

## ADVANCEMENT IN AYURVEDIC PAEDIATRICS BY VIRTUE OF MODERN TECHNOLOGY

Dr. Shailendra Kumar<sup>1\*</sup> and Dr. Minakshi Chaudhary<sup>2</sup>

<sup>1</sup>P.G. Scholar and <sup>2</sup>Sr. Lecturer

Dept. of Kaumarbhritya, Deptt. of Kaumarbhritya Rajeev Gandhi Govt. P.G. Ayurvedic Medical College Paprola, Distt. Kangra, Himachal Pradesh, India. Pin.176115.

Article Received on  
01 August 2019,

Revised on 20 August 2019,  
Accepted on 10 Sept. 2019,

DOI: 10.20959/wjpr201911-15855

### \*Corresponding Author

**Dr. Shailendra Kumar**

P.G. Scholar, Dept. of  
Kaumarbhritya, Deptt. of  
Kaumarbhritya Rajeev  
Gandhi Govt. P.G.  
Ayurvedic Medical College  
Paprola, Distt. Kangra,  
Himachal Pradesh, India.  
Pin.176115.

### ABSTRACT

Ayurvedic texts are full of scientific knowledge related to *Kaumarbhritya*. The details description is available in our ancient literature regarding birth, during birth, after birth, breast feeding and later on many of disease of children along with sanitation. Some of the important things were not described under *Kaumarbhritya*; later on new research works carried out for establishment of advanced Ayurvedic paediatrics. It's well tried to collect the knowledge of paediatric-usefull as well applicable topics under advanced Ayurvedic paediatrics by so many recognized Ayurvedic paediatricians. Technology also plays a very vital role in new achievements with contrast to easily understandable manners. I would like to present such information all together along with new challenges and needs. It's a concept to know about Ayurvedic paediatrics that what we have? What we loosing? And what we can improve? with the help of technology.

**KEYWORDS:** Ancient *Kaumarbhritya*, technology, needs & challenges.

### INTRODUCTION

The base of human knowledge and record of human experience is the literature. Literature is mother for future research, learning i.e. advancement. Ayurveda have huge amount of literature but some important texts are either missing or incompletely available. The partially available ancient Ayurvedic texts are at the stage of extinction. it's due to lack of protection or maintenance or improper interpretations and uses. A very important part of *Ayurveda* i.e. *Kaumarbhritya* deals subjects prior to conception up to adolescence.<sup>#</sup> Ayurvedic paediatrics is

also in such a condition but on the same time many of recognized paediatricians played a very vital role to promote Ayurvedic paediatrics with their own will and good use of modern technology. We are looking to create a bridge between ancient Ayurvedic paediatrics and public. It will definitely help for easy transfer of knowledge in very easy manner. It must be remembered that soul of the ancient Ayurveda should not be changed when applying any technology. We applied technology from the teaching, learning procedures, drugs forms, drug doses, investigation up to the treatment of newly described diseases. Its effect can be seen today in Ayurvedic hospitals and clinics. Number of faithful patients has been increased. It's time not to hesitate in opting technology for the well being of humanity and also to achieve new height in Ayurvedic paediatrics.

### NEED OF ADVANCED PAEDIATRICS

Children are also considered as the most vulnerable class of society as they are unable to express themselves, dependent on caretaker. Thus children need a special attention and nursing. As children are in a rapid continuous process of growth and development physically as well as intellectually the diseases occurring in children, their manifestations are far more different than that of adults. The drug dose formats, modes of drug delivery are important aspects of therapeutics in children. Consequently there arises a need to understand applied therapeutic principles to obey for approaching a sick child. Without any doubt ancient Ayurvedic principles used in *Kaumarbhritya* are very scientific but today environment, food, life style is not similar as that of ancient time i.e. ancient examination room, clothing, sanitation, delivery room, bathing, drug doses, drug format and frequency all are not getting fit in current scenario. Parents are more conscious toward their child health and also for handling techniques. They also have not so much time due to very compact life style. So many newer diseases are coming out in front of Ayurvedic practitioners, some diseases are due to overuse of antibiotics i.e. antibiotic resistance cases that's why we must improve our skills and way to interact with attendants as well as patients. We also need to improve ourselves to revalidate *Kaumarbhritya*. We have not complete Kashyapa *Samhita* so it's also a requirement to complete our basic texts.

Many fields paediatrics needs advancement like Education i.e. teaching and learning, *Navajaata shishu-paricharaya* (Newborn care), *Shishu-paricharaya* (Child care), *Aushadhi swaroopa*, *maatra* (drug format and drug doses), *Matrastanya* and related diseases along with treatments, *Lehana karma* w.s.r. *Suvarna Prashana* (vaccination), *Raksha karma* i.e.

well established *kaumaragara*, *sutikagara* *Panchakarma* procedures, *Rog-rogi pariksha*(examination for disease and sick child), *Nidana* (Diagnosis i.e. diagnostic tools and techniques), *Chikitsa*, *Sanskars* and *Balgrihas* etc.

### Education

Our ancient *Kaumarbhritya* was in the form of *shlokas* in *Sanskrita* language that was transferred from *Guru* to *Shishya* by oral lectures.<sup>[17,18]</sup> Later on, with the discovery of paper and writing skills knowledge has been documented in the form of books. At current time internet technology further improved documentation in the form of e-books, e-library. Methods of teaching also changed from oral lecture to e-lecture and e-CME. Digital Class rooms, Online teaching & tele-conferencing etc. and Development of Comprehensive website are also advanced steps to improve Ayurvedic paediatrics. Propagation of new form of paediatrics through books newspapers, magazines, journal publications, radio stations, TV channels etc. Digitalization of Ayurvedic literature & Manuscripts has been carried out also.

### *Kaumaragara*

In Ayurvedic texts two terms '*Nirvata*' and '*Pravata*' are used as properties of *kaumaragara*, which has been standardized in the form of NURSERY, NICU, PICU etc.

### *Navajaata Shishu-Paricharaya*

Ayurvedic neonatology has been explained by various *Acharyas* in very scientific manner in the form of *shlokas*. Resuscitation described as *Prana Pratyagamana* and *Garbhodaka Vamana*.in various texts. *Krishna kapalika shurpa*<sup>[3,6]</sup> has been replaced by different types of ventilation techniques, at the same way stimulation to baby now not allowed with use of either hot and cold water<sup>[2]</sup> or rubbing of stones<sup>[1,5]</sup> or whispering at ears.<sup>[7]</sup> *Acharya Charaka* and *Acharya Vagbhatta* also described the action plan when baby aspirates amniotic fluid. In the newborn it is very difficult task to clear the gastric contents by vomiting.<sup>[8,9]</sup> Newer technique has been adopted to clear gastric contents by use of mucous suckers initially but now foot operated and automatic suction machine are available and are used at the time of resuscitation & as per requirements.

Ancient Ayurvedic texts are full of routine care of newborn i.e. *Naal Chedana*, *Pichudharana*, *Ulva-Parimarjana*, *Mukha-vishodhana*, *Snana*, *Jaatkarma*, *Raksha-karma*, and *Suvarnaprashana*. Old concept of cutting and tying umbilical cord with sutra is being replacing by using cord clamps. We also need to use *Kusthatailum* to prevent umbilical

sepsis. *Pichu* i.e. Oil soaked cotton is placed over anterior fontanel of scalp. *Ulvaparimarjana* i.e. cleaning of vernix caseosa is not applicable in present pediatric practice because its aim is fulfilled by other simple means of tactile stimulus for breathing and vernix itself prevents hypothermia. Mouth should be cleared with a mixture of *Saindhava lavana* (rock salt) and *Ghrita*. Different types of decoctions are described in ancient texts for bathing purpose of newborn. Various types neonatal feeding is being described in most of the ayurvedic texts. It's our need to improve Ayurvedic pediatrics by using *Kustha Tailum* as antiseptic, *pichu dharana* and initial feeding of neonate along after early initiation of breast feeding as described in ancient texts.

### ***Shishu-paricharaya*<sup>[22]</sup>**

*Acharya Charaka, Kashyapa, Vagbhatta* described head to toe examination to determine the expected age of that particular child or diseased /healthy child.

1. *Ayusman/dirghayu*
2. *Alpayu*

We need technology along with extensive research work to prove our textual *Shishu - paricharya*. *Acharya kashyapa* also gave clear diagnostic examination of diseased child in *Vedanadhyaya*.

### ***Matrastanaya***

Suitable milk for child is said to be *Jeevana* by *Acharya Charaka*.<sup>[23]</sup> Our texts have very beautiful and scientific description of *Dhatri*, *Matrastanya*, alternatives of *Matrastanya* and vitiation of *Matrastanya* with disease produced by feeding of vitiated mother milk. We just see another good concept of human milk banking to provide mother milk to precious child as per requirement when mother is not available. We need technology to validate mother milk alternatives like Cow milk, Goat milk, milk prepared with *Harsva panchmoola*<sup>[10]</sup> and mother milk prepared with *Rudraksha*<sup>[24]</sup> etc. We need advance investigations according to Ayurvedic principles to prove the disease produced by feeding of *dushit stanya* by baby.<sup>[11]</sup>

### ***Aushadhi swaroopa, maatra***

Drug doses starts with *Anguliparvadvaya* up to *Adraamlaka*<sup>[21]</sup>, in the form of *Swards, Kalka, Shirt, Sheet, Faint, Azalea, Yucca, Mandan, Pea, Vile* etc in Ayurvedic texts. Now drugs are more palatable, feasible, cost effective, effective dose has been decreased. Drugs are

available in the drops, syrup, suspension forms. We need to develop long stable form of *Yusha, Manda, Peya, Vilepis* etc. We also need to use drug doses in standardized forms.<sup>[12]</sup>

### ***Lehana karma***<sup>[15]</sup>

In *vrihtrayi* and *Kashyapa Samhita*, so many *lehana* formulations are described but not in easily applicable forms, we need technology to gain benefit of them in easily applicable, acceptable and validated forms. Good health and illness is depends on *lehanakarma*.<sup>[15]</sup> Vaccination is not holistic approach to the baby while Ayurvedic *Lehan karma* is holistic approach.

### ***Dhoopana karma & Raksha karma***<sup>[14]</sup>

Forty *dhoop yogas* described for *Balrogas* etc which were meant for bacteria-virus free surrounding of the baby as mention in text “*रक्षोभूतपिशाचेभ्यो ना भयं वा भविष्यति ।*” i.e. *Kaumar dhoop*, *Nandaka dhoop*, *Shishuka dhoop*, *Uttama dhoop*. We must undergo standardization of *Dhoopan karma* as *Fumigator*; similarly we need to prepare *dhoopas* for routine use.

### ***Shaishaviya Panchkarma***

*Panchakarma* is very important part of *Ayurveda* as well as *Kaumarbhritya* too. Basic principle regarding *Shaishaviya Panchkarma* should be remembered.<sup>[20]</sup> Many procedures are applied to make healthy future of children as *Hasta-sweda*, *Shalisatika pinda swedhana*, *Anuvasan & Matra vasti*, *Ksheer vasti*, *Aasthapana vasti*, *Virechan with erannd tail (Ka)*. Other procedures are *Mridu vaman*, *Shirodhara*, *Snehana*, *Pind sweda*, *Pratimarsh nasya*, *Shirodhara* etc. *Sneha vasti matra*<sup>[16]</sup> was described by acharya *kashyapa* according to age and disease intensity as *Karsha* to *Prasarta* but now it is given in milliliters forms (2.5 ml to 160 ml according to type of *vasti*).

### ***Bal-grihas***<sup>[19]</sup>

Various *Bal-Grahas* has been described by different Acharyas. Each *Bal-Grahas* has so many symptoms just like syndromes but it is not of any importance rather than textual study until it's not applied in diagnosis and treatment. We need technology to validate *Bala-Grahas* and treatment according to Ayurvedic principles of *Bal-rogas*. It is very big challenge to do so.

## SANSKARS

The assessment of normal growth and development is very useful for making a clinical decision for child health. Many Reflexes of the baby may be checked by the use of various Sanskars. Sanskars may be useful in checking milestone achievements at proper time too. We need to develop such protocol; so that use of all sanskars in regular practices can be adopted. Technology may play very important role in making sanskars public friendly. So it's our need to use this bridge of technology between *Kaumarbhritya* and public.

## CURRENT CHALLENGES IN ADVANCED PAEDIATRICS

To prove basic principles like *Panchmahabhootas*, *Dhatus*, *Tridoshas*, *Agni*, *Ojas*, *Strotas*, *Aama*, *Samprapti*, *Shatkriyakaala*, *Prakriti* with the help of technology to develop Ayurvedic parameters. Newer pediatric disease diagnosis on the basis of Ayurvedic principle (रोगस्तु दोषवैषम्यं) and validated with newer accepted Ayurvedic parameters.

## CONCLUSION

Any medical science require two things first is Knowledge for diagnosis, medicinal combination, treatment principles, etc and second are Techniques for medicine preparation /administration, procedures of medical / surgical. Technology is adopted or generated according to the need for diagnosis, management, procedure, etc. foundation of *Kaumarbhritya* are Ayurvedic texts and technology is magical stick. We have to grown up Ayurvedic *Kaumarbhritya* with the help of this stick.

## REFERENCES

1. *Kaumarbhrityamastanam tantranamadhyamuchayate.* (Kashyapa Viman 1; Page 61).
2. *Ashmanao Sangghatanam Karnayomule.* (Charaka sharira 8; 42).
3. *Sheetodakenusnodaken Va Mukhparisheka Tatha Sa Klesh Vihitaan Pranana Punarlabheta.* (Charaka sharira 8; 42).
4. *Krishnakapalika shurpena chainam abhinispuniyarthychestasyata yavata pranana pratyagamanam.* (Charaka sharira 8; 42).
5. *Bala Talien Parishekam Kuryata ....* (Astanga sanghriha u.t.2).
6. *Karnamule Chasmano Sangghatanam.....*(Astanga sanghriha u.t.2).
7. *Yadi Va Achestam Krishanakapalika Shurpena Cha Ainam Abhinispuniya....*(Astanga sanghriha u.t.2).
8. *Dhakshina Karanamule Mantroccharanaie,,,,,,* (Astanga sanghriha u.t.2).

9. "Tato Asyaanantaram Saindhavophiten Sarpisha Karyam Pryachhardhanam." (Charaka sharira. 8/43).
10. "Garbhambhah Saindhava Vacha Sarpisha Vamayeta Tatah." (Astanga Hridayam U.T.1)
11. (Sushruta sharira.10/48 & Astanga Hridayam U.T.1/20).
12. Harita, Charaka chikitsa 30/239, Yoga Ratnakara Bal-roga Chikitsa Page 444, Madhava Nidana Bal-roga Nidana 1.
13. Yoga Ratnakara Bal-roga and Sharangdhara Samhita.
14. Kashyapa Sutra Page 1,3-4,4-5, Astanga Sangriha U1/64-68,71,71-73, charaka chikitsa 9/35-41, Sushruta.Sharira.10/45,68-70.
15. Kashyapa Samhita –Kalpasthan Dhoomkalpadhyaya Sukham dukham hi balanam drishyate lehanashraya. (Kashyapa Sutra Page 1).
16. Kashyapa Khila Sthana 8/111-12.
17. Kashyapa Samhita vimaan; page 61.
18. Kashyap kalpa Sthana 26, 28.
19. Sushruta U.T.27, Kashyapa Chikitsa Sthana- Balgriha Chkitsadhyaya, Astanga Sangriha U.T.3/2, Charaka Chikitsa 9/21, Harita Samhita 3/54, Yoga Ratnakara Balroga 437.
20. Kashyapa Sutra 27/66, Astanga Hridayam U.1/40, Astanga Sangriha U1/58.
21. Kashyapa Sutra Lehadhyaya Page 3.
22. Charaka Sharira 8/51, Kashyapa Sutra 28/6; Page 47-54, Astanga Sangriha 1/31; sharira 8/32.
23. Charaka Sutra 25/40, Kashyapa Khila Sthana Page 355.
24. Stantayam Rudrakshasanyuktamaharartham Prayojyeta. (Yoga Ratnakara page 98).