strengthen the bonding between baby and father and helps the mother in shouldering her responsibility.

V. RECOMMENDATION

- A similar study can be conducted on larger sample and in different settings to generalize the study findings
- A comparative study can be conducted between routine care and KFC
- A long-term study can be done to identify the impact of KFC in reducing later complication such as hypothermia
- A comparative study can be conducted between urban and rural Fathers.
- The same study can be conducted on caesarean section mothers
- Qualitative study can be done on Fathers perception while providing KFC
- Longitudinal study can be done to assess the impact of KFC and their cognitive development in their later life
- Impact of KFC on other paternal and neonatal variables can be assessed.

➤ *Challenges*

Fathers were shy at the beginning of KFC

- Hair at the chest was little disturbing the babies but later they adjusted it was not causing much of the problems.
- Venue for KFC was real challenge. But under the support of Concerned incharges it was completed successfully.

LIMITATION

Unique nature of the father to cope with the KFC

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