







RESEARCH ARTICLE

ROLE OF CHILDHOOD SAMSKARAS IN PREVENTION OF COMMON INFANTILE PROBLEMS WITH SPECIAL REFERENCE TO INFANTILE INFECTIONS, NUTRITIONAL AND WEANING DISORDERS – A KAP SURVEY STUDY

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ABSTRACT

Introduction: Ayurveda and other Hindu literatures explained the concept of Samskaras to the child which aims to achieve the global and all round development of the child. Although there are many Samskaras at different ages, certain important Samskaras mentioned during first year of the life which witnesses the maximum brain growth. Need of the study: there is a real need to educate the parents regarding Samskaras, with regards to the right method, right age and scientific importance and health benefits to child. There is also need to prepare a protocol and standard operational methods with do and don'ts of each Samskara so that it could be practiced uniformly. Objectives: To evaluate the scientific understanding, misconceptions and methodology of practice of childhood Samskaras in public (parents) and applicability of Ayurveda childhood Samskaras in the present day scenario. Material and Method: 500 children were enrolled for the studyfollowed by preparation of a questionnaire format of Samskaras that are performed up to 1 year of age were given to the parents / care giver. After filling the questionnaire format, data were collected and statically analyzed. Discussion: Samskaras are having multi facets benefits related to health status, adaptation status, checking of normal growth and developmental patterns, time to time correction of the mistakes in baby nurturing, and inculcation of moral and social ethics and needed correction of personality development. Global approach of Ayurveda always takes care of once physical, psychological, spiritual, social, lingual and emotional health. Conclusion: This survey study reveals that there is significant benefits in terms of enhancing immunity, prevention of nutritional disorders, prevention of allergic and hypersensitivity, early detection of neurobehavioral problems and role in building the personality of the child in those who performed the Samskaras by understanding its scientific importance.

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INTRODUCTION

Hindus consider all aspects of life to be sacred. As life is a divine blessing that should be cherished and lived according to God's plan, every significant phase from conception to the end of life is commemorated as a reminder of this. Human has always tried to become a better version of himself. He has begun to reflect more deeply on his physical, psychological, and spiritual welfare as a result of this realization. The Vedic sages recommended a series of rituals known as Samskaras in order to achieve this. The closest English equivalent to Samskara is "sacrament," a term connected to the concept of a 'rite of passage.' According to the Oxford English Dictionary, a sacrament is defined as a "religious ceremony or act regarded as an outward and visible sign of inward or spiritual grace." The term "Samskara" has multiple meanings in classical Sanskrit literary works like Kumarsambhava, Hitopadesha, Abhijnan-Shakuntal, Raghuvamsha, and Manu Smriti. These meanings include education, cultivation, training, refinement, perfection, grammatical correctness, polishing, ornamentation, consecration, purificatory ritual, sanctification, the effect of past deeds (Karmas), knowledge gained from one's actions, and the merit earned from one's actions.

A thorough understanding of "Samskara," which includes the majority of these elements, is the process of improving something while getting rid of its undesirable attributesEfforts in Ayurveda to implicate these essential principles starts well before the conception, during conception, antenatal period and after birth which helps to build the optimal levels of ID, the ego and superego, which play key role in development of the high quality physical, psychological, spiritual and social development of the child in the later part of the life. Post-birth, ongoing efforts are made to nurture the child by providing the utmost care during the first year of life, which is the infantile period characterized by maximum brain growth. Certain aspects of the infantile period like maintaining the immunity and practicing the proper feeding schedule will be guided by Jatakarma Samskara while Dolashayana Samskara helps to practice proper baby care. Suryodarshana Samskara highlight the importance of exposing the baby to sunlight to prevent early infancy deficiency disorders like Rickets, while Phalaprashana and Annaprashana Samsakara provide guideline about proper timely weaning methods. Upaveshana Samskar helps to identify the fine and gross motor deficits at the earliest while Nishkramana Samskara helps in checking the social adaptation like social smile. Karana vedhana Samskara helps to prevent the recurrent respiratory infections and Chuda karma Samskara helps in maintenance of the hygiene of the scalp and related infections. Such practices silently contribute to future all round development of the child and decrease the prevalence of infections and nutritional problems and carry on vital infantile period in a healthy way without much pharmacological interventions and thus helps in production of a healthy individual, healthy society and country.

Need of the Study: In the present scenario parents are deviated from basic principles of Ayurveda like Samakara which is time-tested science with global approach and neglected the scientific truth of proper infantile care hidden in the certain childhood Samskaras. As a matter of fact, babies are becoming victim of recurrent infections, improper weaning methods with confusion on initiating the external feeds, faulty infant raring methods, costly unwanted investigation and radiological exposure and unwanted medications. Meanwhile those who are aware of these principles were also practicing it in unscientific, adulterated way and with lot of miss understanding and misconceptions. Hence there is a real need to educate the parents regarding Samskaras, with regards to the right method, right age and scientific importance and health benefits to child. There is also need to prepare a protocol and standard operational methods with do and don'ts of each Samskara so that it could be practiced uniformly. By keeping above facts in mind, as a beginning of correction of this mega problem, a survey study has been planned to identify the current practice of Samskaras in the general public, parental mindset and understating about Samskaras. Survey also includes identification of method of observing Samskaras currently. Efforts will be done to know does parents are aware of the scientific understanding and medical benefits of the Samskaras and identifications of misconceptions regarding Samskaras. Mean time survey also includes identifications of problems encountered in infants, frequent medications, number of hospital visits in those who do not follow or those who follows in wrong way. However the main focus will be on identification will be on health issues like immunity, nutritional problems, hygienic problems and neurobehavioralproblems.

Aim and objectives of the study

Aim

- To understand the prevalence and practice of Ayurveda childhood Samskaras in the present day scenario
- Objectives:
- To evaluate the morbidity status in those who have not observed the childhood Samskaras.
- To evaluate the scientific understanding, misconceptions and methodology of practice of Childhood Samskaras in public (parents)
- Applicability of Ayurveda Childhood Samskaras in the present day scenario.

RESEARCH METHODOLOGY

Operational definitions

Knowledge - In this study refers to the understanding the idea regarding the Bala Samskara. **Attitude** - In this study it refers to the action intended or performed to put knowledge of Bala Samskara in practice. **Self-reported practice** - Act of Bala Samskara performed in any form is reported by Parents under this study.

Inclusion and exclusion criteria

Inclusion Criteria

- Parents with growing kids up to five years of age of either sex were included in the present survey study.
- All the religion / cast / community were included in the present survey study.
- Parents of all economic status were included in the present survey study.

Exclusion Criteria

- Parents with children over the age of five, regardless of gender, was excluded from the present survey study.
- Parents or care taker not willing to participate in the trial were excluded from the present survey study.

• Children born with congenital or chromosomal defects or who have suffering from chronic illnesses since birth were excluded from the present survey study.

Hypothesis and Assumptions

Hypothesis

• There is no significant role of Childhood Samskaras in prevention of common infantile problems with special reference to infantile infections, nutritional and weaning disorders.

Assumptions

- The Parents may be having some knowledge about Bala Samskaras.
- The Parents may be showing their positive attitude towards Bala Samskaras.
- The Parents may be practicing some act of Bala Samskaras

Research design

Population, Samples and Sampling technique: The study population consists of 500 children's parents nearby the NIA, Hospital Jaipur. A Nonprobability purposive sampling method was adopted for the present study. In this study, children up to 5 of year of age were selected according to inclusion criteria, followed by preparation of a questionnaire format of Samskaras that are performed up to 1 year of age was given to the parents / care giver. After filling the questionnaire format, data was collected and statically analysed. Study was carried out on these children after taking due consent from their parents / care giver

Institutional and Ethical Permission: A permission for the present study was obtained from the concerned authorities. The researcher has oriented parents by informing the purpose of the study and after obtaining their consent parents were included in the study group. Confidentiality and ethics were maintained during data collection. Institutional ethics committee clearance No. - IEC/ACA/2021/02-34

Patient information and Consent / Assent Form: Before commencing any trial-related activities, I provided the parent with both verbal and written information in a comprehensible format. It was essential to ensure that the participant was thoroughly informed about the trial's objectives, procedures, potential discomforts, and expected advantages. I emphasized that participation was entirely voluntary. To proceed with the study, a witnessed informed consent/assent, signed voluntarily, was obtained from the participant, parent(s), or guardian(s).

METHODOLOGY

• Study Design: A KAP Survey study (Descriptive Cross Sectional Study)

• Study Period: 6 Months

• Mode of study: Questionnaire format

Study area: Area nearby the National Institute of Ayurveda, Jaipur

• Age group: Upto 5 years of age of either sex

• Sample size: 500

Collection and Processing of Data

Development and description of the questionnaire regarding awareness of Bala-Samskaras: A descriptive survey method was adopted for data collection in the present study and structured questionnaire was prepared to extract information on Knowledge, Attitude and Practices about Bala Samskara. The Questionnaire was developed in 3 parts

Part A – Deals with the demographic data of the children upto 5 years of age.

Part B – Deals with the assessment of knowledge on Bala Samskara.

Part C – Deals with Attitude and practice regarding Bala Samskara.

Rapid evaluation questionnaire format: For children under age five, information was collected in rapid evaluation format, this format was used for assessment of general health status of child and anthropometric examination e.g. height, weight, head circumference, mid arm circumference, chest circumference. Vaccination card record for screening for vaccination, breast feeding age, birth order of children, bowel habit, and to know the morbid condition of child. It also included different type of questions regarding awareness in general public about each Samskara.

Anthropometry: We employed a digital scale to assess the children's weight and height. Furthermore, we measured and documented the head circumference, mid-arm circumference, and chest circumference of the children using a plastic tape, all of which were recorded on the provided Proforma. Socioeconomic status estimated according to Kuppuswamy socio-economic scale. Parents were asked for the incidences of morbidity features like history of recurrent infections (6-10 episodes per year), history of allergy or any skin manifestation (persistent for more than 15 days) and nutritional disorders (underweight and overweight

children) till date. Children also examined for any neurobehavioral disorder like ASD, ADHD or any learning disability disorders. Pamphlets were distributed to each family to put knowledge of Bala Samskara in practice.

Analysis of the Data: All study related information was accurately recorded, thoughtfully managed, and meticulously stored in order to ensure precise interpretation and verification. The observations made during the study were subjected to statistical analysis, and the findings were assessed using statistical methods, specifically the Chi-square test and p-value. The data were analysed statiscally using GraphPad InStat 3.1 programme. CTRI Registration Before commencing the survey, the study was submitted for registration in CTRI and assigned a reference number REF/2022/03/052931 and in April 2022, the trial was registered to CTRI with Registration No. CTRI/2022/04/042020.

RESULTS

Effect of Samskaras in Maintaining the Health of Baby

Table No.1. Showing effect of each Samskara in maintain the health of the baby

Done or not done	Healthy	Unhealthy	Chi-square value	P-value	Result
Done (n-228)	188	40	19.01		Sig
Not done (n-272)	177	95		< 0.0001	
	356	132	0.02495	0.8745	
Not done (n-12)	09	03			NS
	124	1.42	1.010	0.2120	1 270
			1.018	0.3130	NS
Not done (n-323)	231	92			
Done (n-110)	92	18	8 095	0.004	Sig
			0.075	0.004	J Sig
1 : : : : : : : : : : : : : : : : : : :	1 -75	1 2 2 7			
Done (n-87)	78	09	14.42	0.0001	Sig
Not done (n-413)	287	126			
			1		_
			15.74	< 0.0001	Sig
Not done (n-331)	223	108			
Done (n-462)	352	110	31 39	<0.0001	Sig
Not done (n-38)	13	25	31.37	10.0001	3.5
	•		•		
Done (n-64)	53	11	3.585	0.0583	NS
Not done (n-436)	312	124			
			1		
			11.14	0.0008	Sig
Not done (n-276)	185	91			
Done (n-427)	348	79	107.2	<0.0001	Sig
Not done (n-73)	17	56	107.2	×0.0001	Sig
	Done (n-228)	Done (n-228) 188 Not done (n-272) 177 Done (n-488) 356 Not done (n-12) 09 Done (n-177) 134 Not done (n-323) 231 Done (n-110) 92 Not done (n-390) 273 Done (n-87) 78 Not done (n-413) 287 Done (n-169) 142 Not done (n-331) 223 Done (n-462) 352 Not done (n-38) 13 Done (n-64) 53 Not done (n-246) 312 Done (n-224) 180 Not done (n-276) 185 Done (n-427) 348	Done (n-228) 188 40 Not done (n-272) 177 95 Done (n-488) 356 132 Not done (n-12) 09 03 Done (n-177) 134 43 Not done (n-323) 231 92 Done (n-110) 92 18 Not done (n-390) 273 117 Done (n-87) 78 09 Not done (n-413) 287 126 Done (n-169) 142 27 Not done (n-331) 223 108 Done (n-462) 352 110 Not done (n-38) 13 25 Done (n-64) 53 11 Not done (n-246) 312 124 Done (n-224) 180 44 Not done (n-276) 185 91 Done (n-427) 348 79	Done (n-228) 188 40 19.01 Not done (n-272) 177 95 Done (n-488) 356 132 0.02495 Not done (n-12) 09 03 Done (n-177) 134 43 1.018 Not done (n-323) 231 92 Done (n-110) 92 18 8.095 Not done (n-390) 273 117 Done (n-87) 78 09 14.42 Not done (n-413) 287 126 Done (n-169) 142 27 15.74 Not done (n-331) 223 108 108 Done (n-462) 352 110 31.39 Not done (n-38) 13 25 110 3.585 Not done (n-436) 312 124 11.14 Done (n-224) 180 44 11.14 Not done (n-276) 185 91	Done (n-228) 188 40 19.01 Not done (n-272) 177 95 Done (n-488) 356 132 0.02495 0.8745 Not done (n-12) 09 03 0.3130 Done (n-177) 134 43 1.018 0.3130 Not done (n-323) 231 92 18 8.095 0.004 Not done (n-110) 92 18 8.095 0.004 Not done (n-390) 273 117 0.0001 Done (n-87) 78 09 14.42 0.0001 Not done (n-413) 287 126 15.74 <0.0001

From above Table No. 1, we can observe that in the present survey study, Jatakarma Samskara, Nishakramana Samskara, Phalaprashana Samskara, Annprashana Samskara, Karnavedhana Samskara and Chudakarma Samskara had significant association between these Samskara and health status of children. Meanwhile Namakarana Samskara, Dolashayana Samskara, Suryodarshana Samskara, and Upaveshana Samskara had no significant association with health status of children.

Effect of Samskaras in reducing incidences of specific disorders

Jatakarma Samkara

Table No. 2. Showing effect of JatakarmaSamskara in reducing incidences of specific disorders

			Done (n-228)	Not Done (n-272)	Chi-Square Value	P-Value	Result
	Gross motor	Delayed	16	22	0.2025	0.65277	NS
	Gross motor	Achieved	212	250	0.2023	0.03277	No
	Fine motor	Delayed	09	13	0.2041	0.6514	NS
Davidammantal milastanas	rine motor	Achieved	219	259	0.2041	0.0314	No
Developmental milestones	Social & Adaptive	Delayed	11	14	0.02716	0.8691	NS
	Social & Adaptive	Achieved	217	258	0.02710	0.0091	143
	Language	Delayed	07	10	0.03339	0.8550	NS
		Achieved	221	262	0.03339		11/3
Childhood infection		Present	28	56	6.124	0.0133	C:a
Childhood infection		Absent	200	216	0.124	0.0133	Sig
Allowais on any strin monifes	tation	Present	20	32	1.192	0.2749	NS
Allergic or any skin manifestation Abs		Absent	208	240	1.192	0.2/49	INO
Nutritional disorders		Present	51	73	1.329	0.2400	NIC
inutritional disorders		Absent	177	199	1.329	0.2490	NS

From above Table No.2, we can observe that in the present survey study *Jatakarma Samskara* had significant association with history of recurrent childhood infection and no significant association observed with developmental milestones, allergic or any skin manifestation and nutritional disorders.

NamakaranaSamskara

Table No. 3. Showing effect of NamakaranaSamskara in reducing incidences of specific disorders

			Done (n-488)	Not Done (n-12)	Chi-Square Value	P-Value	Result
	Cuasa matan	Delayed	33	05	20.32	< 0.0001	C:~
	Gross motor	Achieved	455	07	20.32	<0.0001	Sig
Developmental milestones	Fine motor	Delayed	19	03	12.40	< 0.0004	Sig
		Achieved	469	09	12.40	<0.0004	Sig
	Social & Adaptive	Delayed	21	04	20.78	<0.0001	Sig
		Achieved	467	08	20.76	<0.0001	Sig
	Language	Delayed	15	02	6.589	0.0103	C:~
		Achieved	473	10	0.369		Sig
Childhood infection		Present	82	02	0.0001564	0.9900	NS
Childhood infection		Absent	406	10	0.0001304	0.9900	INS
Allergic or any skin manifes	tation.	Present	50	02	0.5182	0.4716	NS
Allergic of any skin manifes	station	Absent	438	10	0.3162	0.4/10	IND
Nutritional disorders		Present	123	03	0.0020609	0.9871	NS
Nutritional disorders		Absent	365	09	0.0020009	0.98/1	INS

From above Table No.3, we can observe that in the present survey study, *Namakarana Samskara* had significant association with developmental milestones and no significant association observed with history of recurrent childhood infection, allergic or any skin manifestation and nutritional disorders.

DolashayanaSamskara

Table No. 4. Showing effect of *DolashayanaSamskara* in reducing incidences of specific disorders

			Done (n-177)	Not Done (n-323)	Chi-Square Value	P-Value	Result
	C	Delayed	11	27	0.7400	0.2960	NC
	Gross motor	Achieved	166	296	0.7488	0.3869	NS
	Fine motor	Delayed	06	16	0.6647	0.4149	NS
Developmental	rine motor	Achieved	171	307	0.0047	0.4149	INS
milestones	Social & Adaptive	Delayed	07	18	0.6302	0.4273	NS
	Social & Adaptive	Achieved	170	305	0.0302	0.4273	INS
	Longuage	Delayed	05	12	0.2760	0.5994	NS
	Language	Achieved	172	311	0.2760		
Childhood infectio	•	Present	22	62	3.745	0.0530	NS
Cilitatiood ilitectio	ш	Absent	155	261	3.743	0.0550	IND
Allergic or any skir	m manifactation	Present	17	35	0.1861	0.6662	NS
Aneigic of any ski	II IIIaiii168tau0II	Absent	160	288	0.1001	0.0002	11/2
Nutritional disords	weg.	Present	40	84	0.7118	0.3988	NS
Nutritional disorders		Absent	137	239	0./110	0.3708	11/2

From above Table No. 4, we can observe that in the present survey study, *Dolashayana Samskara* had no significant association with developmental milestones, recurrent childhood infection, allergic or any skin manifestation and nutritional disorders.

Suryodarshana Samskara

Table No. 5. Showing effect of SuryodarshanaSamskara in reducing incidences of specific disorders

		•	Done (n-110)	Not Done (n-390)	Chi-Square Value	P-Value	Result
	C	Delayed	04	34	3.155	0.0757	NS
	Gross motor	Achieved	106	356	3.133	0.0757	INS
Developmental milestones	Fine motor	Delayed	04	18	0.1955	0.6584	NS
		Achieved	106	372	0.1933	0.0364	INS
	Social & Adaptive	Delayed	05	20	0.06134	0.8044	NS
		Achieved	105	370	0.00134		110
	Language	Delayed	03	14	0.1943	0.6593	NS
		Achieved	107	376	0.1943		INS.
Childhood infection		Present	08	76	9.158	0.0025	C:~
Childhood infection		Absent	102	314	9.136	0.0023	Sig
Allowaia an any alsin manifas	station	Present	06	46	3.701	0.0544	NS
Allergic or any skin manifes	station	Absent	104	344	3.701	0.0344	INS
Nutritional disorders		Present	15	109	9.424	0.0021	Sia
Nutritional disorders		Absent	95	281	7. 1 4	0.0021	Sig

From above Table No. 5, we can observe that in the present survey study, Suryodarshana Samskara had significant association with recurrent childhood infection and nutritional disorders no significant association observed with developmental milestones, and allergic or any skin manifestation.

Nishakramana Samskara

Table No. 6. Showing effect of NishakramanaSamskara in reducing incidences of specific disorders

				Done (n-87)	Not Done (n-413)	Chi-Square Value	P-Value	Result
	Cmaga ma	.+	Delayed	05	33	0.5149	0.4730	NS
	Gross inc	Gross motor		82	380	0.3149	0.4730	100
Developmental milestones	Fine mot	0#	Delayed	03	19	0.2268	0.6339	NS
	Time mor	OI .	Achieved	84	394	0.2208	0.0339	1/10
	Casial P	A domtivo	Delayed	04	21	0.03589	0.8497	NS
	Social & Adaptive		Achieved	83	392	0.03389	0.8497	110
	Language		Delayed	02	15	0.3888	0.5329	NS
			Achieved	85	398	0.3000		INO
Childhood infection		Present		10	74	2.121	0.1453	NIC
Childhood infection		Absent		77	339	2.121	0.1455	NS
A 11 i 1 - i	4-4:	Present		07	45	0.6264	0.4207	NIC
Allergic or any skin manifes	Allergic or any skin manifestation			80	368	0.6264	0.4287	NS
Nutritional disorders		Present		18	106	0.9542	0.3287	NS
inutritional disorders		Absent		69	307	0.9342	0.3287	1/1/2

From above Table No. 6, we can observe that in the present survey study, *NishakramanaSamskara* had no significant association with developmental milestones, history of recurrent childhood infection, allergic or any skin manifestation and nutritional disorders.

Phalaprashana Samskara

Table No. 7. Showing effect of PhalaprashanaSamskara in reducing incidences of specific disorders

			Done (n-169)	Not Done (n-331)	Chi-Square Value	P-Value	Result
	Gross motor	Delayed	10	28	1.030	0.3103	NS
	Gross motor	Achieved	159	303	1.030	0.5105	No
Developmental milestones Fine motor Social & Adaptive	Eine meter	Delayed	07	15	0.04039	0.8407	NS
	Achieved	162	316	0.04039	0.8407	No	
	Casial & Adaptiva	Delayed	08	17	0.03811	0.8452	NS
	Social & Adaptive	Achieved	161	314	0.03811	0.8432	INS
	T	Delayed	05	12	0.1515	0.6972	NS
	Language	Achieved	164	319			N2
Childhood infection		Present	21	63	3.494	0.0616	NS
Cilianood infection	11	Absent	148	268	3.494	0.0016	No
Allowaia an any alrie	n manifactation	Present	12	40	2.982	0.0842	NS
Allergic of any skii	Allergic or any skin manifestation		157	291	2.962	0.0642	No
Nutritional diagrada	#0	Present	20	104	23.01	< 0.0001	C: a
Nutritional disorde	Nutritional disorders		149	227	23.01	<0.0001	Sig

From above Table No. 7, we can observe that in the present survey study, *PhalaprashanaSamskara* had no significant association with developmental milestones, recurrent childhood infection, and allergic or any skin manifestation and significant association observed with nutritional disorders.

Annaprashana Samskara

Table No. 8. Showing effect of AnnaprashanaSamskara in reducing incidences of specific disorders

			Done (n-462)	Not Done (n-38)	Chi-Square Value	P-Value	Result
	Gross motor	Delayed	30	08	10.60	0.0011	Sig
	Gross motor	Achieved	432	30	10.00	0.0011	Sig
Developmental milestones	Fine motor	Delayed	19	03	1.194	0.2745	NS
	rine motor	Achieved	443	35	1.194	0.2743	NS
	Social & Adaptive	Delayed	22	03	0.7255	0.3943	NS
		Achieved	440	35	0.7233	0.3943	IND
	Language	Delayed	15	02	0.4347	0.5097	NS
		Achieved	447	36	0.4347		No
Childhood infection		Present	76	08	0.5321	0.465	NS
Cilidiood illiection		Absent	386	30	0.5521	0.403	110
Allowaia an any alrin manifas	tation.	Present	46	06	1.282	0.2575	NS
Allergic or any skin manifestation		Absent	416	32	1.202	0.23/3	1/10
Nutritional disardans		Present	94	30	64.65	-0.0001	C:a
Nutritional disorders		Absent	368	08	64.65	< 0.0001	Sig

From above Table No.8, we can observe that in the present survey study, *AnnaprashanaSamskara* had significant association with gross motor developmental milestones and nutritional disorders. Meanwhile no significant association observed with fine motor, social, adaptive and language milestones, recurrent childhood infection, and allergic or any skin manifestation.

Upaveshana Samskara

Table No. 9. Showing effect of Upaveshana Samskara in reducing incidences of specific disorders

			Done (n-64)	Not Done (n-436)	Chi-Square Value	P-Value	Result
	Gross motor	Delayed	04	34	0.1905	0.6625	NS
	Gross motor	Achieved	60	402	0.1903	0.0023	IND
Developmental milestones	Fine motor	Delayed	02	20	0.2836	0.5943	NS
		Achieved	62	416	0.2630	0.3943	IND
	Social & Adaptive	Delayed	03	22	0.01509	0.9022	NS
		Achieved	61	414	0.01309		IND
	Language	Delayed	02	15	0.01690	0.8966	NS
		Achieved	62	421	0.01090		IND
Childhood infection		Present	08	76	0.9709	0.3245	NIC
Childhood infection		Absent	56	360	0.9709	0.3243	NS
Allorgia or any skin manifor	station	Present	04	48	1.356	0.2441	NS
Allergic or any skin manifestation		Absent	60	388	1.330	0.2441	1113
Nutritional disorders		Present	11	113	2.281	0.1310	NS
Nutritional disorders		Absent	53	323	2.201	0.1310	IND

From above Table No. 9, we can observe that in the present survey study, *UpaveshanaSamskara* had no significant association with developmental milestones, history of recurrent childhood infection, allergic or any skin manifestation and nutritional disorders.

Karnavedhana Samskara

Table No. 10. Showing effect of KarnavedhanaSamskara in reducing incidences of specific disorders

			Done (n-224)	Not Done (n-276)	Chi-Square Value	P-Value	Result
	Cuasa matan	Delayed	14	24	1.053	0.3048	NS
	Gross motor	Achieved	210	252	1.033	0.3048	INS
Developmental milestones	Fine motor	Delayed	08	14	0.6623	0.4157	NS
	Fine motor	Achieved	216	262	0.0023	0.4137	113
	Social & Adaptive	Delayed	10	15	0.2452	0.6205	NS
		Achieved	214	261	0.2432		INS
	Language	Delayed	07	10	0.09344	0.7599	NS
		Achieved	217	266	0.09344		INS
Childhood infection		Present	14	70	32.31	< 0.0001	Ci.~
Cilidhood infection		Absent	210	206	32.31	<0.0001	Sig
Allowaia an any alrin manifas	station	Present	08	44	20.31	< 0.0001	Ci.~
Allergic or any skin manifestation Allergic or any skin manifestation		Absent	216	232	20.31	~0.0001	Sig
Nutritional disorders		Present	22	102	48.82	< 0.0001	Sia
Nutritional disorders		Absent	202	174	40.02	<0.0001	Sig

From above Table No. 10, we can observe that in the present survey study, *KarnavedhanaSamskara* had significant association with developmental milestones. Meanwhile there is no significant association observed with history of recurrent childhood infection, allergic or any skin manifestation and nutritional disorders.

Chudakarma Samskara

Table No. 11. Showing effect of ChudakarmaSamskara in reducing incidences of specific disorders

			Done (n-427)	Not Done (n-73)	Chi-Square Value	P-Value	Result	
	Gross motor	Delayed	32	06	0.04667	0.8290	NS	
	Gross motor	Achieved	395	67	0.04007	0.8290	IND	
	Fine motor	Delayed	18	04	0.2368	0.6265	NC	
Developmental milestones	rine motor	Achieved	409	69	0.2308	0.0203	NS	
	Social & Adaptive	Delayed	20	05	0.6155	0.4327	NS	
		Achieved	407	68	0.0155	0.4327	NS NS	
	T	Delayed	14	03	0.1310	0.7174	NS	
	Language	Achieved	413	70			INS	
Childhood infection		Present	58	26	21.65	<0.0001	G:-	
Childhood infection		Absent	369	47	21.03	<0.0001	Sig	
A 11 1-i		Present	25	27	(4.94	<0.0001	G:-	
Allergic or any skin	Allergic or any skin manifestation		402	46	64.84	<0.0001	Sig	
N-4-4:1-4:4		Present	104	20	0.3092	0.5792	NC	
Nutritional disorders	S	Absent	323	53	0.3092	0.5782	NS	

From above Table No.11, we can observe that in the present survey study, *ChudakarmaSamskara* had significant association with recurrent childhood infection, allergy or any skin manifestation and nutritional disorders. Meanwhile there is no significant association observed with developmental milestones.

Overall effect of Samskaras in common childhood problems

Table No. 12. Showing overall effect of <i>Samskaras</i> in maintaining of health of children	n
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No. of Samskaras done	Total no. of children	Healthy	Unhealthy	Chi-Square Value	P-Value	Result
0	34	08	26	94.34	<0.0001	Sig
1	45	16	29			
2	68	48	20			
3	142	113	29			
4	95	79	16			
5	62	53	09			
More than 5	54	48	06			
Total	500	365	135]		

From above Table No. 12, we can observe that in the present survey study, P value is less than 0.05. Hence it can be concluded that, there is significant association observed. The study indicates that Jatakarna Samskara performed by parents is linked to better child health, reducing infections and issues in subsequent years. Conversely, children without Jatakarna Samskara face various health problems impacting their quality of life. Namakarana Samskara shows no significant relation to specific disorders but indirectly influences personality development. Dolashayana Samskara, while not directly associated, leads to a higher percentage of healthy children. No significant correlation is found with Suryodarshana Samskara, possibly influenced by other factors, but a higher percentage of healthy children is noted. Nishakramana Samskara is significantly correlated with child health, monitoring developmental milestones and identifying behavioral changes. Phalaprashana Samskara shows a significant association, impacting nutritional fulfillment and infection prevention. Annaprashana significantly correlates with child health, directly impacting growth and development. Upaveshana Samskara lacks significant correlation with child health, possibly due to limited impact. Karnavedhana Samskara and Chudakarma Samskara both show significant correlations with child health, preventing various disorders and skin/hair infections, respectively.

DISCUSSION

The overall significant association found in present survey study after analysis suggests that parents who performed maximumpossible *Samskara* on their children were better able to sustain their children's health in subsequent years, resulting in fewer infections and fewer issues related to nutrition, neurobehavioral development, and personality disorders. Conversely, children for whom *Samskara*swere not performed experienced various health problems that significantly affected their quality of life. Therefore, the data in the Table underscores the significant benefits of performing this *Samskara* to support children's health.

Role of childhood Samskaras in prevention of infantile infections: The Samskaras, if performed accurately, can play a significant role in enhancing children's immunity. These Ayurvedic rituals, as described by the Acharyas, adopt a holistic approach and may offer immunological benefits alongside their ritualistic aspects. There is a need for thorough research into the effectiveness of these Samskaras in the contemporary era, drawing from the available literature. It is crucial to assess the impact of Samskaras and establish their scientific basis for the benefit of society. Bala Samskara rituals are not merely religious practices; they are designed to effectively prepare newborns for life outside the womb, promote healthy development, ensure adequate nutrition, prevent diseases, and boost immunity through early stimulation of immune cells. To achieve the societal goal of healthy, disease-free offspring with strong immunity, it is essential in the modern era to comprehend the scientific aspects and implications of these practices. This understanding is aligned with adhering to the National Immunization Schedule. Early childhood Samskaras plays a significant role in prevention of newborn and infantile infections hence helps in reducing neonatal and infantile mortality and morbidity status.

Role of Samskara in nutritional disorders: Childhood Samskaras plays a significant role in maintaining the nutrition of the child during infantile period. It also warns and advice time to time changes that mother has to adopt in infantile care especially related to feeding. Malnutrition related disorders are quite common in India and most of them are due to lack of awareness in feeding or faulty feeding methods. Malnutrition can also results in psychological changes in child and vulnerability to infection. When we thoroughly analyses the Samskaras explained in Ayurveda, it is quite surprising to know the extent of the importance given by Ayurveda regarding nutrition from day 1 to end of the infantile period,

Role of Samskaras in allergy and any skin manifestation: When we discuss the role of Samskaras in prevention or prior identification of allergic conditions of growing child, following points are evident. JatakarmaSamskara where the body is priorly sensitized against certain antigenic substances which are freely present in the environment may also include certain allergens. Sensitizing against these allergens may be helpful to prevent the severe allergic manifestations (Viruddha Abhisamsakara). DolashayanaSamskara also helps to prevent certain skin manifestation due to superficial skin infections which spread by contamination. NamakaranaSamskara although do not have any direct relationship with allergic/ hypersensitive skin

manifestations, it helps to identify certain skin allergy during first two weeks. In SuryodarshanaSamskara, effect of sunlight exposure has both effects skin damage and protection. Meanwhile in NishakramanaSamskara we get a real opportunity to test the immunity of child against environmental factors. To test the immunity of the child against external environment, dust, pollens, cold, air etc. this Samskara provide good opportunity and baby may develop allergic manifestation of respiratory and skin. During Annaprashana and Phalaprashana one can identify certain food allergy and intolerance. It is clearly mentioned that Annaprashana food materials should not be Asatmya. Even while explaining Lehana to child also special care has been given to avoid the Asatmya or hypersensitive materials. UpaveshanaSamskara is related with stimulation of locomootor developmental milestones of the baby. When baby is moving it is readily exposed to environmental hazards and certain skin allergies and infections are quite common. Further KarnavedhanaSamskara performed also helpful assess the immunological, lingual milestones. Ear piercing helpful in preventing infection and allergic reactions as mentioned earlier. Chudakarma Samskara (Shaving of head) can be beneficial in preventing specific skin issues such as cradle cap. If left untreated, cradle cap can develop into seborrheic dermatitis due to the accumulation of sweat in the scalp area, which can block sweat glands.

Role of Samskaras in neurobehavioral disorders: Samskaras offer multiple benefits, including early identification of neurobehavioral disorders. Detecting these disorders in the first two years of life is crucial due to potential neuroplasticity, with the first year being a critical period for brain growth. Jatakarma Samskara initiates the evaluation for neurobehavioral disorders, considering factors like baby activity, reflexes, and emotional attachment. Failure in mother-baby bonding, abnormal reflexes, and feeding issues should raise suspicion of neurobehavioral disorders. Attitudes during breastfeeding can also provide clues. Rejection of breast milk or abnormal feeding behaviour may indicate potential issues, and exaggerated newborn reflexes may be linked to early ADHD and Autism development. Various traditional Samskaras provide valuable opportunities to assess a baby's development and detect potential neurobehavioral disorders. Dolashayana Samskara fosters maternal bonding and enables the observation of neonatal behaviour, with any deviations serving as potential indicators of neurobehavioral issues. Namakarana Samskara involves the observation of the baby's responses to sounds, touch, and words, offering early detection possibilities for neurobehavioral disorders. This ceremony can also serve as a platform for testing auditory function. Survodarshana Samskara provides a comprehensive assessment of developmental milestones, encompassing motor skills, social interaction, and cognitive development. Delayed cognition, social skills, and language may suggest neurobehavioral problems, which often involve cognitive, language, and social development. Lastly, Nishakramana Samskara proves to be an ideal means of evaluating the baby's socio-behavioural patterns. Through the observation of reactions to voices, interactions with strangers, and responses in various social situations, atypical behaviour can be identified, potentially signalling disorders like autism or ADHD. Both Annaprashana and Phalaprashana are useful to detect certain neurobehavioral problems. Attitude, response. Acceptance of food by growing baby is helpful to detect certain developmental neurobehavioral problems. Feeding time is more difficult at time in ADHD and autism because autistic child can't appreciate smell and taste of the food. Similarly the UpaveshanaSamskara play vital role in early assessment of motor disability and neurobehavioral disorders. The playing articles, interest towards playing articles, method of play, enjoying play are certain important points to be considered. Similarly during KarnavedhanaSamskara one can test for reaction of baby on pain while piercing who cries with monosyllables or bisyllables words. During ceremony of Chudakarma Samskara assessment of head growth as head circumference increase maximally in the first year of life indicating maximum brain growth. So shaving the head will provide opportunity to assess the growth, shape, size of skull.

Role of Samskaras in personality development: A person's name plays a significant role in shaping their personality in accordance with the name's meaning. Names provide personal identity to a baby, which holds great importance in their future life. Identifying a neonate by a specific name is crucial for personal identification, maintaining medical records, and preventing mixups in neonatal nurseries. Shakespeare expressed the belief that a name is simply a label, as exemplified in his well-known statement from "Romeo and Juliet": "A rose by any other name would smell as sweet." However, a separate study contested this perspective, asserting that there is evidence suggesting that a rose with a different name might not have as pleasant a fragrance. Samskaras like Suryodaya darshana, Chandra darshaan etc. will also have positive impact on psychological development. During Nishakramana Samskara there is also emergence of a sense of self, being separate from the mother which is identified as first stage of personality developments. Further when child develops more autonomy he is less dependent on parent for certain activities like walking, moving around, talking few words, sentences, feel proud of new skill attained and practically use this skill. Ayurveda says such behaviour is absolutely physiological and attempt of child to attain autonomy, skill and determinations, when child is not eating, not sleeping, or not following the advice it should not frightened by calling Bhuta, Preta, Putana graham, pishacha and forcefully subsiding its natural instincts which result in doubt and shameness.

CONCLUSION

The survey study yielded significant conclusions. It established a notable association between childhood *Samskaras* and health problems in children. The findings indicate substantial benefits, including enhanced immunity, prevention of nutritional disorders, allergic reactions, hypersensitivity, early detection of neurobehavioral issues, and contributions to personality development, particularly when *Samskaras* were performed with an understanding of their scientific importance. In summary, parents who diligently and timely performed a maximum number of childhood *Samskaras* on their children were better positioned to safeguard their health in subsequent years, experiencing fewer infections, nutritional challenges, and neurobehavioral and personality disorders. Conversely, children who underwent few or no *Samskaras*, lacking awareness of their significance, proper methods, and timing, faced increased susceptibility to various health issues, significantly diminishing their overall quality of life.

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