

## Leprosy and its Socio-cultural perception in Indian religions and ancient texts

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Received : 04.12.2009 Revised : 30.12.2009 Accepted : 28.01.2010

Leprosy is one of the oldest ailments known to the mankind. Many of the ancient texts and scriptures reveal that leprosy was not categorised as a specified disease but was grouped along with other skin diseases. However, in certain texts categorical mention of this disease does exist. The prime objective of this article is to highlight the age old traditional line of perception about this disease. A literature review was done to up-date the socio-cultural perception of leprosy in Indian religions and ancient texts. References were obtained through examining relevant bibliographies and the views/suggestions of eminent scholars engaged in this field were also included. An analysis of the secondary sources of data, particularly the ancient texts reveals that in good old days, leprosy had been considered to be an infliction of wrong- doings and sins. This viewpoint has been significantly reflected in these texts.

**Key words :** Leprosy, Indian religions, Indian texts, Socio-cultural perceptions

### Introduction

Translations of early Vedic scriptures is the first textual reference to leprosy. These are found in proto-historic texts including the Egyptian Ebers papyrus dated to 1550 BC (Hulse 1972). There are references to the disease in Sanskrit hymns of the Atharva Veda composed before the first millennium BC (Bloomfield 2004) and in the Old and New Testaments of the Bible. However, this evidence is controversial (Hulse 1972, Auferheide and Rodriguez-Martin 1998, Roberts and Manchester 2005). The earliest widely accepted references to the disease are from much later sources: South Asian texts Sushruta Samhita and Kautilya's Arthashastra dated to the 6<sup>th</sup> century BC (Bloomfield 2004, Zysk 1992), 4<sup>th</sup> century accounts of the Greek author Nanzianos (Pinhasi et al 2005), a 3<sup>rd</sup> century Chinese text Shuihudi Qin

Jia (McLeod and Yates 1981) and 1<sup>st</sup> century AD Roman accounts of Celsus and Pliny and Elder (Auferheide and Rodriguez-Martin 1998, Roberts and Manchester 2005, Rawcliffe 2006).

The Atharva Veda is the earliest historical reference to the disease of leprosy, its pathogenesis and treatment (Bloomfield 2004).

"Born by night art thou, O plant, dark, black, sable. Do thou, that art rich in colour, stain this leprosy, and the grey spot! . . . The leprosy which has originated in the bones, and that which has originated in the body and upon the skin, the while mark begotten of corruption, I have destroyed with my charm" (p 19).

As the Sanskrit word *kushtha* referred to a plant used to treat leprosy and tuberculosis (*rajayakma*) (Zysk 1992), the Atharva Veda is also

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the earliest text to infer a connection between the two conditions at least in terms of treatment.

In Ayurveda, the word *kushtham* refers to a herb and skin diseases in general. It is known as *kushtham* because it brings about absorption, putrefaction and mutilations of the limbs. (कुष्णाति वपुः इति कुष्ठम्।) The word leprosy also means inner layer of bark of a tree. Thus, it does not appropriately describe the disease process.

It was customary in Vedic tradition in parts of India to bury lepers alive (Bryant 2004, Cust 1881) rather than cremate their bodies, which as diseased, was not considered an appropriate sacrifice to Gods (Bryant 2004).

While it is interesting to note that there is no authentic evidence of the existence of leprosy in any country further back than about 600 BC, yet the curse, 'May you be stricken with leprosy and blindness', is of very ancient origin.

## Ayurveda and leprosy

### Epidemiology

In India, the notions and ideas relating to the etiology of the disease leprosy remained naive till 1981. The predominant reasons for the origins of this disease remained the same as indicated in ancient literature. It is said that leprosy is prevalent in the areas through which rivers originating from Sahyadri and Vindhya mountain flow (southern states).

प्राच्यावन्त्यपरान्तोत्था दुर्नामानि, महेन्द्रजाः।  
उदरश्लीपदातङ्कान, सहय्विन्ध्योद्भवाः पुनः ॥११॥  
कुष्ठपाण्डुशिरोरोगान्, दोषघ्न्यः पारियात्रजाः।  
बलपौरुषकारिण्यः, सागराम्भस्त्रिदोषकृत् ॥१२॥  
(अष्टांग हृदय, सूत्रस्थान, अध्याय-5, पृष्ठ-63)

It is stated that the water of rivers of the countries such as Prachya (Prachya country or Gauda *desa* comprise of central part of Bengal and parts of Orissa), Avanti (Avanti or the Malwa country was around the modern city of Ujjain), Aparanta (modern Konkan comprising of Goa, north Kanara and Karwar districts of Karnataka) and those arising in Mahendra mountains (northern part of

Western *ghats*) produces diseases like piles, enlargement of abdomen and filariasis; the water of rivers arising from Sahya (mountains from which river Godavari arises) and Vindhya mountains (mountain ranges in central India) produce leprosy (and other skin diseases), anaemia and diseases of the head; rivers arising from Pariyatra mountains (western part of Vindhya mountains) mitigates all the *dosas*, improve strength and valour; water from the sea tend of increase all the three *dosas* (Murthy 2000).

It is documented that a *Mycobacterium* was isolated from the waters of river 'Lufu' in Africa. This *M. lufu* has many similar properties like *M. leprae*. The areas of Tapi-valley, Krishna-valley, Bhima valley, Godavari valley and Painaganga valley are cotton growing belts. *M. leprae* thrives in the soil as shown by Kazada (Dongre n.d.).

### Modes of transmission

It is well noted in Sushruta-Samhita that the modes of transmission of leprosy are through the respiratory tract and skin to skin contact only with infectious leprosy patients.

प्रसङ्गाद्रात्रसंस्पर्शात्निश्वासात् सहभोजनात्।  
सहयशय्यासनाच्चापि वस्त्रमाल्यानुलेपनात् ॥३३॥  
कुष्ठं ज्वरश्च शोषश्च नेत्राभिष्यन्द एव च।  
औपसर्गिकरोगाश्च संक्रामन्ति नरान्तरम् ॥३४॥  
(सुश्रुत-संहिता, अध्याय-पंचम, पृष्ठ-44)

Literally, translated, it means that Indulgence in physical contact, expired air, eating with others in the same platter, sharing the bed and chair, wearing (used) clothes, garland and paste (cosmetics), ailments like *kustha*, fever, consumption, conjunctivitis and other infectious disease spread from man to man.

Atreya and other great sages mentioned about *dinacharya* (daily regimen) in which it is said the one should not laugh, sneeze, belch or yawn without covering his mouth.

नासंवृतमुखः कुर्यान्क्षुतिहास्य-विजृम्भणम्।.... ॥९३॥  
(अष्टांग संग्रह, दिनचर्या, अध्याय-3, पृष्ठ-50)



### Etiology

The germ theory is challenged by Dr. Meny Bergel of Argentina who states that an imbalance of oxidized unsaturated fatty acids and tocopheral (Vitamin E) cause leprosy. In Ayurveda, it is stated that imbalance in diet causes leprosy. It advocates *virudha* grains in diet (sprouting seeds, Vitamin E).

*Pathina* is a long and clean variety of fish living in rivers and is without scales (also known as *voyala*) increases *kapha*, aphrodisiac, sleepy, carnivorous, vitiates *raktapitta* and causes *kustha*.

Charak specifies fish as *chilichim* and Sushrut as *pathina*. The milk and fish theory of Hutchinson is based on this line.

पाठीनः श्लेष्मलो वृष्यो निद्रालुः पिशिताशनः ।

दूषयेद्रक्तपित्तं तु कुष्ठरोगं करोत्यसौ ।... ॥४६॥

(सुश्रुत-संहिता, सूत्र स्थान, अध्याय-XLVI, पृष्ठ-487)

The chapter-V of Susruta-Samhita deals with the etiology of the disease-leprosy. The etiology of the disease as propounded by Dhanvantri:

मिथ्याहाराचारस्य विशेषाद्गुरुविरुद्धासात्म्याजीर्णाहिताशिनः  
स्नेहपीतस्य वान्तस्य वा व्यायामग्राम्यधर्मसेविनो  
ग्राम्यानुपौदकमांसानि वा प्यासाऽभीक्षणमश्नतो यो वा  
मज्जत्यप्सूष्माभितलतः सहसा छर्दि वा प्रतिहन्ति, तस्य  
पित्तश्लेष्माणौ प्रकुपितौ परिगृह्णानिलः प्रवृद्धस्तिर्यग्गाः सिराः  
संप्रपद्य बाह्यं मार्गं प्रति समन्ताद्विक्षिपति, यत्र यत्र च दोषो  
विक्षिप्तो निश्चरति तत्र तत्र मण्डलानि प्रादुर्भवन्ति, एवं  
समुत्पन्नस्त्वचि दोषस्तत्र तत्र च परिवृद्धिं  
प्राप्याप्रतिक्रियमाणोऽभ्यन्तरं प्रतिपद्यते धातून्भिदूषयन् ॥३॥

(सुश्रुत-संहिता, निदानस्थान, अध्याय-V, पृष्ठ-36)

In a person with a faulty diet and behaviour particularly eating heavy, incompatible, unsuitable and unwholesome items and indigestion; or indulging in physical exercise and sexual intercourse after intake of *sneha* (unctuous substances) or emesis; or frequently eating meats of domestic, marshy and aquatic animals with milk; or taking dip in water after

having been heated by fire (or the Sun); or by suppressing vomiting suddenly, increase *vayu* carrying aggravated *pitta* and *kapha* reaches the obliquely moving channels, further aggravates and scatters them all around towards the external passage. Wherever scattered *dosa* moves, patches appear. Thus, *dosa* started in skin further increases and, if not treated, goes inwards vitiating *dhatu*s.

तस्य पूर्वरूपाणि-त्वक्पारुष्यमकस्माद्रोमहर्षः कण्डूः  
स्वेदबाहुल्यमस्वेदनं वाऽङ्गप्रदेशानां स्वापः क्षतविसर्पणसृजः  
कृष्णता चेति ॥४॥

(सुश्रुत-संहिता, निदानस्थान, अध्याय-V, पृष्ठ-36)

Its premonitory symptoms are - roughness of skin, sudden horripilation, itching, excess or absence of sweat, numbness in body parts, spreading of wounds and blankness of blood.

The chapter-V of Charaksamhita mentions:

तत्रेदं सर्वकुष्ठनिदानं समासेनोपदेद्ययामः शीतोष्णव्यत्या-  
समनानुपूर्व्योपसेवमानस्य तथा संतर्पणापतर्णाम्यवहार्यव्यत्यांस,  
मधुफाणितमत्स्यलकुचमूलककाकमाचीः सततमति-  
मात्रमजीर्णे च समश्रन्तः, चिलिचिमं च पयसा,  
हायनकयवकचीनकोद्दालककोर दूषप्रायाणि चान्नानि  
क्षीरदधितक्रकोलकुलत्थमाषातसीकुसुम्भस्नेहवन्ति, एतेरे-  
वातिमात्रं सुहितस्य च व्यवायव्यायामसंतापानत्युपसेवमानस्य,  
भयश्रमसंतापोपहतस्य च सहसा शीतोदकमवतरतः, विदग्धं  
चाहारजातमनुल्लिख्य विदाहीन्यम्यवहरतः, छर्दि च प्रतिधन्तः  
स्नेहांचातिचरतः, त्रयो दोषा युगपत् प्रकोपमापद्यन्ते;  
त्वगादयचत्वारः शैथिल्यमापद्यन्ते; तेषु शिथिलेषु दोषाः  
प्रकुपिताः स्थानमधिगम्य संतिष्ठमानास्तानेव त्वगादीन्  
दूषयन्तः कुष्ठान्यभिनिर्वर्तयन्ति ॥६॥

(चरक-संहिता, निदानस्थान, अध्याय-V, पृष्ठ-277)

Now (I) shall explain the etiology of all types of *kustha* (leprosy) in general. A person who uses cold and hot things in contradictory and disorderly manner and also the saturating and desaturating food in contradictory way, takes honey, *phanita*, fish *lakuca*, radish and *kakamaci* constantly, excessively and during indigestion;

indigestion; *cilacima* (a type of fish) with milk diet consisting mostly of cereals like *hayanaka*, *cinaka*, *uddalaka* and *kodo* (all inferior grains) combined with milk, curd, butter milk, *kola* (jujube), horse gram, black gram and oils of linseed and *kusumbha*; after taking these in excessive quantity indulges in sexual intercourse, physical exercise and intense heat; dips in cold water suddenly after affliction with fear, exertion and intense heat; without vomiting the burnt (excessively acidic) food, again takes food of similar nature, suppress the urge of vomiting, applies too much unction, the three *dosas* are vitiated simultaneously and the four *duśyas* (*tvak* etc.) attain laxity. Thus, the vitiated *dosas* get accommodated in these tissues and staying therein affect those *tvak* etc. morbidly and thus give rise to *kustha*.

Leprosy is considered to be hereditary and according to Ayurveda, the disease runs through generations.

तत्रादिबलप्रवृत्तं पौण्डरीकं काकणं चासाध्यम् ॥१९॥

(सुश्रुत-संहिता, अध्याय-V, निदानस्थान, पृष्ठ-41)

*Pundarika* (indicative of all major types of *kustha*) inherited from parents and *kakanaka* are incurable. By entering into successive *dhatu*s, they are capable of vitiating semen. This capability is not in minor *kustha* and as such they are not hereditary. *Kakanaka* is incurable because of its initiation by potent *tridosas* at the manifestation itself.

As a tree grows and penetrates deep into the earth, in course of time, with its roots developed by rains, *kustha* appeared in skin (*rasa*), after a long time, gradually permeates *dhatu*s, if not treated.

स्पर्शहानिः स्वेदनत्वमीषत्कण्डूश्च जायते ॥

वैवर्ण्यं रूक्षभावश्च कुष्ठे त्वचि समाश्रिते ॥२२॥

त्वक्स्वापो रोमहर्षश्च स्वेदस्याभिप्रवर्तनम् ॥

कण्डूर्विपूयकश्चैव कुष्ठे शोणितसंश्रिते ॥२३॥

बाहुल्यं वक्त्रशोषश्च कार्कश्यं पिडकोद्रमः ॥

तोदः स्फोटः स्थिरत्वं च कुष्ठे मांससमाश्रिते ॥२४॥

दौर्गन्ध्यमुपदेहश्च पूयोऽथ क्रिमयस्तथा ॥

गात्राणां भेदनं चापि कुष्ठे भेदः समाश्रिते ॥२५॥

नासाभङ्गोक्षिरागश्च क्षते च क्रिमिसंभवः ॥

भवेत् स्वरोपघातश्च ह्यस्थिमज्जसाश्रिते ॥२६॥

कौप्यं गतिक्षयोऽङ्गानां संभेदः क्षतसर्पणम् ॥

शुक्रस्थानगते लिङ्गं प्रागुक्तानि तथैव च ॥२७॥

स्त्रीपुंसयोः कुष्ठदोषाहुष्टशोणितशुक्रयोः ॥

यदपत्यं तयोर्जातं ज्ञेयं तदपि कुष्ठितम् ॥२८॥

(सुश्रुत-संहिता, निदानस्थान, अध्याय-V, पृष्ठ-42)

Loss of sensation, excessive perspiration, slight itching, discolouration and roughening – these are found in *kustha* located in skin (*rasa*). Numbness in skin, horripilation, excessive perspiration, itching and putrid smell appears in *kustha* located in blood. Largeness of patches, dryness of mouth, roughness, appearance of boils, pricking pain, cracking of skin and hardness – these are features of *kustha* located in muscle. Foul smell, excess of dirt, pus, organisms, tearing of body parts are signs of *kustha* located in fat. Falling of nose, redness in eyes, appearance of organisms in wound and loss of voice are the features of *kustha* located in bone and marrow. Crookedness and loss of movement in limbs, cracking, spread wound and also the aforesaid ones are the signs of *kustha* located in semen. If a man and a woman are victims of *kustha*, the male and female seeds (ovum and sperm) are vitiated which results in a progeny affected by *kustha*. When male and female seeds are damaged completely there would be no fertilisation while in case of partial affliction there would be abnormality in the child.

Leprosy was considered as a disease due to sins committed in the previous incarnation/or due to curse of God.

बह्वस्त्रीसज्जनवध्यपरस्वहरणादिभिः ॥

कर्मभिः पापयोगस्य प्राहुः कुष्ठस्य संभवम् ॥३०॥

(सुश्रुत-संहिता, निदानस्थान, अध्याय-V, पृष्ठ-43)

Killing of brahmana, women and saints, stealing others' property etc. give rise of *kustha*, a sinful disease.

म्रियते यदि कुष्ठेन पुनर्जातेऽपि गच्छति ॥

नातः कष्टतरो रोगो यथा कुष्ठं प्रकीर्तितम् ॥३२ ॥

(सुश्रुत संहिता, निदानस्थान, अध्याय-V, पृष्ठ-43)

If one dies with *kustha* it follows in re-birth too. Thus, there is no disease more difficult than *kustha*.

### Diagnosis

In Ayurveda, the examination of a patient is to be done by asking questions, by inspection and by touching the patient, that is, by palpation (दर्शनस्पर्शप्रश्नैः। परीक्षयेत् ॥)

Chapter-IV of Susruta-Samhita expounds on description of foetus, as propounded by Dhanwantri, also gives account of existence of *kustham* in the *Tamra* and *Vedini* layers of the skin.

तस्य खल्वेवंप्रवृत्तस्य शुक्रशोणितस्याभिपच्यमानस्य क्षीरस्येव सन्तानिकाः सप्त त्वचा भवन्ति। तासां प्रथमाऽवभासिनी नाम या सर्वान् वर्णानवभासयति पृष्ठविधां च छायां प्रकाशयति, सा ब्रीहेरष्टादशभागप्रमाणा, सिध्मपद्यकण्टकाधिष्ठाना; द्वितीया लोहिता नाम, षोडशभागप्रमाणा, तिलकालकन्यच्छव्यङ्गाधिष्ठाना; तृतीया श्वेता नाम, द्वादशभागप्रमाणा, चर्मदलाजगल्लीमषकाधिष्ठाना; चतुर्थी ताम्रा नामाष्टभागप्रमाणा, विविधकिलासकुष्ठाधिष्ठाना; पञ्चमी वेदिनी नाम, पञ्चभागप्रमाणा, कुष्ठविसर्पाधिष्ठाना; षष्ठी रोहिणी नाम, ब्रीहिप्रमाणा, ग्रन्थ्यपच्यबुद्दशलीपदगलगण्डाधिष्ठाना; सप्तमी मांसधरा नाम, ब्रीहिद्वयप्रमाणा, भगन्दर-विद्रध्यशोऽधिष्ठाना। यदेतत् प्रमाणं निर्दिष्टं तन्मांसलेष्ववकाशेषु, न ललाटे सूक्ष्माङ्गल्यादिषु च; यतो वक्ष्यत्युदरेषु- 'ब्रीहिमुखेनाङ्गुष्ठोदरप्रमाणमवगाढं विध्येत्' (चि.अ. १४) इति ॥४ ॥

(सुश्रुत-संहिता, शरीरस्थान, अध्याय-IV, पृष्ठ 150-151)

In a conglomerate of sperm and ovum (foetus), development takes place and consequently seven layers of *tvak* (skin) come into existence, like those of cream in milk. Of them, the first layer is known as *avabhasini* (lustrous) which illuminates all sorts of complexion and also brightens five types of shade. It measures eighteenth part of a

barley grain and is the seat of *sidhma* and *padmakantaka*; the second layer is known as *lohita* (red) which measures sixteenth part of a barley grain and is the seat of *tilakalaka*, *nyaccha* and *vyanga*; the third one is *sveta* (white) measuring one-twelfth of a barley grain and is the seat of *carmadala*, *ajagalli* and *masaka*; the fourth layer is *tamra* (coppery) measuring one-eighth of a barley grain and is the seat of various types of vitiligo and leprosy; the fifth layer is *vedini* (sensitive) measuring one-fifth of a barley grain and seat of leprosy and erysipelas; the sixth layer is *rohini* (healing) measuring two barley grains and seat of fistula-in-ano, abscess and piles. The measurement mentioned above is for muscular parts and not for forehead and small fingers etc.

The total depth of all the seven layers of skin is equal to breadth of the middle of thumb which measures six barley grains less one-twentieth part. This corresponds the stratum granulosum and corneum in biomedicine. Ayurveda describes loss of pigment, loss of sensation, loss of sweat, on excessive sweat and wrinkling of skin as the signs and symptoms of *kushtha* (bio-medicine adds to this the presence of *M.leprae* in the skin).

The outstanding symptom is described as loss of sensation. (अंगसाद सम्यग् विशेषतः स्पर्शनध्वानाम्।)

### Types and terminology

According to Sushrut, diseases of skin are divided into two groups. In one, there are seven major and eleven minor diseases. Amongst the major, *Arunkushtha* means tuberculoid leprosy. The term *mahagada* includes leprosy.

According to some authorities, *vatashonit* means gout. But, the symptoms of *vatashonit* are similar to that of pure neuritic leprosy in the beginning. *Raktapitta* means bleeding from natural orifices. In *Gujarati*, *raktapitta* means leprosy. The pure neuritic leprosy is also described as *vishvachi* (ulnar neuritis). *Grudhrasi* means sciatica, according to some. But the symptoms resemble neuritis of common peroneal nerve.

हूप्येते चरणो यस्य भवेतां च प्रसुपत्त्वत् ॥५५ ॥  
पादहर्षः सं विज्ञेयः कफमारूतकोपजः ।

(15/58 वातरोग)  
(अष्टाङ्ग हृदयम्, पृष्ठ-544)

The person whose both feet have tickling sensation along with of feeling of numbness indicates the ailment *pada-harsha*. The term *pada-harsha* indicates sensory loss of feet. This disease is caused by *kapha* and *vaat dosha*.

*Vathutavartma* means Lagophthalmos defect. It is due to defect of नेमिषिणी सिरा-सु. उ .३/२५  
(क्षुद्ररोग)

निमेषणीः सिरा वायुः प्रविष्टो वर्त्मसंश्रयाः ॥

चालयत्यति वर्त्मानि निमेषः स गदो मतः ॥

(सुश्रुत-संहिता, उत्तरतन्त्रात्मकः २५)

When *vayu* enters into blinking channels situated in eyelids and causes excessive movements of lids. It is known as *nimesa*.

Some read as 'so' *gado matah agadah* meaning painless. It is caused by *vata* and is incurable.

“उन्मेषणीः सिरा वायुः प्रविश्य चावतिष्ठते । अत्यर्थं चालयेद्  
वर्त्म निमेषः स न सिध्यति” ॥ (Sharma 2000).

Birthmark which is a differential condition is described as *Lanchhan or Nyachha*. Foot drop has been described as *kalayakhanja*. The tropic ulcer due to leprosy has been described and it is said that its treatment is unsatisfactory. Nodules on the ears have been described as *parilehi* (कर्णरोग).

Entropion has been described in Ayurveda as *pakshama ghat*. The term *prasupta* means Maculo-anaesthetic leprosy.

#### Treatment

The treatment of leprosy was always with multi-drugs in Ayurveda. *Tuvarak* oil which is Hydnocarpus oil or *Chaulmoogra* oil has been described. The patient was supposed to massage it and consumes it daily by increasing one drop per day. Hydnocarpus oil has been proved to be weak bacteriostatic for *M.leprae*. Today, oil massage with vegetable oil is a part of

physiotherapy for dry skin and contracted fingers. Ayurveda describes advantages of *abhyanga* with *vajrak* oil and *mahavajrak* oil that prevents contractures.

In *siravyadha* chapter, treatment for *grudhrasi* and *vishwachi* (newoolysis for ulnar neuritis) is described. It is said that the respective joints should be flexed and the *siras* should be cut. Does this indicate today's neurolysis? As *sira* means nerves too, according to some authorities.

For depressed bridge of nose, rhinoplasty has been described by Sushrut (600 BC) which is practiced even today. An operation performed near Pune city during the regimen of Tipu Sultan in 1792 is documented in 1794 by two British doctors in the Gentlemen's magazine in London as well as in the Madras gazetteer in that year (Dongre 2009).

Hence, one can infer that since ancient times, leprosy was recognised and treated in a systematic manner and scientific way in India.

#### Diet restrictions

विरुद्धाध्यशनासात्म्यवेगविघातैः स्नेहादीनां चायथारम्भैः  
पापक्रियया पुराकृत- कर्मयोगाच्च त्वग्दोषा भवन्ति ॥३ ॥

(सुश्रुत-संहिता, चिकित्सास्थान, अध्याय-IX, पृष्ठ-358)

Skin diseases, according to Dhanvantari, are caused by taking incompatible and unsuitable food, eating during indigestion, suppression of urges, faulty use of unction, sinful activities and mis-deed of previous birth.

तत्र त्वग्दोषी मांसवसादुग्धदधितैलकुलत्थमाषनिष्पावे-  
क्षुपिष्टविकारा म्लविरुद्धा-ध्यशनाजीर्णविदाह्वाभिष्यन्दीनि  
दिवास्वप्नं व्यवायं च परिहरेत् ॥४ ॥

(सुश्रुत-संहिता, चिकित्सास्थान, अध्याय-IX, पृष्ठ-358)

A person suffering from skin diseases should abstain from meat, muscle-fat, milk, curd, oil, horse gram, black gram, *nispava*, products of sugarcane and rice-flour, sour, incompatible, eating when previous food is not digested, uncooked, burning and slimy food, day-sleep and sexual intercourse.

तत्र शालिषष्टिकयवगोधूमकोरदूषश्यामाकोद्दालका-  
दीननवान् भुञ्जीत मुद्गाढक्योरन्यतरस्य यूषेण सूपेन  
वा निम्बपत्रारूष्करव्यामिश्रेण, मण्डूकपर्ण्यवल्गु-  
जाटरूष्करूपिकापुष्पैः सर्पिः सिद्धैः सर्षपतैलसिद्धैवा,  
तिक्तवर्गेण वाऽभिहितेन; मांससात्म्याय वा जाङ्गलमांसममेदस्कं  
वितरेत्; तैलं वज्रकमभ्यङ्गार्थं; आरग्वधादिकषायमुत्सादनार्थं;  
पानपरिषेकावगाहादिषु च खदिरकषायम्; इत्येष  
आहारचारविभागः ॥५॥

(सुश्रुत-संहिता, चिकित्सास्थान, अध्याय-IX, पृष्ठ-358)

Then one should eat old *sali* and *sastika* rice, barley, wheat, kodo, *syamaka*, wild kodo etc. with soup of either green gram or pigeon pea or with pulse mixed with *nimba* leaves and *bhallataka*; or with *mandukaparni*, *bakuci*, *vasa* and *arka* (flowers) cooked with ghee or mustard oil; or with bitter group (of vegetables) or fat-free meat of wild animals should be given to those having suitability to meat. *Vajraka taila* should be used for massage, *aragvadhadi kasaya* (paste or powder) for rubbing and decoction of *khadira* for intake, sprinkling and dipping bath etc. This is the injunction about food and activities.

Some do not accept mustard oil as it vitiates *rakta* and *pitta*; others, however, indicate it for *kustha*, caused by *vata* and *kapha*; *tikta-vargena*-bitter group such as *cakramardsa*, *bakuci*, *patola* etc.

## Leprosy and the Puranas

### The Padma Purana

Once, while describing about the importance of *Surya's* worship to Vaishampayan, Sage Vyasa narrated the following tale:

There lived a king named Bhadreshwar. He ruled over *Madhyadesh*. Once his left hand was infected with leprosy. Bhadreshwar, fearing the prospect of dreadful leprosy spreading to his whole body, decided to end his life. He expressed his desire to the head-priest. The head-priest cautioned Bhadreshwar that if he went ahead with his decision, then the whole kingdom would be destroyed. He said-"You" will be cured of leprosy, if you worship Lord *Surya*' (Sun).

The head-priest then told the king about the appropriate rituals of *Surya*-worship. King Bhadreshwar began his austerities and worshipped Lord *Surya* by chanting mantras and offering articles like *naivedya*, fruits, *ardhya*, *akshat* etc to the deity. He was cured of his leprosy within a year by the virtue of his deep devotion towards Lord *Surya*.

In another place also, there is a reference of a person suffering from leprosy in Padma Purana.

सुकर्मोवाच

तयोश्चपिद्विजश्रेष्ठमातापित्रोश्चस्ना ॥

पुत्रस्यापिहिसर्वोप-श्चस्ना तंत्यंबुकणायदा ॥१॥

सर्वतीर्थसमंस्नानंपुत्रस्यापिसुजायते ॥

पतितं विकलं वृद्धमशक्तं सर्वकर्मसु ॥२॥

व्याधितं कुष्ठिनं तातं मातरं च तथविधाम् ॥

उपाचरतियः पुत्रस्तस्य पुण्यवदाम्यहम् ॥३॥

विष्णुस्तस्य प्रसन्नात्मा जायते नात्र संशयः ॥

प्रयाति वैष्णवं लोकं यदप्राप्यं हियोगिभिः ॥४॥

पितरौ विकलौ दीनौ वृद्धावेतौ गुरुसुतः

महागदेन संप्रापतौ परित्यजति पापधीः ॥५॥

पुत्रो नरक्रमाप्रोतिदारुणं कृमिसंकुलम् ॥

द्वाभ्यां च समाहूतो गुरुभ्यामिह सांप्रतम् ॥६॥

(श्री पदमहापुराणम्, अध्याय-६३)

Sukarman said:

O best brahmana, the son properly gets (the religious merit of) a bath similar to the one in all the holy places when the drops of water, (falling from the bodies) of the mother and the father who have bathed, fall on the entire body of the son. I shall (now) tell you about the religious merit of the son who serves his father who is fallen, who is maimed, who is old, who is weak (in doing) all acts, who is ill, who is suffering from leprosy, and also his mother like that (i.e. in such a condition). There is no doubt that Vishnu has his mind pleased with him. He goes to Vishnu's heaven, unobtainable by (even) the mediating saints. That son of a sinful mind who abandons his parents who are maimed, helpless, old, or are suffering



from a serious disease, obtains (i.e. goes to) a terrible hell, full of worms (Bhatt 1990).

A couple (King-Shivsharma and his queen) had leprosy but were reaccepted in the society after cure (Dongre 2009).

### **The Garuda Purana**

During ancient times there lived a Brahmin named Kaushik in Pratishtanpur Nagar. He was afflicted with leprosy but still his wife was very chaste and faithful towards him. His wife used to be on her toes attending to all his demands and looking after all his requirements. But still, he used to scold and abuses his wife at the first given opportunity without any rhyme or reason. However, his wife did not mind his behaviour understanding quite well the frustrations of a man suffering from a dreaded disease like leprosy.

One day, something happened which made Kaushik extremely angry and in a fit of rage he made an impossible demand thinking that his wife would never comply with it giving him an opportunity to curse her to the satisfaction of his heart. Shouting angrily at his wife, Kaushik said: "Age has started showing effect on you. You do not look beautiful as before. You have also started neglecting me. Take me to a beautiful prostitute so that I can satisfy my sexual urge."

Kaushik's wife was deeply hurt by his rude and unfair remarks but she remained cool and calm. Being a chaste and faithful wife, she had no option but to obey her husband's command. So, she left for a prostitute's house carrying Kaushik on her shoulders.

The prostitute's house was far and it became dark while they were still on the way. Because of darkness, Kaushik's wife could not see sage Mandavya, who, in spite of his innocence, was given a severe punishment by the king. He had been made to sit on a pointed cone which after having penetrated through his body had pierced even his skull. But, being a great sage, Mandavya was engrossed in his meditation even in such a painful physical condition. Unfortunately, Kaushik's feet, which were hanging down the

shoulders of his wife, touched Mandavya's body. Mandavya's meditation was disturbed and he came out from his meditative level. As a result, he became conscious of his unbearable physical pain and cursed that whoever had disturbed his meditation would not live to see the next day.

Kaushik died the next day but his wife, who had full confidence in her power of chastity, knew that her husband would be alive once again. She cursed angrily: Mandavya has a misconception about his power. He thinks that only he can control the natural phenomena but, perhaps, he does not know what feats a chaste woman is capable of performing. It is my command to the Sun not to rise from tomorrow onwards and indeed, the Sun stopped rising from the next morning leading to catastrophic fallout. Everything went haywire in the world, which made the deities extremely worried. They went to Lord Brahma with a request to reveal why Sun had stopped rising. He told them that it was all due to the curse of a chaste woman and then he narrated the whole story. He revealed to them that nobody except Sati Anusuya was capable of bringing back order in the world. He advised them to seek the help of Sati Anusuya who was famous for her exceptional chastity. So, all the deities went to Sati Anusuya and requested her to make the Sun rise so that everything became orderly in the world once again. Sati Anusuya agreed to lend her help in bringing back normalcy in the world. She, by the virtue of her chastity, not only made the Sun rise daily but also made dead Kaushik alive once again. Such is the power commanded by a woman practicing the austerity of chastity. There are numerous examples of such women famous for their chastity and Lord Rama's wife, Sita, was one of them.

In the Matsya Purana, it is mentioned that the only parts of *Surya's* body that were not modified were the feet. No one can bear to look at *Surya's* feet and it is forbidden to visualise the sun-god's feet when one is praying to him. A person who does not follow this injunction is a sinner and is made to suffer from leprosy.

Further, it states that Samba, one of the sons of Lord Krishna, developed leprosy and was cured when he worshipped the Sun God at Konark. He was welcomed back home (Dwarka) with due honour and affection. A prince in Mahabharat named Devapi (Devashi), had leprosy (Sarkar 2001).

The Ganesh Purana cites the cases of king Somkant and king Rukmangad, who were under a curse and developed leprosy. They were cured when they worshipped Lord Ganesh after which they were accepted back as King (Dongre 2009).

In the Bhavishya Purana, it is noted that the courier/reporter of Gods, namely, Narad, had leprosy, cursed from Bhanumati, a princess from Sinval *dwip* (Dongre 2009).

#### The Parshuram Charitira

Renuka, the mother of Parshuram (an incarnation of Lord Vishnu) nursed 32 Gandharvas who had leprosy. She is recorded to have been world's first leprosy worker.

#### The Vedas

A highly learned person, Brahmavadin Mahagosha had leprosy but was reaccepted in the society after cure, mentions the Rig Veda. King Thav (Dhav) had leprosy but was reaccepted in the society after his cure (Dongre 2009).

The Atharva Veda, written centuries before the Manu Smriti, mentions of *kilar* and *shweta kushta* (Dongre n.d.).

#### Sri Guru Granth Sahib on leprosy

In Sri Guru Granth Sahib, the holy book of Sikhs, leprosy has been related to a disease of mind and soul of a person who has forgotten the *Naam* (the divine name of the Guru), who indulges in worldly riches and sins like allurement or attachment and who has been denounced and reprobated by the Guru.

जो सतिगुरि मारे तिन जाइ मिलहि रहदी खुहदी सभ पति गवाही ।।  
ओइ अगै कुसटी गुर के फिटके जि ओसु मिलै तिसु कुसटु उछाही ।।

(वाणी: गुरु राम दास जी, राग-गडड़ी खंड-1,  
पृष्ठ-308-309, लाइन-2)

Any person who meets such a person, who has been denounced by the true Guru, loses his good will and respect. That means they have already become like lepers; cursed by the Guru, whoever meets them is also afflicted by leprosy.

नाम विसारि मनि दुखु पाइआ ॥ माइआ मोहु सभु रोगु कमाइआ ॥  
बिनु नावै मनु तनु है कुसटी नाके वासा पाइदा

(वाणी: गुरु अमरदास जी, राग मारू, खंड-3, पृष्ठ-106,  
लाइन-9)

Any person who has forgotten the name of the *Guru* accumulates the pain and suffering of soul and body and other diseases like *maya* (allurement) and *moha* (attachment). Without the *naam* his mind and body are afflicted with leprosy and he obtains his home in hell.

ब्रह्मण कैली धातु कंजका अणचारी का धनु ॥

फिटक कोड़, बदीआ सदा सदा अभिमान ॥

(गुरु अमरदास जी, राग-सलोक वारां, खंड-4,  
पृष्ठ-1413, लाइन-4)

O fellow brother, killing Brahmaveta (an expounder of the Vedas) killing a cow, killing a daughter and the wealth of *durachari* (an immoral character) is worth reprobate. He is spiritually cursed with leprosy from inside, he is forever and ever filled with egotistical pride from the outside.

#### Ancient great men and leprosy

##### Laws of Manu

According to the code of Manu (dating between BC 1300-500), leprosy resulted in this life if one stole a Brahmin's gold. Also, to kill 100 cows was equal to killing one Brahmin; to kill 100 Brahmins was equal to killing one woman; to kill 100 women was equal to killing one child; to kill 100 children was equal to telling one lie. Only those whose sins equalled that of telling 100 lies would become lepers. The prescription for the treatment of leprosy included worshipping the snake or the sun or getting bitten by a cobra (Juggi 1973). Lowe felt that the Laws of Manu should not be regarded as conclusive proof of the prevalence of leprosy. But, when studied in relation to the Hindu medical

writings of a similar period; they afford strong evidence that leprosy was common (Oommen 2000).

भ्रामरी गण्डमाली च श्वित्र्यथो पिशुनस्तथा ।

उन्मत्तोऽन्वश्च वर्ज्याः स्युर्वेदनिन्दक एव च ॥१६१ ॥

( मनुस्मृति, अध्याय-3 )

An epileptic man, who suffers from scrofulous swellings of the glands, one afflicted with white leprosy, an informer, a madman, a blind man and he who cavils at the Veda must (all) be avoided purposefully they must all be left during the Vedayajna and ancestral worship.

वीक्ष्योन्धे नवतेः काणः षष्टेः श्वित्र्य शतस्य तु ।

पापरोगी सहस्त्रस्य दातुर्नाशयते फलम् ॥१७७ ॥

( मनुस्मृति, अध्याय-3 )

A blind man by his presence causes to the giver (of the feast) the loss of the reward for ninety (guests), a one-eyed man for sixty, one who suffers from white leprosy for a hundred and one punished by a (terrible) disease for a thousand.

नोन्मत्ताया न कुष्ठिन्या न च या स्पृष्टमैथुना ।

पूर्वे दोषानभिरव्याप्य प्रदाता दण्डमर्हति ॥२०५ ॥

( मनुस्मृति, अध्याय-8 )

He who gives (a damsel in marriage), having first openly declared her blemishes, whether she be insane or afflicted with leprosy or have lost her virginity, is not liable to punishment.

अन्नहर्ताऽऽमयावित्त्वं मौक्यं वागपहारकः ।

वस्त्रापहारकः श्वैत्र्यं पङ्गतामश्वहारकः ॥५१ ॥

( मनुस्मृति, अध्याय-11 )

A stealer of (cooked) food is afflicted by dyspepsia, a stealer of the words (of the Veda) suffers from dumbness, a stealer of clothes suffers from white leprosy and a horse-stealer becomes lame.

#### Sant Kabir

नाम जपत कुष्टी भला, चुड़ चुड़ परै जो चाम ।

कंचन देह केहि काम की, जा मुख नही नाम । ।

( कबीर साखी संग्रह, पृष्ठ-86 )

A leper, from whose wounds oozes out pus, but his thoughts are submerged with *Naam* and *Shabad* of the Lord, is way ahead and better than that of a person who has a beautiful healthy body and all worldly riches, who has forgotten the *Naam* of the Lord.

#### God Rama

God Rama is said to have contracted *kushta roga* but he was cured by taking a medicine made from fruit of *chaulmoogra* tree.

#### Kalidasa

Kumarasambhava is one of the Sanskrit epic poems written by Kalidasa. Kumarasambhava means the birth of the war god or Kartikeya, Lord Shiva's first son. The epic poem Kumarasambhava is divided into seventeen chapters or *sargas*. It is believed that Kalidasa was cursed with leprosy when he completed the eight chapter of Kumarasambhava. In this chapter, he described the act of love between Lord Shiva and Parvati.

#### Kalithogai

Srinivasan (2006) writes: "In Kalithogai, an ancient anthology of Tamil poetry (circa fourth century CE), there is a poem (Kurinjik Kali-64) that describes a scene in which a love-lorn maiden complains to her lady friend thus: "as you told me to, I went last night to the mango grove outside our village, to keep tryst with 'him'; and what a horrible time I had there! An old Brahmin, mutilated by 'dark' (leprosy) and who wouldn't dare enter the village, kept pestering me so incessantly that I had to run away from there without waiting for my beloved." Besides being the earliest reference to leprosy in Tamil literature that I could trace, this passage illustrates poignantly two serious consequences of leprosy experienced by affected persons even sixteen centuries ago namely, mutilation of extremities and rejection by the community (dehabilitation) and the close association between each other. Even today 'treatment' and 'cure' of the disease are not meaningful to most patients if these two consequences have not been thereby avoided or ameliorated."

### Kautilya's Arthashastra

Kautilya's Arthashastra mentions that if a man has no inclination, he may not lie with his wife who is afflicted with leprosy and if a woman is desirous of having sons, she may lie with men suffering from such a disease. This narration is concerned with marriage, the duty of marriage, the property of a woman and compensation of remarriage (Book-II, Chapter-II). Kautilya's Arthashastra has a reference of a similar kind of leprosy relating to a gem (syamika) which is brown and has variegated with large round spots (Book-II, Chapter-XI). Kautilya even mentions about rescission of purchase and sale of animals and suggested a fine of money in case the animals suffer from leprosy or other diseases (Book-II, Chapter-XV). Also, when a person is taunted for leprosy, lunacy, impotency and the like, he recommends a fine (Book-II, Chapter-XVIII).

Kautilya goes to the extent of mentioning attack of leprosy on elephants and their subsequent behaviour becoming obstinate (Book-IX, Chapter-I).

Regarding the etiology of leprosy, it is mentioned in Arthashastra that the smoke caused by burning the mixture of *Krikalasa* and *Grihagaulika* causes leprosy (Book-XIV, Chapter-I). Kautilya mentions that a person will have leprosy in course of a month if any of the part of the body is rubbed with a paste of *Tinduka* (glutinosa) and *Arishta* (soap-berry), the dung of a cow smeared with a juice of *Bhallataka* (*Semecarpus anacardium*). (Book-XIV, Chapter-II). He also suggests a decoction as a remedy for leprosy (Book-XIV, Chapter-IV).

### The Tulasi Ramayana

One can find reference of leprosy in the Tulasi Ramayana as conversational question and answering between Garuda and Kakabusundi. The seven questions asked by Garuda to Kakabusundi were:

- i. Which form of all is the most difficult to obtain?
- ii. Which is the greatest misery?

- iii. Which is the highest pleasure?
- iv. What are the innate disposition of or the essential characteristics of the saints and of the evil-minded?
- v. Which is the highest religious merit made known in the Vedas?
- vi. Which is the most terrible sin?
- vii. What is the disease of the mind?

While referring the disease of leprosy, Kakabusundi replied that a note must be made on the disease of the mind from which everyone suffers. Infatuation is the root of all ailments and from these again arise many other troubles. Lust is a counterpart of wind and inordinate greed corresponds to an abundance of phlegm; while anger represents bile which constantly burns the breast. Should all these three combine, there results what is known as *sannipata* (a derangement of the aforesaid three humours of the body causing dangerous type of fever). The cravings for the manifold pleasures of the sense, so difficult to realise, are the various distempers, which are too numerous to name.

The feeling of meanness corresponds to ring-worms, envy represent itches, while joy and grief correspond to a disease of the throat marked by an excessive enlargement of the glands (goiter). Grudging contemplation of others' happiness represents consumption; while wickedness and perversity of soul correspond to leprosy. Egotism is the counterpart of the most painful gout; while hypocrisy, deceit, arrogance and pride correspond to the disease known as Dracontiasis (which is marked by the presence in the body of a parasite known as the guinea-worm). Thirst for enjoyment represents the most advanced type of dropsy; while the three types of craving (those for progeny, to be rich and honour) correspond to the violent *quartan* ague. Jealousy and thoughtlessness are the two types of fever. There are many more feel diseases, too numerous to mention.

### The Tulsi Ghat

This *ghat* (a landing-stair) signifies the win of truthful and righteous over evil. It is believed that the first enactment of the story of Lord Rama was conducted on this *ghat*. *Tulsi ghat* is another important *ghat* of Varanasi. It is associated with number of important activities such as bath of *Lolarkkunda* (to be blessed with sons and their long life) and the sacred bath to get rid of leprosy.

### Jainism

The references of leprosy is also found in one of the pilgrimage centres - Sri Palanpur *Tirth*. King Prahalad settled this city and named it as Prahaladanpur. Later on, the name was changed into Palanpur. Its history can be traced to the thirteenth century of the *Vikram* era. Since, it was built by king Prahalad; this temple became famous as the temple of Prahaladan Prashvanath. Today, it is known as the temple of Pallaviya Parshvanth. This brave king melted the metal idol of Delvada in Abu and made an idol of Shiv's riding bull. Soon, he began to be pained by leprosy. In agony, he, at last, went to a forest. There he happened to meet Acharyasthri Shalibhadrasurisvarji. He repented for what he had done and then according to the instructions and with blessings of the Acharya, he made a temple of Bhagawan Parshvanath. He poured on his body the water with which the idol was bathed and cured of his disease of leprosy. King Prahalad then became a follower of the Jain religion.

### Leprosy in the Quran

Warning against the disease leprosy, the Prophet Mohammed (PBUH) said "Escape away from the Leprous the way one escapes away from the Lion (Bukhari)". The greatness of the directive of the Prophet (PBUH) appears in the fact that he advised people not to gaze at leprosy. He said: "Do not gaze at leprosy" (Refer to Irshand Elsari to Sharh of Bukhari). The modern science proved that when the leprosy sees a healthy or normal person, he gazes at him and then suffers from psychological pain. Therefore, the advice of the Prophet was to respect the feelings of the leprosy.

The saying of the Prophet asked people to run away from the leprosy as they run away from the lion. That shows the dangerous nature of this disease which can be transferred easily and its overwhelming nature. Modern science also advises people to avoid leprosy people so long as the disease they nurse is active and not neutralised and its activity is not suspended by the use of the available resistant. (Samed 2009).

Dongre (2009) has also mentioned the references of leprosy in Quran. Prophet shook hands and took food with leprosy patients.

(Shahih Bukhari: Vol: 4, Bk: 55)

#### A. Hadiths: (Reports)

Bukhari: Fear about leprosy (Shahih Bukhari, Vol: 7, Bk: 71)

Alert by Abdullah bin Umar through valley of Asfan

Abu naim – keep distance, eat olive oil

Musnad abu, Tiyasi – hair in nose prevent infection

#### B. Shariat: Muslim Marriage Act 1939, the rules for dissolution of marriage for leprosy patients are mentioned (Shahih Bukhari, Vol: 7, Hadith 1368)

Hanafi school – wife can sue for dissolution

Imam Shafi – both can ask for dissolution

Imam Muhammed – wife can sue only for leprosy

Sayyid Maududi – leprosy causes break in compassion, so dissolution marriage tie should not cause harm

#### C. Wasayat: 'Will' for leprosy patients, (Shahih Bukhari: Vol: 4, Bk: 51)

Four Imams – Patient can be legator or legatee

#### D. Hiba: gift for benefit, patient can take or give (Shahih Bukhari, Vol: 3, Bk: 41)

Inheritance – Consanguinity/marriage with patient, inheritance possible.



- E. Wakf: Charity (Shahih Bukhari: Vol. 2, Bk 524)  
For ailing humanity. Patient can form Wakf.  
(Dongre 2009).

### **Christianity and leprosy**

#### **Leprosy in the Old Testament**

While it is interesting to note that there is no authentic evidence of the existence of leprosy in any country further back than about 600 BC, yet the curse 'May you be stricken with leprosy and blindness' is of very ancient origin. It is upon references to leprosy and blindness as the worst types of punishment which could befall mankind that Skinsnes (1964) bases his opinion that biblical leprosy was actually the leprosy we know today. He suggests that in ancient times diseases were not particularly well differentiated and if he were to choose a disease which bore out the significance of such a curse, he could think of no worse disease than leprosy with its long course, its terrible mutilation and its end results. The assumption that diseases were not differentiated accurately enough to recognise the existence of leprosy in days as far back as 1500-2000 BC cannot altogether be substantiated for. In the early Babylonian times, we find excellent descriptions of disease; for instance, epilepsy was well known and well described. It would seem extraordinary that if the ancients knew epilepsy and could describe it accurately, they would miss the equally obvious, or at any rate advanced, leprosy; and nowhere, as it has already been pointed out, can one align any description of a condition or conditions, translated as leprosy, with the disease, which we know as leprosy today.

It is problematic whether leprosy existed in Egypt at the time of the bondage of the Children of Israel. Nevertheless, even assuming that it did, there is no evidence that the diseases, described in the Levitical record, included leprosy. If classical leprosy had occurred among the tribes of Israel, there surely would have been a more accurate description of it. In the absence of such a description, it seems to Cochrane (1963) reasonable to conclude that, in those early days,

Abraham and his descendants were careful to separate themselves from the surrounding people. The first sign of this separation is seen in the story of Lot and Abraham, when Lot chose all the plain of Jordan (Genesis 13: 11-14) and Abraham went on and chose the more unpromising land away from the cities. During the time of the Egyptian captivity the Children of Israel were segregated in the land of Goshen and there was no integration between the slave people of Israel and the proud Egyptians. In this connection, Lowe (1942) states that: "Unless more recent work has produced new evidence, it appears that we have no definite proof that leprosy was common or even known in ancient Egypt. We have to come to far later times for the first definite reference to leprosy in Egypt".

#### **Diseases included in the Levitical record under the term 'leprosy'**

The first mention of leprosy in the Old Testament is found in Exodus (4: 6). Other references are found in Numbers 12:10, with reference to Miriam and Aaron's complaint against Moses, and in verses 9 and 10 it states that "the anger of the Lord was kindled against them; and he departed. In addition, the cloud departed from off the tabernacle; and, behold, Miriam became leprous, white as snow...".

In neither of these two references to leprosy could it possibly have been the disease as we know it today, for the lesions of leprosy are never white. A further reference to leprosy is found in 2 Kings 5: 27. It is interesting to note that leucoderma in India is referred to as 'white leprosy' and those who suffer from leucoderma are fearful of this disfigurement, for they believe it is related to leprosy (Cochrane 1963).

Turning now to the Leviticus record of the description of leprosy in Leviticus 13, it is interesting to note that there is not one single sign by which one could attribute the conditions there described to leprosy as we know it today. In the first place, it should be noted that all the references to leprosy are preceded by the definite

or indefinite article. In Leviticus 13: 2, 'like the plague of leprosy'. The same phraseology occurs in verses 3, 5, 6, and in verse 8, 'it is leprosy'; in verse 11, 'it is an old leprosy', and in verse 12, 'and if leprosy breaks out'. In other words, this description suggests that 'the plague of leprosy' does not cover one single disease, but blemishes caused by any one of a whole group of diseases which cause a person so afflicted to be ceremonially unclean before the Lord. Further, one reads that a person who is suspected of having leprosy is frequently separated from the camp for periods of seven days. Leviticus 13:6 reads: 'And the priest shall look on him again the seventh day: and, behold, if the plague be somewhat dark and the plague spread not in the skin, the priest shall pronounce him clean; it is but a scab... . But in verses 7 and 8, the description obviously refer to a deep-seated ulcer which is much more than a mild break in the skin and may be of the nature of a phagedenic ulcer, which, in the period described, would spread and not heal and would therefore be considered to be 'a leprosy'. There is an interesting reference in verse 13 to the plague having 'all turned white'. This would suggest that albinism was not classified as 'a leprosy', but the whiteness of psoriasis was probably included because it refers to the fact of 'raw flesh appearing', for it is well known that when one scrapes the surface of a patch of psoriasis small bleeding points occur. However, this description might refer to the fact that there has been an extensive condition of the skin, which has left its tell-tale marks, but is no longer active. In verse 30, an interesting word is used - scalp; and in the latter part of the verse it is a dry scalp. The Shorter Oxford Dictionary defines 'scalp' as 'a scaly or scabby disease of the skin, especially of the scalp and appears to be synonymous with psoriasis'. Gramberg (1952), however, translates the word 'scalp' as 'an itch' and suggests that this description covers fungal disease such as favus or tinea capitis. It is further interesting to note that in verse 26 of chapter 13 of the Levitical record, the words describing the development of leprosy

are 'somewhat dark'. The instruction then is to continue to observe the person for a further seven days and if the darkness 'spread much abroad in the skin, then the priest shall pronounce him unclean: it is the plague of leprosy verse 27. But in the very next verse 28, it states 'if the bright spot stay in his place, and spread not in the skin, but it be somewhat dark; it is a rising of the burning, and the priest shall pronounce him clean'. The former description obviously refers to a progressive disease, possibly, again, some form of tinea. In verse 28, the reference probably is to a hyper-pigmentation taking place after an inflammatory affliction of the skin, for it is well known that, particularly in the dark skin, when inflammation occurs the end result is a permanent hyper-pigmented spot or area. Gramberg (1952) states that the three most important words in the description of leprosy in Luther's translation, namely *se'th*, *sappahath* and *bahereth* were translated 'tumor, ulcer, and blister', not as 'swelling, eruption and spot'. Chapter 14 of the Book of Leviticus concludes: "To teach when it is unclean, and when it is clean: this is the law of leprosy". Chapters 13 and 14 are preoccupied with the difficulty of interpreting and applying this law, as the following examples from chapter 13 show. If Leviticus is regarded as a handbook for priests to help them diagnose leprosy and distinguish it from less serious skin afflictions, these verses illustrate how difficult this was. They circle and return obsessively to the spot, blemish or sore in question in the attempt to decide whether it is clean or unclean. There are two details in the Levitical record which cannot apply to leprosy- its 'whiteness' and the affection of the scalp. In the first place, leprosy lesions are *never* white. In the second place, leprosy of the scalp very rarely occurs and does not occur apart from advanced lepromatous leprosy. In the Old Testament, the only possible description that could fit leprosy is the reference to Uzziah (2 Chronicles 26: 19). 'This could be a form of true leprosy, because, in Africa particularly, the forehead is a predilection site for an initial lesion

of leprosy. However, it could be a patch of leucoderma for, in the Old Testament, leprosy is always mentioned as white and under emotional strain the surrounding erythematic of the skin might make a leucoderma spot more obvious (Cochrane 1963).

One could take each of the Levitical descriptions of leprosy and relate them to one or other of the various skin diseases but not to classical and modern leprosy. Infections such as a carbuncle, or extensive favus of the scalp, or ringworm of the body, all these came within the description of 'the plague of leprosy' in the Levitical record. In addition to this, various ulcerative conditions in the scalp and beard area are also put down to 'a plague of leprosy'. Deep-seated infections of the hair follicle, such as impetigo, may well be included in these descriptions. *Sycosis barbae* in all probability was also among the diseases included in the term leprosy. *Nowhere is there any suggestion that leprosy is associated with anaesthesia!* The laws of the cleansing of the 'leper' are so meticulously laid down that one is bound to conclude that in the Old Testament record provision was made for the cleansing of the patient who had 'the plague of leprosy' and that healing of the disease was a common phenomenon. It appears, therefore, that one must conclude that in the Levitical record, there is no evidence that any of the diseases so described and actually diagnosed as leprosy had any relationship to the disease known as leprosy today.

Simons (1950) is of the opinion that 'Old Testament *tsara'ath* was not present-day leprosy' and that 'the word was a collective noun for numerous skin diseases'. Muir (1948) wrote: "The highly contagious condition described in the Jewish Law has obviously nothing to do with leprosy". Llendrum (1952) states that 'Leviticus 13 and 14 demonstrate to the most sceptical that the word which is translated as leprosy did not apply to the condition officially called "leprosy" at the present day and indeed did not define a disease entity at all'. It is interesting to note that Tas (1953)

and Israeli scholars stress that 'at the time of the Septuagint the word *lepra* meant nothing but a symptom: scaled skin'. In conclusion, therefore, it will be noted that only a small minority of physicians, notably Sitanala (1937) and Ketting (1922, cf. Cochrane 1963), maintained that the word *Tsara'ath* should be translated as leprosy, but the consensus of opinion is that the disease we now know as leprosy was not described before 600 BC and that there is no evidence of the existence of leprosy at the time of Israel's bondage. The conclusion, therefore, in regard to the Old Testament is that a disease, or a group of diseases, the mere mention of which struck terror into the hearts of men, was referred to in the Old Testament in connection with ceremonial purposes, and that such sufferers were unclean before the Lord until they were healed and ceremonially cleansed. Cochrane (1963) trust that "he has given sufficient evidence to convince his readers that if we translate the Hebrew word *Tsara'ath* in the Old Testament as leprosy, without any explanatory note whatever, we are making an error, for the consensus of opinion among those who have studied the subject is that *Tsara'ath* was a generic name for a group of diseases, and there is no evidence whatever that the Children of Israel suffered from leprosy in any form. Therefore, one is in error if one takes what is a conception of a group of diseases, representing ceremonial uncleanness, and applies it to one specific disease."

#### **Leprosy in the New Testament**

This conception of holiness without blemish was carried over into the New Testament. In Ephesians 5: 25-27 with reference to the Church, Paul says: 'As Christ loved the church, and gave himself for it; That he might sanctify and cleanse it... and present it... a glorious church, not having spot, or wrinkle, or any such thing; but that it should be holy and without blemish.' The apostle Paul is referring to the Song of Solomon, which is accepted as being the love story of Christ and His Church: 'Thou art all fair, my love; there is no spot in thee' (4: 7). There are only three references to

Christ's cleansing 'the leper'. The first of these is recorded by the three synoptic writers (Matthew 8: 1-4; Mark. 1: 40-45; Luke 5: 12-14). Luke adds a physician's touch, 'full of leprosy'. The second incident is recorded only by Luke, that of the ten 'lepers' (Luke. 17: 12-19). It may be significant that the word 'healed' in connection with leprosy was used only in Luke's account of the cleansing of the ten lepers. Further, the Lord did not repeat the command to go to the priest to the Samaritan, for the Samaritan did not recognize the Jewish priesthood. Tradition has it that Luke belonged to the School of Hippocrates, and nowhere in the Hippocratic writings, which Cochrane (1963) has been able to trace, is there an accurate description of leprosy. Leprosy, in these writings, is confused with many other diseases. Nevertheless, it may be that this was the case of true leprosy, for leprosy was known in Israel by the time the Lord was on earth. Whether this was so is immaterial to his argument, for the Lord was a Jew and would apply the Jewish Law to all such cases, for they would be included among the many who had permanent blemishes. There is only one other reference in the Gospels to leprosy, and that is the statement that Jesus visited the house of Simon, the leper (Mathew 26: 6; Mark, 14: 3). It is right to assume that Jesus had cleansed Simon. It was in Simon's house that Mary anointed Jesus' head with precious ointment. This was symbolic of the anointing of Aaron and his sons with the holy anointing oil (Philippians 133: 2; Exodus 30: 25-30) consecrating him and his sons to the High-Priestly offices of meditation, intercession and forgiveness after the synoptic Gospels there is no reference to leprosy. Surely this was because Jesus, being a Jew, came to fulfill the Law (Mathew 5: 17), and He therefore accepted and honoured the Mosaic code and bade the cleansed 'leper' go to the priest 'and offer for thy cleansing those things which Moses commanded' (Mark 1: 44). The Lord, in so far as biblical leprosy was concerned, fulfilled the Law of Moses. While no mention of leprosy occurs after the Lord's

resurrection and ascension, this idea of ostracism and shame is found in Hebrews 13: 12, 13 Here we are reminded that the Lord and Savior took upon him all the shame and the sin, and suffered without the gate. He also took upon Himself the guilt and penalty of sin, thus identifying Himself with the stricken of God (leprosy). We too, in accepting His great salvation and the gift of His Holy Spirit, in the eyes of the world bear the same reproach, for He died for us 'without the gate' and we are, thereby, 'made nigh by the blood of Christ' (Ephesians 2: 13).

### **The exegetical interpretation of leprosy in the Old and New Testaments**

The key to the understanding of the condemnation of 'the leper' in the Old Testament is found in Exodus 19: 6, 1 Peter 2: 9 and Revelation 21: 2, 11. Further, we have the same injunction to holiness in Leviticus 20: 7: 'In Leviticus 10: 10 comes the command and stern directive, following on the committal of gross sin in the realm of worship, to 'put difference between holy and unholy, and between unclean and clean' The derivation of the word 'holy' is the same as that of the words 'health' and 'wholeness', and, therefore, anything that was unhealthy (unholy) was a defilement in the camp of Israel. Cochrane (1963) has received confirmation from a Chief Rabbi that to translate the word *Tsara'ath* as 'defiled' or 'stricken' is correct so far as the Hebrew is concerned. If, then, instead of adopting the conventional translation of the word *Tsara'ath* as 'leprosy', we give it its correct meaning - defilement - we are at once reminded that in the Old Testament scriptures there were two kinds of defilement.

- i. *The defilement of temporary uncleanness* - related in Leviticus 12 and 15. In Leviticus 15: 31 the word of God says: "Thus you shall separate the children of Israel from their uncleanness, lest they die in their uncleanness when they defile my tabernacle that is among them". Restoration to communion and fellowship was allowed after certain days of separation and after the



sacrifice of a lamb or two turtle doves. Nothing that is unclean or ungodly must, therefore, defile the camp of Israel. Paul also has this in mind when in 1 Corinthians 3: 16, 17 he says: 'Know you not that you are the temple of God ... the temple of God is holy, which temple you are.' The apostle reiterates the same thought in 6: 19, 20 and ends with the exhortation, 'therefore glorify God in your body, and in your spirit, which are God's'.

- ii. *The defilement of permanent uncleanness*—This usually resulted in perpetual separation from the camp of Israel. Only exceptionally was this defilement removed. The Hebrew word *Tsara'ath* covered all those conditions which resulted in a prolonged separation of the offending individual from the camp of Israel. This more serious uncleanness was found in a group of maladies, or infections, which by virtue of disease of the body were dangerous to others, or, in the case of garments and houses, were dangerous by virtue of contamination. From temporary defilement there was a hope of recovery; therefore laws for the cleansing of such persons were formulated. In this latter instance, however, the defiling condition was dangerous and irremediable: therefore, the garment was burnt (Leviticus 13: 52) and the house had to be demolished (Leviticus 14: 34-57). It was this group of conditions, symbolical of permanent defilement, which came under the sentence - 'Unclean, unclean ... without the camp shall his habitation be' (Leviticus 13: 45, 46). This interpretation is strengthened by the alternative rendering in the marginal reference of Isaiah 53: 8, 'For the transgression of my people was the stroke (the curse) upon him', alluding to the curse of the crucified (Galatians 3: 13 and Deuteronomy 21: 23) (Cochrane 1963). The Table 1 may assist in comparing the malignant condition described in Lev. 13 with some forms of modern clinical leprosy.

The Hebrew word *Tsara'ath*, therefore, was used for a disease or blemish which showed itself as gross or permanent defilement of man or materials. This word, however, was translated [The word 'leprosy' was first found in the Latin Vulgate translation, where the Greek word 'lepros' (scaly) - feminine 'lepra' - was translated into Latin as *leprosus*. The Greek Physician, Claudius Galenus, in the year AD 150, gave an accurate account of 'leprosy', and called the disease *Elephantiasis graecorum* 'leprosy', and the sufferer 'a leper', because, in the days when the Bible was translated into English, leprosy, because of its mysteriousness, its mutilating power and its incurability, was symbolic of all that was dreadful in the life of man. The modern disease of leprosy bears no resemblance to that described in the Bible, and in any case only a small fraction of leprosy cases among the total who are afflicted can be described as loathsome to look upon. The full significance of the verse in Isaiah 53: 4 is brought home in the Vulgate rendering. General Mac Arthur, the eminent and erudite medical historian, reminds us that this verse in the Latin Vulgate translation reads: 'We did esteem Him as if He were leprous, smitten of God and afflicted.' In Wycliffe's translation the rendering is: 'Vereli ourse sicknesses he took, and cure sorrows he bar; and wee heel den hymn has leprous, smyten of God, and milked (afflicted) of God. And verse 8 of the same chapter by the same token should be rendered, 'For the transgression of my people was He leprous - was the stroke or curse upon Him.' Browne (1962) emphasises the significance of the ceremonial aspect in regard to leprosy, for he says: 'The ancient Jewish attitude, based on the mosaic code, was essentially concerned with a ceremonial uncleanness, and secondarily with a scaly skin disease, possibly infectious. 'Further, as Sir, MacArthur (1953), pointed out in his article on 'Mediaeval leprosy' in the British Isles, the word 'leper' comes from a Greek word meaning a scale or parchment, and the Latin word for book (*liber*) has the same



**Table 1 : Comparative account of leprosy in Leviticus-13 and biomedicine**

<b>Malignant <i>sara'at</i></b>	<b>Hansen's Disease</b>
Papules or nodules on shiny or erythematous skin patch.	Typical of lepromatous leprosy. Skin patch may also exhibit edema.
Hypo-pigmentation and spreading of patch.	Seen in maculo-anesthetic leprosy, tuberculoid leprosy, and the indeterminate group of leprosy.
Pinkish-white patches. Cuticular crusts.	Diffuse cutaneous erythema.
Subcutaneous nodules.	Low-grade pustulation common.
Loss of scalp hair associated with a cutaneous lesion. (Scalp lesions rare?).	Seen in nodular lepromatous leprosy.
Leucotrichia	Seen in diffusely infiltrated lepromatous leprosy.. Hair loss can occur in different areas of the body.
A sore on the site of a burn.	Not reported in modern leprosy.
Coppery-coloured hair in a facial or scalp lesion.	Anesthetic skin patches sometimes become infected.
Skin ulcers. Disease "deeper than the skin".	Hair-colour changes from black to coppery reported both in children and adults with some forms of leprosy.
\ "Quick raw flesh".	Scaly lesions rare.
White, spreading eruption, "no deeper than the skin".	Lepromatous ulcers.
"Appearance of leprosy".	Subcutaneous nodules either ready to ulcerate or erupting, seen in lepromatous leprosy. Ulceration or inflammation of lepromatous nodules? Hypopigmented, slightly raised lesions seen in minor tuberculoid leprosy. Leonine facies, indurated skin typical of diffusely infiltrated lepromatous leprosy.

**(Source: Harrison 1986)**

origin. It must therefore be concluded that historically, medically, exegetically and almost certainly etymologically there is no justification for applying the Old Testament conception of leprosy to the disease we now know by that name (Cochrane 1963).

It appears that the British fright about diseased oysters has become an apprehension not merely

of ptomaine poisoning but actually of leprosy, which has not heretofore been a British malady. The connection between fish eating and leprosy is so far established that it seems to be only in ichthyophagous countries that leprosy occurs. But how and why it occurs there nobody has satisfactorily explained.

According to Jonathan Hutchinson, "Neither

contagion nor the crusades, but Christianity was responsible for the prevalence of leprosy in Europe during the Middle Ages." He adds that: "Wherever Catholic missions are successful, there is increase of leprosy," and that the facts "show that a convert from Hinduism to Roman Christianity incurs at one an enormously increased risk of becoming a leper." This risk is, of course, the compulsory or permissive use of fish on fast days of the Catholic church. Unconverted Hindus, of course, abstain from animal food, but the prejudice against it seems to disappear with their conversion. As Hutchinson puts it: "Conversion to a creed which imposes the use of fish on one or two days at least of every week increases the risk enormously". He estimates that a Catholic convert runs twenty times as much risk of leprosy as an unconverted Hindu.

All this is not reassuring to the British public. Rather on the contrary, the reassurance comes in when Hutchinson says definitely that "there is no danger whatever from sound fish, whether fresh or cured. The danger comes when decomposition commences." In hot climates fish soon become tainted, salt is apt to be dear, and partly decomposed fish is in some places preferred for its flavour to fresh. The statistics, cited by authority, are very curious and come near to being convincing. In India at large there are but five cases of leprosy to 10,000 inhabitants, but of three communities in which the inhabitants live by fishing, the proportion rises, respectively, to 50,150, and 500 in 10,000. Hutchinson seems to be warranted in saying that the preponderance of the disease among converts to Catholicism "given the coup de grace to the belief in the contagiousness of leprosy". (The New York Times, June 7, 1903; cf. query. nytimes.com).

St. Leviticus, St. Mathres, St. Lukes, St. Mark have referred to the disease as it was understood at the time. According to some authorities disease mentioned in the Old testament was not leprosy. Leprosy was most probably unknown at the time of Moses-Cochrane.

Turning now to the Leviticus record of the description of leprosy in Leviticus 13, it is interesting to note that there is not one single sign by which one could attribute the conditions there described to leprosy as we know it today.

It must, therefore, be concluded that historically, medically, exegetically and almost certainly etymologically there is no justification for applying the Old Testament conception of leprosy to the disease we now know by that name.

### **Leprosy and astrology**

The Indian astrology, like its counterparts elsewhere, scrutinized seven planets-Sun, Moon, Saturn, Jupiter, Mars, Venus and Mercury-to establish the changing relationship between them and the earth, and also their shifts in relation to each other.

The major preoccupation of astrologers was to draw up horoscopes, noting the date and hour of birth which would define the *nakshatra*, the position of the seven planets of the celestial world and twelve zodiac signs.

Astrologers are also consulted to decide appropriate course of action, location of missing goods, prospects of wealth and astral cures for sickness (Oberoi 1994).

In astrology, planetary influences on individuals may cause leprosy. Like the individuals with Zodiac signs of Cancer, Capricorn and Pisces cause diseases of blood such as cancer, leprosy, gout, fistula, etc. It also mentions *Ketu* inflicting a body with ailments like leprosy, cancer, paralysis, etc. Skin afflictions including leprosy could be on account of the ill effects of Saturn.

Astral remedies for certain planets which influence body infliction with leprosy could be found in astrology. The importance of precious and semi precious gems find place in remedial measures towards leprosy and other skin disease. For example, red coral, which is a gem for planet Mars, cures leprosy, hypertension and diseases of children. Mention of Yellow sapphire for the

cure of leprosy and skin diseases is found to evade the ill-effects of Jupiter. It is claimed that Cinnamon stone cures leprosy and leukaemia.

### Conclusion

The notions and ideas relating to the etiology of the disease, leprosy, remained naive till 1981. The predominant reasons for the origins of this disease remained same as indicated in ancient literature. Almost all the religions have had some points of discussion on leprosy which indicates that it is a very old disease. There are discussions relating to its cure in many ancient texts and religions and the then prevailing notion to consider leprosy incurable, is unjustified. Generally, religious texts propound that leprosy is caused due to sins of previous births. But, some of the religious texts mention that sins committed in present lifetime do cause this disease. Nevertheless, Gopal observes that Holy books of all main religions have degraded the leprosy affected persons by either referring to them in the name of the disease or cursing wrongdoers with leprosy in the next carnation (Nath 2009). According to hymn of Sant Kabir, God has never discriminated against leprosy patients. There is also a belief that this disease is caused due to influence of individual planets or due to combined effect of planets. Based on the discussions on religious texts, there is a need to create a positive atmosphere in the society, free from any feeling of discrimination against the leprosy patients. These texts completely support the idea of not to discriminate against the sufferers of leprosy.

### Acknowledgements

The authors are thankful to University Grants Commission, New Delhi for the award of a Major Research Project. The authors are also indebted to the Panjab University authorities and the Chairperson, Department of Anthropology, Panjab University, Chandigarh for extending infrastructure and the facilities.

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