



A Critical Review on the Treasure of Indian Knowledge available in various Scriptures in relevance to Modern Era

Dr. Smita Arora

Asstt. Professor, PG Deptt. of Kriya Sharir, Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi-110073, India.

E-mail : drarorasmita18@gmail.com

Received: 27 February 2025; Accepted: 15 May 2025

Indian knowledge system is a rich legacy catering the society with the concepts of holistic way of living with high levels of spiritual consciousness. The Vedas, Upanishad, Aranyaka, Brahmanas and various other epics are great repository of knowledge encompassing every walk of life, like science, technology, astronomy, architecture, mathematics, ecology and agriculture etc. Though we are presently living in an era of Artificial Intelligence, the wisdom of our ancient Vedic era can't be denied in current scenario. The present era achievements can be denoted as the fruits which the tree of time is bearing and whose roots can be traced in our ancient literature. Therefore, it becomes essential to explore the hidden treasure of Indian knowledge present in the *Vedic* era or ancient times which have been described in various scriptures, manuscripts, epics and texts etc. The earliest sources of our knowledge of Indian philosophy and medicine are the four *Vedas*, few sacred books of knowledge which were available from the period of 1500 to 800 B.C.

This research article provides a critical review of the concepts and knowledge which our ancient scholars possessed and that have been adopted in the modern era after conducting scientific researches. This study serves as an initial step to peep into the ancient era window using a spectacle of modern era concepts.

Keywords : Ancient, Ayurveda, Upanishad, Scriptures, Scientific, Sanskrit, Indigenous

Introduction:

The prime source for the Indian traditional knowledge is various scriptures like Ramayana-Mahabharata-Shrimada Bhagwat Gita, Vedas viz. Rigveda-Yajurveda-Samaveda-Atharveda, Ayurveda, Upanishad, Purana like Bhagwat Purana and other epics, texts and manuscripts. Most of these have been written in Sanskrit language. Sanskrit is not just a language but it is a definition of beauty and ancient divine energies and henceforth it is resurged again. Therefore Sanskrit in ancient knowledge system is adorned as a fountainhead of Indian Knowledge System.

The actual Indian knowledge system speaks through various literature on science, law, management, trade, administration etc. Sanskrit is the key to unlock the wisdom closed in them. Many of these scriptures, texts and epics have been referred for the concepts which are relevant in the present era also and possess their importance today also from a scientific point of view. The authenticity of the concepts of ancient Indian knowledge has been proved and supported with the references from the ancient texts and the latest researches conducted over them have been included in this article. It covers various fields of Indian Knowledge like Mathematics, Chemistry, Medicine, Physics, Astronomy etc.

The wisdom which the ancient Indian scholars had, have been explored, collected and compiled to give a shape of modern era research based concepts. These concepts originally belonged to IKS (Indian Knowledge System) and in present era these have been represented after research and the old Indian wisdom have been authenticated for acceptance. In this research article many such concepts have been considered in the light of era of Artificial Intelligence.

Indian Knowledge Resources and Their Relevance Today:

Ancient Indian knowledge system has its origins traced back to the *Vedas*, known as the oldest available classics in the world. The *Vedas*, the scientific wisdom of India contain treasure of knowledge of ancient sages' propounded in all aspects of life. An analysis of the concepts in the *Vedas* reveals that all four *Vedas* contain numerous references to various aspects of different concepts of life. The concepts which are available in ancient books / *Vedas* / literature / manuscripts in India, have been researched and named as Discovery by the modern scholars. The fact is scientific basis and technology based, proven authentic concepts have been postulated in present era but simultaneously the origin of the concepts and the wisdom of ancient

scholars can not be denied today also.

RESOURCES OF INDIGENOUS KNOWLEDGE AND THEIR ACCEPTANCE TODAY

S. No.	Ancient Knowledge	Subject / Concept of Knowledge	Source of Knowledge / Reference	Era or Time Period of Knowledge	Ancient Description	Present Era Acceptance of Concept	Modern Year of Discovery/ Research
1.	Sanskrit language	Methodology of the Grammar rules	<i>Panini in Ashtadhyayi</i>	500– 1500 BCE	<i>Vedic Sanskrit</i>	Linguistic Studies Phonetics Natural Language Processing (NLP) Logical structured grammar	NASA scientist Rick Briggs has confirmed that grammar of Sanskrit (Structured) is most suited for computer programming in the field of Artificial Intelligence All modern Computers work on this basis Regiomontanus (square root calculation) 1450 AD Hero of Alexandria (cube root calculation) Pythagoras 570 BC - 495 BC
2.	Invention of Zero	Mathematica 1 miracle	<i>Aryabhatayam and Brahmagupta</i>	476 CE and 700 CE respectively	Place value system and formalization of arithmetic properties of zero	Basis for Binary Number System	Regiomontanus (square root calculation) 1450 AD Hero of Alexandria (cube root calculation) Pythagoras 570 BC - 495 BC
3.	Square & Cube Roots	Mathematics	<i>Aryabhatayam</i>	476 CE	One should divide the non-square place by twice the square root of the square place, then subtract the square from the next square place.	The modern method of calculating the Square & cube root is division	Regiomontanus (square root calculation) 1450 AD Hero of Alexandria (cube root calculation) Pythagoras 570 BC - 495 BC
4.	Pythagoras Theorem	Mathematics	<i>Baudhayansutram – Shulba Sutra</i>	700-800 BCE	The area of the squares produced separately by the length and breadth of a rectangle together is equal to the area of the square produced by the diagonal.	$AB^2+BC^2 = AC^2$	Pythagoras 570 BC - 495 BC
5.	Path of Celestial bodies	Astronomy	<i>Rigveda 1/164/2</i>	1500-1000 BCE	Celestial bodies follow an elliptical path i.e. (<i>Trinabhichakram</i>) Path of a point that moves so that the sum of its distances from 2 fixed points (foci) is constant	Path of planets and all celestial bodies is Elliptical	Johannes Kepler 1609 CE
6.	Planetary Motion	Astronomy	<i>Aryabhatiyam-Kalakriyapadah 3/17</i>	499 CE	Planets move in their orbits or eccentric circles with their own motion, clock wise from their perigees and anti-clockwise from their apogees	Planets orbit the sun in elliptical orbits where sun is positioned at the one focus of the orbit	Johannes Kepler 1700 CE

(Contd.)

RESOURCES OF INDIGENOUS KNOWLEDGE AND THEIR ACCEPTANCE TODAY							
S. No.	Ancient Knowledge	Subject / Concept of Knowledge	Source of Knowledge / Reference	Era or Time Period of Knowledge	Ancient Description	Present Era Acceptance of Concept	Modern Year of Discovery/ Research
7.	Moon as satellite	Astronomy	<i>Rigveda 10/189/1</i> <i>Yajurveda</i> <i>Taitariya Samhita 1/5/1/3,4</i>	1500-1000 BCE 1200-800 BCE	Moon is the satellite of earth and revolves around it, while earth revolves around sun (self-luminous)	Moons (satellites) orbit other planets	Galileo Galilei 1610 CE
8.	Solar Energy	Astronomy	<i>Taitariya Aranyakam 3/11</i>	700 BCE	The universe is sustained by solar energy and sun is the source of energy for vitality and strength of living beings	Photo-voltaic effect of solar energy	Alexander Edmond Becquerel 1839 CE
9.	Speed of Light	Physics	<i>Rig Samhita 1/50/4</i>	1200-1500 BCE	Sunlight (Sunrays) travel 2,202 <i>Yojana</i> distance in half a <i>Nimisha</i> time period 1 <i>Yojana</i> = 9 miles = 12.8 Km $\frac{1}{2}$ <i>Nimisha</i> = 1/8.75 seconds	Velocity of Light 299,792, 458 meters per second i.e.	Michaelson and Morley 19 th Century
10.	Rainbow	Physics	<i>Brihata Samhita – Ch. 35</i>	600 CE	The different colour rays of the sun are dispersed in the cloudy sky and are visible in the shape of a bow, known as Rainbow	White light is composed of different colours which get separated when are refracted through water droplets, forming a Rainbow	Isaac Newton 1687 CE
11.	Lens	Physics	<i>Nyayadarshanam Ch. 3/46</i>	800 BCE	Not visible with naked eyes can be visible using glass, <i>Abhrapatala</i> (mica thin layer) and <i>sphatika</i> (crystal)	A lens is a piece of glass or any transparent material with 1 curved and 1 plane surface or both curved surfaces causing spreading or conversion of light rays passing through it.	Roger Bacon's Invention of Lens 1214-1292 CE
12.	Gravitation	Physics	<i>Brahmagupta Bhaskaracharya-II in Siddhanta Shiromani</i>	628 CE 1114-1185 CE	An attractive force exerted by earth which attracts everything towards it. <i>Gurutvakarshana</i> is inherent attractive property of the earth.	A force that pulls are objects to each other and to the earth in the universe is Gravitation.	Isaac Newton 1687 CE

(Contd.)

RESOURCES OF INDIGENOUS KNOWLEDGE AND THEIR ACCEPTANCE TODAY

S. No.	Ancient Knowledge	Subject / Concept of Knowledge	Source of Knowledge / Reference	Era or Time Period of Knowledge	Ancient Description	Present Era Acceptance of Concept	Modern Year of Discovery/ Research
13.	Photosynthesis	Botany	<i>Mahabharata Shantiparva 184/18</i>	500- 1000 BCE	The plants receive nutrition through water and sunlight. Water drawn by the roots reacts with light (heat) and air to form fluid for plant's nourishment.	A chemical process that uses light energy to convert water and carbon dioxide into oxygen and sugar in plants.	Jan Ingenhousz 1770 CE
14.	Phototropism	Botany	<i>Charak Samhita</i>	200-400 BCE	The consciousness of the plants (Live status) can be understood by observing their orientation / movement according to the sun's direction.	The way in which plants grow towards or away from light	Charles Darwin 1880 CE
15.	Origin of Matter	Physics-Chemistry	<i>Taittiriya Upanishada (Brahmanand Valli-anuvak-1)</i>	500 – 600 BCE	An absolute cause gives rise to <i>Akash</i> (Space), which forms <i>Vayu</i> (Air), air gives rise to <i>Agni</i> (Fire), fire forms <i>Jala</i> (water) and finally from water element <i>Prithvi</i> (earth) comes.	The sequence of matter is Plasma, Gas, Energy, Liquid and Solid (States of Matter)	SatyendraNath Bose and Albert Einstein 1920 CE (Bose-Einstein condensate)
16.	Blood Circulation	Medicine	<i>Sushrut Samhita Sutrasthana 14/3 Bhela Samhita</i>	6 th BCE 400-750 CE	The product of well digested food is known as <i>Rasa</i> (fluid for nourishment), which reached heart and from there it is thrown to the entire body through 24 arteries for nourishment, support, satisfaction and maintenance of entire body and which is propelled by an unseen cause.	Blood circulates throughout the body.	William Harvey 1628 CE
17.	Rhinoplasty	Cosmetic surgery	<i>Sushrut Samhita Sutrasthana 16/ 27, 28</i>	6 th BCE	The nose is reshaped using cheeks skin and leaf.	Till date Father of Plastic Surgery is <i>Acharya Sushruta</i>	---

(Contd.)

RESOURCES OF INDIGENOUS KNOWLEDGE AND THEIR ACCEPTANCE TODAY							
S. No.	Ancient Knowledge	Subject / Concept of Knowledge	Source of Knowledge / Reference	Era or Time Period of Knowledge	Ancient Description	Present Era Acceptance of Concept	Modern Year of Discovery/ Research
18.	Prosthesis (Artificial Limb)	Orthopaedics	<i>Rigveda 1/116/15, 1/112/10, 1/117/11, 1/118/8, 1/182/1</i>	4000-6000 BCE	King Vishpala's female companion who lost her leg in a war, iron prosthesis led was replaced by <i>AshwinKumar</i> sto make her capable of walk.	Oldest known prosthetic are from Egypt (artificial toes)	1550 – 700 BC
19.	Head Transplantation	Advanced Neuro- Surgery	<i>Rigveda 1/119/9, 1/116/12, 1/117/22, 10/39/3</i>	4000 - 6000 BCE	<i>AshwinKumars</i> (scholars of <i>MadhuVidya</i> and <i>KakshyaVidya</i> i.e. Transplantation surgery) re-transplanted head of horse.	Future endeavour	---
20.	Test Tube Baby	Gynaecology	<i>Rigveda 7/33/13</i>	4000 - 6000 BCE	<i>Mitra</i> and <i>Varuna</i> , the deities mentioned in <i>vedas</i> poured a common effusion into a utensil called <i>Vastivara</i> (A compact abode of liquid), from which <i>Mana (Agastya)</i> and <i>Vashishta</i> were born. Later in <i>Mahabharata</i> period, <i>Kripacharya</i> and <i>Dronacharya</i> were born like this	In Vitro Fertilization (IVF)	Louise Brown (1978) 1 st Test Tube Baby
21.	Sex Conversion with Fertility	Advanced Surgery	<i>Rigveda 1/116/13, 1/117/24</i>	4000 - 6000 BCE	On request of eunuch <i>Vadhrimati</i> , <i>Ashwin Kumars</i> made her capable of giving birth to <i>Hiranyahastan</i> named son	Gender-affirming surgery	20 th Century
22.	Surgical Instruments	Surgery	<i>Sushrut Samhita Sutrasthana 7/5, 8/3</i>	1000 – 1500 BCE	6 types of Blunt (<i>Astra</i>) instruments and 20 types of Sharp (<i>Shasta</i>) instruments	Modern instruments are based on these 26 types of surgical instruments	Still in use with modern techniques
23.	Caesarean / Laparotomy	Surgery	<i>SushrutSamhitaNidanaSthana8/11, Ashtanga Samgraha Sharira Sthana 4/52, Ashtanga Hridaya ShariraSthana 2/53</i>	1000 – 1500 BCE	If on death of a pregnant female during labour, the quivering of abdomen still persists, then abdomen can be immediately open to extract the live foetus.	On living patient first documented Caesarean was performed by <i>JakobNufer</i> (Switzerland) in 1500	Few reports say Caesarean-sections performed as earliest as 1337-1400 CE

(Contd.)

S. No.	Ancient Knowledge	Subject / Concept of Knowledge	Source of Knowledge / Reference	Era or Time Period of Knowledge	Ancient Description	Present Era Acceptance of Concept	Modern Year of Discovery/ Research
24.	Immunization	Medicine	<i>ShrimadaBhagwat aPurana 1/5/33</i>	800– 1000 BCE	A material causing a disease can prevent the disease in if used in a minute quantity through a procedure.	Live Attenuated Vaccine	Louis Pasteur 1872 CE
25.	Size of Soul	Metaphysics	<i>ShwetashwarUpni shada 5/9, Mundaka Upnishada 3/1/9</i>	5 th – 6 th BCE 100-300 BCE	If tip of the hair is divided into 100 parts, each part is further subdivided into 100 parts, each such part denotes the dimensions of a Spirit soul	Not yet known	---
26.	Photo Therapy	Paediatrics	<i>Atharvaveda 1/22/2</i>	1000– 1200 BCE	The morning and evening sun rays are useful for body and alleviate yellowness of skin (usually occurring due to jaundice) and gives lustre and redness to skin.	Phototherapy for Neonatal Jaundice Phototherapy for Vitamin D formation through skin	NielsRyberg Finsen 1903 CE
27.	Stem Cell & Cloning	Genetics	<i>Durga Saptashati 8/41, 44</i>	400 – 600 CE	The fallen blood drops of the demon <i>Raktabeeja</i> , formed clones to himself possessing same strength, vitality, power and courage	Stem Cell Cloning in frog First live clone of a mammal was a Sheep-Dolly (1996-2003)	John Gurdon 1958 CE

In this article the glimpses of the ancient Indian knowledge in different subject areas have been described to understand the true wealth of India. This proposed article aims to justify the concepts of ancient Indian knowledge in vast areas.

Sanskrit language becomes mandatory to learn today than ever before as it is necessary to preserve our moorings by unravelling the knowledge present in the ancient texts. Sanskrit grammar provides a well-defined patterns and rules which are necessary for the strong foundation of applications of Artificial Intelligence especially in Natural Language processing (NLP). The proper functioning of AI depends upon its processing based on algorithms. Sanskrit being the mother of all other languages, gives clear representation to any word's meaning because it shows minimum ambiguity and therefore any language can be interpreted accurately. The concept of Sanskrit grammar has been explained by *Acharya Panini* in his book *Ashtadhyayi*¹.

In the field of Mathematics, Indian knowledge has

established its dominance by invention of zero (*Aryabhatayam*)², calculation of square-cube roots (*Aryabhatayam*)³ and giving Pythagoras theorem (*Baudhayanasantam*)⁴ and many such other concepts.

Astronomical concepts like Elliptical path of celestial bodies (*Rigveda*)⁵, planetary motion (*Aryabhatayam*)⁶, moon like satellites (*Rigveda, Yajurveda, titariyaSamhita*)⁷ and solar energy (*TaitariyaAranyakama*)⁸ have been explained here from the ancient texts and epics.

Photosynthesis (*Mahabharata*)⁹ and Phototropism (*CharakSamhita*)¹⁰ like significant phenomena are also part of ancient knowledge system, which have been rediscovered by modern scientists' centuries after they were explained in ancient texts.

There are many concepts and theories of Physics like Speed of light (*Rig Samhita*)¹¹, Rainbow formation (*BrihataSamhita*)¹², Use of Lens (*NyayaDarshan*)¹³, Gravitation (*Brahmagupta, Bhaskaracharya – II*)¹⁴ described Gravity (attraction) as the inherent property of the earth. Origin of matter (*Taittiriya*

Upanishada)¹⁵ etc. have been explained in ancient books centuries before they were discovered or postulated by the modern scientists.

Besides many such concepts from different areas of subjects, Indigenous knowledge system has hidden treasure of medicinal gems also. Indian system of medicine, *Ayurveda* depicts a fusion of mythology and scientific medicine system -*Ayurveda*. It encompasses various specialities of medical practices viz. Medicine, Surgery, Physiology, Anatomy, Gynaecology and Obstetrics, Paediatrics, Genetics etc. The advanced concepts of these specialities in ancient epics and texts integrate the rich tapestry of principle of *Lok-Purush Samya*, (Humans as miniature reflections of this universe), providing a comprehensive understanding of health and its components. The famous *Ayurveda* scholars are *Acharya Charaka* (known as best Physician), *Acharya Sushruta* (Till date considered best surgeon and Father of modern Surgery too), *Acharya Vagbhata*, *Acharya Sharangdhara* and *Acharya Bhela* etc.

In field of ancient medicine, the concept of Blood circulation was first of all described in *Sushrut Samhita*¹⁶, the basis of concept of Immunization has been mentioned in *ShriMadaBhagwata Purana*¹⁷, Cosmetic surgery (Rhinoplasty) was first of all performed by *Acharya Sushruta*¹⁸, the description of first prosthetic limb has been found in *Rig veda*¹⁹, which shows the advancement of orthopaedic procedures in ancient era too. The reference of advanced Neurosurgery of head transplantation description is available in *Rigveda*²⁰. *Acharya Sushruta* is known father of modern surgery also. He has explained 20 types of sharp instruments and 101 types of blunt instruments. The modern technology based instruments are reformation of *Sushruta*'s types of Instruments²¹. The concept of Test Tube Baby is the invention and wisdom of indigenous system of medicine. In *vedicera (Rig veda)*²² its reference is available. The concept of Photo therapy using sun light has been used since ancient times. In addition to that sun was believed as a celestial God figure because of its miraculous energy power pack which is essential for the health and vitality of human beings. In *Atharvaveda*²³, the use of sun rays as photo therapy is available which is now a days is in practice by paediatricians to manage neonatal jaundice and by other dermatologists in skin therapy using various forms of sun rays types. The modern medical science has taken up the concept of *Prakriti*(Constitution analysis) in relation to genetics and the researches are being carried

upon under the name of Ayurgenomics. Similarly, the reference of concept of cloning and stem cells is available in an epic / mythological book *Durga Saptashati*²⁴. There is mentioning of a demon character *Raktabeeja*. As the name suggests, the blood of him is seed (contains DNA)itself and his blood was capable of giving rise to other demon creatures having similar power, strength and vitality. Henceforth, it can't be denied that blood contains stem cells and the concept is not at all new in this era. Moreover similar clone character *Raktabeeja* was formed from his own blood drops, equal to the number of drops fallen on the ground, justifies the cloning of demon from his stem cells present in his blood. In gynaecology / obstetrics field the caesarean section is a common surgical procedure these days to get the baby delivered of a pregnant female if the delivery is not possible following normal labour process. In *Sushruta Samhita*, a similar surgical process *KukshiPatana*²⁵ has been mentioned where the abdomen of a pregnant female is opened surgically to deliver / extract the baby out of uterus if the pregnant female is dead but the foetus was alive. This can be considered as an idea to save the foetus if the female is not capable of giving birth to baby with uterine contraction or bear down force.

The science about soul is still a mystery for the modern era scientists. The description about which is available abundantly in many mythological books / epics / related texts. In *Shwetashwar Upnishad* and *MundakaUpnishad*²⁶, there is mentioning of size of spiritual soul. Such wisdom gives a scope for further endeavours to authenticate the knowledge / information given in ancient treasure of books.

A study of the *Vedas* indicates that they contain numerous references to various aspects of life especially medicine. The *Atharva Veda*, can be considered an encyclopedia of ancient system of medicine. *Ayurveda*, the science of life, is also regarded as an *Upa-Veda* (subsidiaryveda) of the *Atharva Veda*. The holistic health care approach of *Ayurveda* is being adopted by western countries also. It proves the inclination of modern knowledge back to Body-Mind-Soul concept of ancient Indian medical science-*Ayurveda*. This concept of psychosomatic medicine has been adopted by modern system of medicine also. The updated definition of Health by World Health Organization is best example of it.

In 1948, Health definition by WHO : "Health is a state of complete physical, mental and social

well-being.”

Latest updated Health Definition by WHO: “*Health is a state of complete physical, mental, spiritual and social well-being and not merely the absence of disease or infirmity.*”

Discussion:

This research review article provides a baseline for providing the research material to the whole world from Indian Traditional Knowledge and shall nurture the impression of Globalization of the Indian knowledge system. It may set a mile stone for the future endeavours in the field of research.

The various books, manuscripts, epics and other literary material have been consulted for giving this article the present face. Besides it, the Archeological Record of ancient knowledge also contributes to the Indian Knowledge System. The evidence of early wisdom can be traced through archaeological discoveries. For instance, several skulls were unearthed from the Mehargarh and Harappa Cemeteries, dating back to 2300 BC, showing evidence of trepanation and bone healing. Another discovery near Baluchistan, in the Burnt City (2800 BC), a skeleton with a bitumen prosthetic eye was found in a grave²⁷.

Rich Indian Heritage and Available / Lost Manuscript Wealth²⁸ :

India is rich in culture, wisdom and knowledge. Many of our treasure are present in 10 millions of manuscripts. Unfortunately, approximately 96% of these manuscripts are still unpublished and 75% of manuscripts are not catalogued. Approximately 50 lakhs manuscripts are still lying in various villages of India. Even 5 lakhs estimated manuscripts have been stolen / sold out to other countries. Only 45 lakhs estimated literary material of manuscripts is available for research and reconsideration by various research scholars of present era. Only approximately 48000 manuscripts / books collections are available for public also. Surprisingly most of them are religious scriptures like *Bhagwat Gita, Bhagwat Purana, Ramayana, Mahabharat etc.*

Acharya Vyas categorised and systematized the Vedas 5000 years ago. As described in *Mahabharata* scripture, at the end of *Mahabharata* war, Four Vedas viz. *Rigveda, Yajurveda, Samaveda* and *Atharvaveda* were present which had approximately 1131 *Shakas* (recensions). The *Rigveda* has 21 *shakas*, *Samaveda* has 1000 *shakas*, *Yajurveda* has 100 *shakas*, *Atharvaveda* has 11 *shakas* and *Ayurveda* is a

sub-veda of *Atharvaveda*. It is a sign of silent disaster that at present in Total only 11 out of 1131 *Shakas* are available. 19 *Shakas* of *Rigveda* are lost and only 2 *shakas* (*Shakala* and *Sankhayayana*) are available.

Out of 100 *Shakas* of *Yajurveda*, 96 *shakas* are lost and only 4 *shakas* (*Taitariya, Maitrayaniya, Kanva* and *Madhyandina*) are available today. Similarly, from *Samaveda*, out of 1000 *shaka* only 3 *shakas* (*Ranayaniya, Jaiminiya* and *Gautama*) are available and 997 are lost. Likewise from *Atharvaveda*, out of 11 *shaka* only 2 *shakas* (*Shaunaka* and *Pippalada*) are present and 9 *shakas* are lost. It is just an example from the Vedas and our rich tradition is at the loss of 1120 precious *Vedic Shakas*.

Protection of Available Indigenous wealth :

This fact can not be denied that many of our Indigenous knowledge had been robbed and stolen by the invaders from the other countries in past, which had been taken to their countries. India was under the British rule for 200 years and by the time India got Independent, most of our heritage and treasure was lost. It becomes duty of every Indian to carry our legacy of being a Golden bird and protect our remaining Indigenous wisdom. Today the protection of our Indian wisdom is the demand of time. In this reference, it is worth mentioning here about the TKDL (Traditional Knowledge Digital Library) project which was launched in 2001 by CSIR (Central Scientific Industrial Research) in collaboration with CCRAS (Central Council for Research in Ayurvedic Sciences) and was adopted in 2003 as Intellectual Property. It was a great initiative by Government of India to prevent the misappropriate act of International patent offices. The medical wisdom which was already a hidden treasure in various books of Indian system of medicine, the western countries have started giving patent to them on their names. The Traditional knowledge is a valuable as well as vulnerable asset for Indian people, communities including tribal communities too. The whole data of the Indigenous books have been converted and entered in a code form which can be decoded in International languages like English, Japanese, French, German and Spanish. Presently approximately 4.5 lakh formulations have been transcribed into code form in the data base of TKDL.

The available Indian knowledge can be translated into different languages and their patent rights can be sold to other countries on demand. There is need to study Sanskrit language to understand the available literature properly. Sanskrit is still considered as the

voice of soul of our *Bharat*.

There might be many more unknown manuscripts which Indian tribes or Village people are having and still are under threat of being lost unpublished or damaged due to insects or pests.

Conclusion :

This paper attempts to bridge the gap between modern medical technology and ancient Indigenous knowledge available in *Vedic* era. Indian knowledge system has surprised the world with its advance unique concepts in ancient era, which are relevant and acceptable in present era also. Indian system of Medicine (AYUSH-Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy) is one such treasure of ancient wisdom whose many concepts are still lying as unpolished un-carved gems / diamonds. .

The present paper may set a milestone for future endeavours in this field. Henceforth it is recommended to review ancient Indian Knowledge and existing knowledge of all technical and non-technical fields and to incorporate the ancient wisdom into standard textbooks. This research article would provide an opportunity for interested researchers to further study and explore ancient Indian Literature /texts / manuscripts to gather the wisdom catering the Indian Knowledge System since long. The valuable resources available in our own country as Indigenous heritage and Indian culture cannot be neglected and these resources must be given priority to explore the ancient wisdom from modern research point of view to carry our legacy of rich culture and wisdom.

References :

1. Briggs, R. (1985). Knowledge Representation in Sanskrit and Artificial Intelligence. AI Magazine, 6(1), 32.
2. A brief history of zero, January, 2008 George Gheverghese Joseph, T r kh-e Elm: Iranian Journal for the History of Science, 6 (2008), pp. 37-48
3. भागहरेदवर्गात्रित्यं द्विगुणेनवर्गमुलेन।वर्गाद्विर्गेशुद्धेलब्धस्थानान्तरेमुलम्॥
(*Aryabhatayam*)
4. दीर्घचतुरस्रयाक्षयारज्जुःपार्श्वमानीतिर्यक्मानीचयत्पृथग्भूतेकुरुतस्तदुभ्यं करोति। (*Baudhayanasantam*)
5. त्रिनाभिक्रमजरमनर्वयत्रेमाविश्वभुवनानितस्थुः।(*Rigveda 1/164/2*)
6. कक्ष्याप्रतिमण्डलगाभ्रमन्ति सर्वेग्रहाः स्वचारेण।
मन्दोच्चादनुलोमं प्रतिलोमञ्चैवशीघ्रोच्चात्॥(*Aryabhatiyam-Kalakriyapadah 3/17*)
7. आयंगोःपृश्निक्रमीत् असदन्मातरं पुरः।पितरं च प्रयन्तस्वः॥
(*Rigveda 10/189/1, Yajurveda-TaittiriyaSamhita 1/5/1,3,4*)
8. येनेमाविश्वभुवनानितस्थुः।ततःक्षत्रं बलमोजश्चजातम्॥
(*Taittiriya Aranyakam 3/11*)

9. तेनतज्जलमादत्तंजरयत्यग्निमारुतौ।आहारपरिणामाच्चस्नेहोवृद्धिश्चजायते॥ (*Mahabharata Shantiparva 184/18*)
10. वृक्षादीनांचेतनत्वं बोद्धव्यं तथा हि।सूर्यभक्त्यासूर्यभ्रमण-
दिकसारिभ्रमणेनदृक्॥1 (*CharakSamhita*)
11. तरणिविश्वदर्शतो ज्योतिष्कुदसिसूर्य।विश्वमाभासिरोचनम्॥
तथाचस्मर्यतेयोजनानांसहस्वद्वेद्वेशतेद्वेचयोजने।
एकेननिमिषार्धेनक्रममाणनमोअस्तुते॥(*Rig Samhita 1/50/4*)
12. सूर्यस्यविविधवर्णाःपवनेनविद्यत्ताःकराःसाभ्र।वियतिधनुः
संस्थानाःयेदृश्यन्तेतदिन्द्रधनुः॥
(*Brihata Samhita-Ch.35*)
13. अप्राप्यग्रहणकाचाभ्रपटलस्फटिकान्तरितोपलब्धेः॥
(*Nyayashastram - 3/46*)
14. International Journal of Scientific Research in Science, Engineering and Technology, Bhaskaracharya's Law of Attraction, Dr.Chandramouli Raina, Vol. 1 No. 6 (2015) : November-December
15. तस्माद्वाएतस्मादात्मनआकाशःसम्भूतः।
आकाशात्वायुः, वायोःअग्निः, अग्नेःआपः, अदाभ्यःपृथिवी॥
(*Taittiriya Upanishada, Brahmanand Valli-Anuvak -*
16. आहारस्यसम्यक्परिणतस्ययस्तेजोभूतसारःपरमसूक्ष्मःसरसइत्युच्यते
स्यहृदयस्थानम्।सहृदयात्त्वतुःविंशतिधमनीरनुप्रविश्यकृतसंशरीरमहर
हःतर्पयतिवर्धयतिधारयतियापयतिचअदृष्टहेतुकेनकर्मणा॥(*SushrutaS
amhitaSutrasthana 14/3*)
हृदोरसोनिस्सरतितस्मादेतिचसर्वशः।सिराभिर्हृदयं वैतितस्मात्तत्रभवाः
सिराः॥(*BhelaSamhita*)
17. आमयोयच्चभूतानांजायतेयेनसुव्रता।
तदेवहियामयद्रव्यंनपुनातिचिकित्सितम्॥
(*SrimadaBhagwataPurana 1/5/33*)
18. विश्लेषितायास्त्वथनासिकायावक्ष्यामिसन्धानविधिंयथावत्।
नासाप्रमाणं पृथ्वीरुहाणांपत्रं गृहीत्वात्वलम्बितस्य॥
तेनप्रमाणेनहिगण्डपार्श्वदुक्त्यब्दधात्वथनासिकाग्रं।विलिख्यचाशुप्रति
सन्दधीततत्साधुबन्धैर्भिषगप्रमत्तः॥
(*SushrutaSamhitaSutrasthana 16/27, 28*)
19. चरिचंहिवेरिवाच्छेदिपर्णमाजाखेलस्यपरितकम्यायाम्।
सद्यजङ्गामायसोविशपलायैधनेहितेसतवेप्रत्यधत्तम्॥
(*Rigveda 1/116/15, 1/112/10, 1/117/11, 1/118/8, 1/182/1*)
20. उतस्यावांमधुमन्मक्षिकारपन्मदेसोमस्योशिजोह्वन्यति।
यवंदधीचोमनआविवासथोअथाशिरःप्रतिवामश्व्यम्बदत्॥
(*Rigveda 1/119/9, 1/116/12, 1/117/22, 10/39/3*) Editorial
Article Whole brain transplantation in man: Technically
feasible Sergio Canavero, Surgical Neurology International
Journal, DOI 10.25259/SNI_1130_2022
21. तानिषट्प्रकाराणितद्यथा - स्वस्तियन्त्राणि, संदंशयन्त्राणि,
तालयन्त्राणि, नाडीयन्त्राणि, शलाकायन्त्राणि, उपयन्त्राणियन्त्राणिवेत्ति।
विंशतिःशस्त्राणि, तद्यथा
मण्डलाग्रकरपत्रवृद्धिपत्रनखशस्त्रमृद्रिकोत्पलपत्रकार्धधार -
सूचीकुशपत्राटीमुखशरारिमुखान्तमृत्रिकूर्चककुठारिकाव्रीहीमुखारा
वतेवसपत्रकवडीश-दन्तशकवेषण्यइति॥
(*SushrutaSamhitaSutrasthana 7/5, 8/3*)
22. सत्रेहजादाविषितानमोभिःकुम्भेरेतःसिषिचतुःसमानम्।
ततोहमानउदियायमध्यात्ततोजातमृषिमाहुर्वसिष्ठम्॥
(*Rigveda 7/33/13*)
23. परित्वारोहितैवर्णेदीर्घायुत्वायदध्मसि।यथायमरपाअसदथो
अहरितोभुवत्॥ (*Atharvaveda 1/22/2*)

- 24 रक्तबिन्दुर्यदाभूमोपतत्यस्यशरीरतः।
समुत्पततिमेदिन्यांतत्प्रमाणस्तदासुरः॥
यावन्तःपतितास्तस्यशरीराद्रक्तबिन्दवः।तावन्तःपुरुषाजातास्तद्वीर्यबल
विक्रमाः॥
(*DurgaSaptashati 8/41,44*)
- 25 वस्तद्वारेविपन्नायाःकुक्षिप्रस्पन्दतेयदि।
तत्क्षणाज्जन्मकालेतंपाटयित्वोद्धरेद्भिषक्॥
(*SushrutSamhitaNidanaSthana 8/11, Ashtanga Samgraha
Sharira Sthana 4/52, Ashtanga Hridaya Sharira Sthana 2/53*)
- 26 बालाग्रशतभागस्यशतधाकल्पितस्यच।
- भागोजीवःसविज्ञेयःसचानन्त्यायकल्पते॥
(*ShwetashwarUpnishad 5/9*)
एषोअणुरात्माचेतसावेदितव्योयस्मिन्प्राणःपञ्चधासंविवेश॥
(*MundakaUpnishad 3/1/9*)
- 27 Vedam, R., Pansare, T. A., & Narula, J. (2021).
Contributions of ancient Indian knowledge to
modern medicine and cardiology. *Indian Heart Journal*, 73(5),
531.
- 28 BharatiSamskrita, 2007. Science in Samskrit. Samskrita
Bharati, 144-145.