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Ayurveda And Oral Health: A Review

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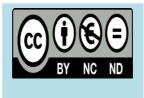
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ABSTRACT: -

Oral diseases pose a major health burden for many countries and affect people throughout their lifetime, causing pain, discomfort, disfigurement and even death. Most oral health conditions are largely preventable and can be treated in their early stages. However the conventional treatment options are too expensive considering the fact that most of the oral diseases dis-proportionally affect the poor and socially-disadvantaged members of society There is a global need for alternative preventive and therapeutic options for the management of oral diseases. Ayurveda, the traditional system of medicine of India has an extensive literature regarding the etiopathogenesis and various treatment aspects of Oral diseases. In the present review an attempt has been made to collect and compile the literature pertaining to oral diseases and their treatment in various Classical texts of Ayurveda. It was observed that most of the single herb remedies for oral diseases mentioned in Ayurveda like *Yasti madhu* (*Glycyrrhiza glabra*),*Triphala* etc possess anti-microbial and anti-inflammatory properties which further substantiate their claims. It was also found that Ayurveda focus more on prevention-oriented management of oral disease than treatment-centered practice. Ayurvedic methodologies for maintaining oral health are found to be far more economical, safe and can be easily adopted by the general public.

Key words: Ayurveda, Traditional medicine, Oral health



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INTRODUCTION

Oral diseases pose a major health burden for many countries and affect people throughout their lifetime, causing pain, discomfort, disfigurement and even death¹. These diseases share modifiable risk factors with other major non communicable diseases². Oral conditions remain a significant public health challenge. Unmet demand for dental services reached approximately 3.5 billion cases in 2017, and it is likely to keep increasing³. Untreated dental caries (tooth decay) in permanent teeth is the most common health condition according to the Global Burden of Disease 2017. Severe periodontal (gum) disease, which may result in tooth loss, is also very common, with almost 10% of the global population affected. Treatment for oral health conditions is expensive and usually not part of universal health coverage (UHC). Most oral health conditions are largely preventable and can be treated in their early stages. Oral diseases disproportionally affect the poor and sociallydisadvantaged members of society. There is a very and consistent association strong between socioeconomic status (income, occupation and educational level) and the prevalence and severity of oral diseases⁴.

There is a global need for alternative preventive and therapeutic options for the management of oral diseases. Ayurveda is a form of traditional holistic medicinal system originating in the Indian subcontinent region. Its advent and practice in the region reportedly date back about 3000-5000 years. Recently, it has gained popularity as complementary medicine in other parts of the world⁵. The aim of Ayurveda is to guarantee both preventive and curative benefits to the mankind.

The eight branches of Ayurveda have elaborately explained the methods for diagnosis as well as treatment of diseases affecting different parts of body separately. '*Shalakya Tantra*' is one of the branches dealing with diseases of head and neck. Ancient texts of Ayurveda explain the significance of this section differently. Extensive literature is available in *Charaka Samhita, Susruta Samhita, Astanga* Hridaya regarding the etiopathogenesis and various treatment aspects of Oral diseases. In the present paper a review of the oral diseases explained in various Ayurvedic texts and various preventive and curative treatment options of *Ayurveda* in the management of oral diseases has been dealt with.

MATERIALS AND METHODS

Oral diseases and their treatment methodology was compiled from Classical texts of Ayurveda like Charaka Samhita, Sushruta Samhita and Ashtanga Hridaya, Astanga Sangraha etc.. Research studies pertaining to single herbs were searched from various databases like Google scholar, Pubmed etc.

Oral diseases in Ayurveda

According to the '*Charaka Samhita*' sixty-four varieties of diseases of mouth are described, depending on the variations in their *sansthan* (location), *dushya* (tissue elements which are vitiated), *aakriti* (signs and symptoms) and *nama* (name)⁶ (table no. 01). It has been classified in to four types, viz., *vatika, paittika, kaphaja* and *sannipaatika*⁷. These are described under the specialized branch of Ayurveda, "*shalakya tantra*" which deals with the diseases of head and neck, according to their etiology, signs and symptoms, characteristic features and treatment⁸. The diagnosis and treatment of the four types of mouth-diseases

are described in *CharakaSamhita*^{9.10}. *SusrutaSamhita*'also explains the diagnosis and treatment of diseases of the mouth in detail^{11,12}. It contains total sixty -five number of diseases of the mouth, localized in seven *aaytana* (seats)viz, *oshtha* (lips-8),*dantamula* (roots of the teeth, gums-15), *danta* (teeth-8),*jihva* (tongue-5),*talu* (palate-9),*kantha* (throat-17) and the entire mouth (3)^{13,14}. According to *Ashtanga Hridya* and *Ashtanga sangraha*, diseases of mouth are seventy-

five in total, in which diseases of *oshth* (lips) are eleven ,disease of *ganda* (neck) is one ,diseases of *danta* (teeth) are ten, diseases of *dantamula* (roots of the teeth) are thirteen, diseases of *jihva* (tongue) are six , diseases of *talu* (palate) are eight, diseases of *gala* are eighteen, diseases of *vaktra* (mouth) are eight¹⁵. Table no 01,02,03 and 04 explains oral diseases and their remedies mentioned in different *samhitas*.

Table no.01 showing some of common oral diseases and drugs mentioned for their treatment in Charaka Samhita¹⁶

S.N.	Oral disease name	Useful drug
1.	Vataja mukharoga	Kalak churna
2.	Pittaj mukharoga	Pitak churna
З.	Kaphaja mukhar <mark>oga</mark>	Mridikadi churna
4.	Mukhapaka (stomatitis)	Triphala kwatha
5.	Kantha roga (diseases of neck)	Kshar gutika, pathadi churna
6.	All Danta <mark>,mukha,g</mark> ala roga	Khadiradi Gutika

Table no:02 showing some common oral diseases and drugs mentioned for their treatment in Susruta Samhita¹⁷

S.N.	Oral disease nam <mark>e</mark>	Useful drug
1.	<i>Shitad</i> (spongy gu <mark>m</mark>)	Triphala
2.	Dantapupput(gum boil)	Pancha lavana, y <mark>ava kshara</mark>
3.	Dantavestak(pyorrhea)	Kshiri vriksha
4.	Sushir (gingivtis)	Kshiri vriksha
5.	Upakusha (pyorrhea)	Trikatu, vetasphala
6.	Dantavaidarbh	Kshara (Alkali)
7.	Adhimamsa (Impacted tooth)	Pippali(Pepper) churna, triphala
8	Kaphaj jihvakantak	Sarshapa (Mustard), saindhava lavana (Rock Salt)
9.	Galashundika(Uvulitis)	Nimba, vacha (sweet flag), patha(Cissampelos Pareira)
10.	Vatajarohini(Diphtheria)	Panchalavana
11.	Pittaj rohini	Draksha kwatha
12.	Kaphaj rohini	Vidanga, saindava lavana danti(Red physic nut) kawal
13.	Vataj sarvsara	Panchlavana
14.	Vataj osth roga,(cracked lips)	Guggulu, Yashti madhu (Licorice) churna
15.	Kaphaj osth roga,(macrochelia)	Trikatu,kshar
16.	Medaja osth roga(cheilitis)	Priyangu(Perfumed cherry),triphala and lodra churna

Table no.03 showing some common oral diseases and drugs mentioned for their treatment in *Ashtanga* Samgraha¹⁸

S.No	Oral disease nan	ne	Useful drug
1.	Khandostha (cleft	t lip)	Shata dhout ghrit
2.	<i>Kaphaj osth</i> (macrochelia)		Vyosh
3.	Shitadant(bleedinggum)		Anutail ,kshirivriksh kasaya
4.	Dantaharsha (sensitivetooth)	<u> </u>	Ela (Elettaria cardamomum) ,kusth (Saussurea lappa) ,patli gandush
5.	Danta chala		Dashmula kwath,triphala
6.	Danta sarkara(Ta	urar)	Kshara tail
7.	Krimi danı caries)	a(dental	Sarshapa (mustard), karanja tail
8.	Shitad(spongy gu	m)	Rasanjan, triphala, arjuna (Terminalia arjuna)
9.	Upkusha (Pyorrho	ea)	Maricha (Piper nigrum), kusth(Saussera lepa), madhuk(Madhuca indica), priyangu (Callicarpa macrophylla)
10.	Dantapupuut (dentoalveolar ab	scess)	Svarjika (Alkali), madhuk (Madhuca indica), sunthi, (Zingiber officinale) saindav(rock salt)
11.	Dantvidradi		Kusth (Saussurea lappa),katuka (Picrorhiza kurroa) ,yavankshar,triphala
12.	Susir		Lodra (Symplocos racemosa), musta (Cyperus rotundus), triphala, kshirivriksha
13.	Adimans (Impacted tooth)		Yava kshar
14.	Danta vaidarbh	E	Kshar (alkali), lodra (Symplocos racemosa), manjishtha (Rubia cordifolia), madhuk (Madhuca indica).
15.	Dantanadi (oral sinus)	X	kshirivriksha , guda (jaggery) ,madhu (honey),sarspa tail(mustard oil).
16.	<i>Talupaka</i> (ulceration of Pal	ate)	Kasis (Ferrous Sulphate), rasanjan, kshodra(honey), patoladi kwath
17.	<i>Talushosha</i> (cleft palate)		Madhuk (Madhuca indica),pippali (piper longum) ,nagar
18.	Kanthroga		Rasanjan, nimb kwath,vyosh,triphala
<i>19</i> .	Vataj rohini		Mahapanchmula kwath,ela(Elettaria cardamomum) ,kapith (wood apple)
20.	Pittaj rohini		Patang (Caesalpinia Sappan), lodra, draksha ,triphala,
21.	Kaphaj rohini		Triphala, saindhv (rock salt), nimb (neem) ,jati (Jasminum grandiflorum), vidang (Embelia ribes)
22.	<i>Gala</i> <i>vidradi</i> (Paraphary abscess)	ngeal	Lodhra (symplocas racemossa),rasanjan,kiratiktaka kwath
23.	<i>Galagand</i> (goiter)		Tila (sesame), priyal (Buchanania lanzan), mulak, (radish) atsi (Flax plant), nimb(margosa), guduchi (Tinosporia cordifolia)

	Review Article.
Mukhapaka	Triphala kwath, mridvika, patha (Cissampelos pareira), jati(Jasminum
(stomatitis)	grandiflorum),
Vataj mukhapaka	Dashamula, kakoli (Roscea procera wall.), sariva kwath ,pippali(Piper
	longum)(salt) ,lavan
Pittaj mukharoga	Kshir (milk),draksha(Vitis vinifera) ,manjistha (rubia cordifolia) ,
	Lodhra(symplocas racemossa),
Kaphaj mukharoga	Kshar, lavan, nirgundi (Vitex negundo), davdaru, ativisa (Aconitum
	heterophyllum),danti (Baliospermum montanum)
Sarvaj mukhapaka	Rochanna, kasis Ferrous Sulphate., rasanjan, mocharasa (exudates of
	Bombax malabarica)
Arbuda	Muskak bhasma, madhu (honey) tail(oil) ,nimb (margosa) , guduchi
	kwath
	(stomatitis) Vataj mukhapaka Pittaj mukharoga Kaphaj mukharoga Sarvaj mukhapaka

Table no:4 showing some common oral diseases and drugs mentioned for their treatment in Ashtanga Hridaya¹⁹

Hriad	5	
1.	Khandosth	Yasthyadi tail,mhasneha
	(Cleft Iip)	
2.	Pittaj osthroga(Aphthous	Rodhra (symplocas racemossa), sarjrasa, (Vateria indica)
	ulcer)	guduchi (Tinosporia cordifolia)
З.	Kaphaj ostharoga	Patha (Cissampelos pareira), kshar, vyosh
	(macrochelia)	
4.	Medoj ostharoga(cheilitis)	Priyangu (Callicarpa macrophylla) ,rodhra (symplocas
		racemossa), trip <mark>hala</mark>
5.	Jalaarbuda(cyst in lips)	Kshodra(honey),Kshar, pippali (piper longum) ,maricha (piper
		nigrum)
6.	Shitadanta	Dadim (PUNICA GRANATUM), twak
	(spongy gums)	(Cinnamomum cassia), takshrya, kshirini kwath, anu tail
7.	Dantaharsha	Til(sesame), yastimadhu (glycyrizza glabera)
	(sensitive tooth)	
8.	Prachal dwija	Dashamulambu, tutth (Copper sulphate) ,rodra (symplecos
		racemose)
9.	Adidanta (extra tooth)	Ksharen,
10.	Danta sharkara	Kshar churna
	(tarter)	
11.	Krimidanta(dental caries)	Saptaparnaarka ksheer
12.	Shitad (spongy gums)	Musta (Cyperus rotendus), arjuna (Terminalia arjuna), twak
		(Cinnamomum cassia) ,triphala
13.	Upakusha	Laksha (Laccifer lacca) priyangu (Callicarpa macrophylla), kusth
	(Pyorrhea)	(sausarrea lapa), maricha (Piper nigrum), rasanjan
14.	Dantapupput	Yasthyadi, swarjika, shunthi (zingiber officinalis), saindev(rock
	(Palatal abscess)	salt)
15.	Danta vidradi	Katuka (Picrorhiza kurroa), kusth (Saussurea lappa), yava
		(Barley)

16. Soshir Rodra (Elaeocarpus ganitrus), mushia, mishi, kinshuk (Butea monosperma), yasthyadi pakva tail 17. Adimansk Patol (Trichosanthes dioica), nimb (margosa), triphalakwath, vachal (Acorus calamus), tejovati (ZANTHOXYLUN ARMATUM) 18. Dantavidarbha Kshar, kshirivrikshaambu, jati, madan, khadir 19. Talupaka Kasis,takshrya 20. Talushosha Kana, shunthi (ingiber officinalis), dhanvmansrasa 21. Kanharoga Dari (Berberis aristata), twak(Cinnamomum cassia), nimb (Margosa), takshrya, haritaki kasaya 22. Vataj rohini Panchamulaambu 23. Pittaj rohini Priyangu (Callicarpa macrophylla), sita, draksha (vitis vinifera), parushka kwath 24. Kaphaj rohni Apamarga (Achyranthes aspera), sveta, danti, saindev 25. Vatajalgand Ajagandha, palasa, gunja,vatskalirva tail 26. Kaphajalagand Ajagandha, palasa, gunja,vatskalirva tail 27. Medojgalgand Ajagandha, palasa, gunja,vatskalirva tail 28. Mukhapaka (stomatitis) Triphala,din,iridvika 29. Vatajmukhapak Krishanaadya 30. Arbuda (tumor) Svarijka,nagar,kshodra,guduchi,iniba 31. Putimukha			Review Article.
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21. Kantharoga Darvi (Berberis aristata), twak(Cinnamomum cassia), nimb (Margosa), takshrya, haritaki kasaya 22. Vataj rohini Panchamulaambu 23. Pittaj rohini Priyangu (Callicarpa macrophylla), sita, draksha (vitis vinifera), parushka kwath 24. Kaphaj rohni Apamarga (Achyranthes aspera), sveta, danti, saindev 25. Vatajgalganda (goitre) Guduchi, nimb, kutaj, hanspadi, bala 26. Kaphajgalgand Ajagandha, palasa, gunja, vatskadirva tail 27. Medojgalgand Asanadi churna 28. Mukhapaka (stomatitis) Triphala, patha, jati, mridvika 29. Vatajmukhapak Krishanaadya 30. Arbuda (tumor) Swarjika, nagar, kshodra, guduchi, nimba 31. Putimukha Samanga, dhatki, rodhra, padmak 32. Kanthadi roga (diseses of throat) Triphala, kiratiktadi, katurikadi, mustha, haridra, khadirsara 33. Sarvmukharoga (diseses of oral cavity) Khadir .jambu, madhuyasthi, nilotpala, jatipatra 34. Mukha danta gala vikara Takshrya, patha, yosh, ghradhuma 37. Danta aasya galaamya (diseases of throat) Darvi, (Berberis aristata), wak (Cinnamomum cassia), sindu , manashila, haratatal, pitak churna Davit, (Berber			-
(Margosa), takshrya, haritaki kasaya22.Vataj rohiniPanchamulaambu23.Pittaj rohiniPriyangu (Callicarpa macrophylla), sita, draksha (vitis vinifera), parushka kwath24.Kaphaj rohniApamarga (Achyranthes aspera), sveta, danti, saindev25.Vatajgalganda (goitre)Guduchi,nimb, kutaj, hanspadi, bala26.KaphajgalgandAjagandha, palasa, gunja, vatskadirva tail27.MedojgalgandAsanadi churna28.Mukhapaka (stomatitis)Triphala, patha, jati, mridvika29.VatajmukhapakKrishamaadya30.Arbuda (tumor)Swarjika, nagar, kshodra, guduchi, nimba31.PutimukhaSamanga, dhatki, rodhra, padmak32.Kanthadi roga (diseases of throat)Triphala, kiratiktadi, katutrikadi, mustha, haridra, khadirsara throat)33.Sarvmukharoga (diseses of oral cavity)Khadir , jambu, madhuyasthi, nilotpala, jatipatra34.Mukhadushika (acne), vyanga (blemishes)Prapunat, rodhra, darvi (blemishes)35.Dansamansa, arti, kandu, paka (diseases of throat/oral cavity)Darvi (Berberis aristata), wak (Cinnamomum cassia), sindu (diseases of throat)38.Galaamya (diseases of throat)Darvi (Berberis aristata), shunthi (zingiber officinalis), triphala, vishala (Citrulius colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia)44.Mukha saka shaishanPatoi(Citrulius colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia)	20.	Talushosha	
22. Vataj rohini Panchamulaambu 23. Pittaj rohini Priyangu (Callicarpa macrophylla) ,sita, draksha (vitis vinifera), parushka kwath 24. Kaphaj rohni Apamarga (Achyranthes aspera), sveta, danti, saindev 25. Vatajgalganda (goitre) Guduchi,nimb,kutaj,hanspadi,bala 26. Kaphajgalgand Ajagandha,palasa, gunja,vatskadirva tail 27. Medojgalgand Asanadi churna 28. Mukhapaka (stomatitis) Triphala,patha,jati,mridvika 29. Vatajmukhapak Krishanaadya 30. Arbuda (tumor) Swarjika,nagar,kshodra,guduchi,nimba 31. Putimukha Samanga,dhatki,rodhra,padmak 32. Kanthadi roga (diseses of oral cavity) Triphala,kiratiktadi,katutrikadi,mustha,haridra,khadirsara 33. Sarvmukharoga (diseses of oral cavity) Prapunat,rodhra,darvi (blemishes) Otansamansa,arti,kandu.paka Patha ,darvi,twak,kusth,musta,tikta,rodhra 35. Dansamansa,arti,kandu.paka Patha ,darvi,twak,kusth,musta,tikta,rodhra 36. Mukha danta gala vikara Takshrya,patha,vyosh,ghradhuma 37. Danta aasya galaamya (diseases of throat/oral cavity) Darvi,(Berberis aristata) ,twak (Cinnamomum c	21.	Kantharoga	
23. Pittaj rohini Priyangu (Callicarpa macrophylla) ,sita, draksha (vitis vinifera), parushka kwath 24. Kaphaj rohni Apamarga (Achyranthes aspera), sveta, danti, saindev 25. Vatajgalganda (goitre) Guduchi,nimb,kutaj,hanspadi,bala 26. Kaphajgalgand Ajagandha,palasa, gunja,vatskadirva tail 27. Medojgalgand Asanadi churna 28. Mukhapaka (stomatitis) Triphala,patha,jati,mridvika 29. Vatajmukhapak Krishanaadya 30. Arbuda (tumor) Swarjika,nagar,kshodra,guduchi,nimba 31. Putimukha Samanga,dhatki,rodhra,guduchi,nimba 32. Kanthadi roga (diseases of triphala ,kiratiktadi,katutrikadi,mustha,haridra,khadirsara throat) 33. Sarvmukharoga (disease of oral cavity) Prapunat,rodhra,darvi 34. Mukhadushika (acne), vyanga Prapunat,rodhra,darvi 35. Dansamansa,arti,kandu,paka Patha ,darvi,twak,kusth,musta,tikta,rodhra 36. Mukha danta gala vikara Takshrya,patha,vyosh,ghradhuma 37. Danta aasya galaamya (diseases of throat) Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu (diseases of throat) 38. Galaamya (diseases of throat) Saptachdadi kwa			
parushka kwath24.Kaphaj rohniApamarga (Achyranthes aspera), sveta, danti, saindev25.Vatajgalganda (goitre)Guduchi,nimb,kutaj,hanspadi,bala26.KaphajgalgandAjagandha ,palasa, gunja,vatskadirva tail27.MedojgalgandAsamadi churna28.Mukhapaka (stomatitis)Triphala,patha,jati,mridvika29.VatajmukhapakKrishanaadya30.Arbuda (tumor)Swarjika,nagar,kshodra,guduchi,nimba31.PutimukhaSamanga,dhatki,rodhra,padmak32.Kanthadi roga (diseases of triphala ,kiratiktadi, katutrikadi,mustha,haridra,khadirsara33.Sarwnukharoga (diseses of oral cavity)Khadir ,jambu,madhuyasthi,nilotpala,jatipatra34.Mukhadushika (acne), vyangaPrapunat,rodhra,darvi(blemishes)Dansamansa,arti,kandu,pakaPatha ,darvi,twak,kusth,musta,tikta,rodhra37.Dansa asya galaamya (diseases of throat/oral cavity)Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,manashila, haratal, pitak churna38.Galaamya (diseases of throat)Duvishar, vara, panchapatu, vyosha, takshrya39.Mukha paka (stomatitis)Saptachdadi kwath40.Mukha gada shaishanPatol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia)41.MukhasthDarvi,(Berberis aristata) gairik,kshodra	22.	*	
24. Kaphaj rohni Apamarga (Achyranthes aspera), sveta, danti, saindev 25. Vatajgalganda (goitre) Guduchi,nimb,kutaj,hanspadi,bala 26. Kaphajgalgand Ajagandha, palasa, gunja,vatskadirva tail 27. Medojgalgand Asanadi churna 28. Mukhapaka (stomatitis) Triphala,patha,jati,mridvika 29. Vatajmukhapak Krishanaadya 30. Arbuda (tumor) Swarjika,nagar,kshodra,guduchi,nimba 31. Putimukha Samanga,dhatki,rodhra,padmak 32. Kanthadi roga (diseases of throat) Triphala, kiratiktadi, katutrikadi,mustha,haridra,khadirsara 33. Sarvmukharoga (diseses of oral cavity) Khadir ,jambu,madhuyasthi,nilotpala,jatipatra 34. Mukhadushika (acne), vyanga Prapunat,rodhra,darvi (blemishes) Darvi,(Berberis aristata) , twak (Cinnamomum cassia), sindu (diseases of throat) 37. Dansamansa,arti,kandu,paka Patha ,darvi,twak,kusth,musta,tikta,rodhra 38. Galaamya (diseases of throat) Darvi,(Berberis aristata) , twak (Cinnamomum cassia), sindu (diseases of throat) 39. Mukha paka (stomatitis) Saptachdadi kwath 40. Mukha gada shaishan Patol(Trichosanthes dioica) , shunthi	23.	Pittaj rohini	
25.Vatajgalganda (goitre)Guduchi,nimb,kutaj,hanspadi,bala26.KaphajgalgandAjagandha ,palasa, gunja,vatskadirva tail27.MedojgalgandAsanadi churna28.Mukhapaka (stomatitis)Triphala,patha,jati,mridvika29.VatajmukhapakKrishanaadya30.Arbuda (tumor)Swarjika,nagar,kshodra,guduchi,nimba31.PutimukhaSamanga,dhatki,rodhra,padmak32.Kanthadi roga (diseases of throat)Triphala ,kiratiktadi,katutrikadi,mustha,haridra,khadirsara33.Sarvmukharoga (diseases of throat)Khadir ,jambu,madhuyasthi,nilotpala,jatipatra34.Mukhadushika (acne), vyanga (blemishes)Prapunat,rodhra,darvi (blemishes)35.Dansamansa,arti,kandu,pakaPatha ,darvi,twak,kusth,musta,tikta,rodhra36.Mukha danta gala vikaraTakshrya,patha,vyosh,ghradhuma37.Danta (aasya galaamya (diseases of throat/oral cavity)Darvi,(Berberis aristata) , twak (Cinnamomum cassia), sindu (diseases of throat)38.Galaamya (diseases of throat)Patol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia)41.MukhasthDarvi,(Berberis aristata) gairik,kshodra			parushka kwath
26.KaphajgalgandAjagandha ,palasa, gunja,vatskadirva tail27.MedojgalgandAsanadi churna28.Mukhapaka (stomatitis)Triphala,patha,jati,mridvika29.VatajmukhapakKrishanaadya30.Arbuda (tumor)Swarjika,nagar,kshodra,guduchi,nimba31.PutimukhaSamanga,dhatki,rodhra,padmak32.Kanthadi roga (diseases of throat)Triphala ,kiratiktadi,katutrikadi,mustha,haridra,khadirsara33.Sarvmukharoga (diseses of oral cavity)Khadir ,jambu,madhuyasthi,nilotpala,jatipatra34.Mukhadushika (acne), vyanga (blemishes)Prapunat,rodhra,darvi35.Dansamansa,arti,kandu,pakaPatha ,darvi,twak,kusth,musta,tikta,rodhra36.Mukha danta gala vikaraTakshrya,patha,vyosh,ghradhuma37.Danta aasya galaamya (diseases of throat)Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,manashila, haratal, pitak churna38.Galaamya (diseases of throat)Saptachdadi kwath40.Mukha gada shaishanPatol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia)41.MukhasthDarvi,(Berberis aristata) gairik,kshodra			
27.MedojgalgandAsanadi churna28.Mukhapaka (stomatitis)Triphala,patha,jati,mridvika29.VatajmukhapakKrishanaadya30.Arbuda (tumor)Swarjika,nagar,kshodra,guduchi,nimba31.PutimukhaSamanga,dhatki,rodhra,padmak32.Kanthadi roga (diseases of throat)Triphala ,kiratiktadi,katutrikadi,mustha,haridra,khadirsara33.Sarvmukharoga (diseses of oral cavity)Khadir ,jambu,madhuyasthi,nilotpala,jatipatra34.Mukhadushika (acne), vyanga (blemishes)Prapunat,rodhra,darvi (blemishes)35.Dansamansa,arti,kandu,pakaPatha ,darvi,twak,kusth,musta,tikta,rodhra36.Mukha danta gala vikaraTakshrya,patha,vyosh,ghradhuma37.Danta aasya galaamya (diseases of throat/oral cavity)Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,manashila, haratal, pitak churna38.Galaamya (diseases of throat)Saptachdadi kwath40.Mukha gada shaishanPatol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia)41.MukhasthDarvi,(Berberis aristata) gairik,kshodra			
28. Mukhapaka (stomatitis) Triphala,patha,jati,mridvika 29. Vatajmukhapak Krishanaadya 30. Arbuda (tumor) Swarjika,nagar,kshodra,guduchi,nimba 31. Putimukha Samanga,dhatki,rodhra,padmak 32. Kanthadi roga (diseases of throat) Triphala ,kiratiktadi,katutrikadi,mustha,haridra,khadirsara 33. Sarvmukharoga (diseases of oral cavity) Khadir .jambu,madhuyasthi,nilotpala,jatipatra 34. Mukhadushika (acne), vyanga (blemishes) Prapunat,rodhra,darvi 35. Dansamansa,arti,kandu,paka Patha ,darvi,twak,kusth,musta,tikta,rodhra 36. Mukha danta gala vikara Takshrya,patha,vyosh,ghradhuma 37. Danta aasya galaamya (diseases of throat/oral cavity) Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,manashila, haratal, pitak churna 38. Galaamya (diseases of throat) Saptachdadi kwath 40. Mukha gada shaishan Patol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia) 41. Mukhasth Darvi,(Berberis aristata) gairik,kshodra	26.		
29. Vatajmukhapak Krishanaadya 30. Arbuda (tumor) Swarjika,nagar,kshodra,guduchi,nimba 31. Putimukha Samanga,dhatki,rodhra,padmak 32. Kanthadi roga (diseases of throat) Triphala ,kiratiktadi,katutrikadi,mustha,haridra,khadirsara 33. Sarvmukharoga (diseses of oral cavity) Khadir .jambu,madhuyasthi,nilotpala,jatipatra 34. Mukhadushika (acne), vyanga (blemishes) Prapunat,rodhra,darvi 35. Dansamansa,arti,kandu,paka Patha ,darvi,twak,kusth,musta,tikta,rodhra 36. Mukha danta gala vikara Takshrya,patha,vyosh,ghradhuma 37. Danta aasya galaamya (diseases of throat/oral cavity) Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,manashila, haratal, pitak churna 38. Galaamya (diseases of throat) Saptachdadi kwath 40. Mukha gada shaishan Patol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia) 41. Mukhasth Darvi,(Berberis aristata) gairik,kshodra	27.		Asanadi churna
30. Arbuda (tumor) Swarjika,nagar,kshodra,guduchi,nimba 31. Putimukha Samanga,dhatki,rodhra,padmak 32. Kanthadi roga (diseases of throat) Triphala ,kiratiktadi,katutrikadi,mustha,haridra,khadirsara 33. Sarvmukharoga (diseses of oral cavity) Khadir ,jambu,madhuyasthi,nilotpala,jatipatra 34. Mukhadushika (acne), vyanga (blemishes) Prapunat,rodhra,darvi 35. Dansamansa,arti,kandu,paka Patha ,darvi,twak,kusth,musta,tikta,rodhra 36. Mukha danta gala vikara Takshrya,patha,vyosh,ghradhuma 37. Danta aasya galaamya (diseases of throat/oral cavity) Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,manashila, haratal, pitak churna 38. Galaamya (diseases of throat) Saptachdadi kwath 40. Mukha gada shaishan Patol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia) 41. Mukhasth Darvi,(Berberis aristata) gairik,kshodra	28.	Mukhapaka (stomatitis)	Triphala,patha,jati,mridvika
31. Putimukha Samanga,dhatki, rodhra, padmak 32. Kanthadi roga (diseases of throat) Triphala ,kiratiktadi,katutrikadi,mustha,haridra,khadirsara 33. Sarvmukharoga (diseses of oral cavity) Khadir ,jambu,madhuyasthi,nilotpala,jatipatra 34. Mukhadushika (acne), vyanga (blemishes) Prapunat,rodhra,darvi 35. Dansamansa,arti,kandu,paka Patha ,darvi,twak,kusth,musta,tikta,rodhra 36. Mukha danta gala vikara Takshrya,patha,vyosh,ghradhuma 37. Danta aasya galaamya (diseases of throat/oral cavity) Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,manshila, haratal, pitak churna 38. Galaamya (diseases of throat) Saptachdadi kwath 40. Mukha gada shaishan Patol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia) 41. Mukhasth Darvi,(Berberis aristata) gairik,kshodra	29.	Vatajmukhapak	Krishanaadya
32. Kanthadi roga (diseases of throat) Triphala ,kiratiktadi,katutrikadi,mustha,haridra,khadirsara 33. Sarvmukharoga (diseases of oral cavity) Khadir ,jambu,madhuyasthi,nilotpala,jatipatra 34. Mukhadushika (acne), vyanga (blemishes) Prapunat,rodhra,darvi 35. Dansamansa,arti,kandu,paka Patha ,darvi,twak,kusth,musta,tikta,rodhra 36. Mukha danta gala vikara Takshrya,patha,vyosh,ghradhuma 37. Danta aasya galaamya (diseases of throat/oral cavity) Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,maashila, haratal, pitak churna 38. Galaamya (diseases of throat) Dvikshar, vara, panchapatu, vyosha, takshrya 39. Mukha gada shaishan Patol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia) 41. Mukhasth Darvi,(Berberis aristata) gairik,kshodra	30.	Arbuda (tumor)	Swarjika,nagar,kshodra,guduchi,nimba
throat)Khadir ,jambu,madhuyasthi,nilotpala,jatipatra33.Sarvmukharoga (diseses of oral cavity)Khadir ,jambu,madhuyasthi,nilotpala,jatipatra34.Mukhadushika (acne), vyanga (blemishes)Prapunat,rodhra,darvi35.Dansamansa,arti,kandu,pakaPatha ,darvi,twak,kusth,musta,tikta,rodhra36.Mukha danta gala vikaraTakshrya,patha,vyosh,ghradhuma37.Danta aasya galaamya (diseases of throat/oral cavity)Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,manashila, haratal, pitak churna38.Galaamya (diseases of throat)Dvikshar, vara, panchapatu, vyosha, takshrya39.Mukha paka (stomatitis)Saptachdadi kwath40.Mukha gada shaishanPatol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia)41.MukhasthDarvi,(Berberis aristata) gairik,kshodra	31.	Putimukha	Samanga,dhatki,rodhra,padmak
33.Sarvmukharoga (diseses of oral cavity)Khadir ,jambu,madhuyasthi,nilotpala,jatipatra34.Mukhadushika (acne), vyanga (blemishes)Prapunat,rodhra,darvi35.Dansamansa,arti,kandu,pakaPatha ,darvi,twak,kusth,musta,tikta,rodhra36.Mukha danta gala vikaraTakshrya,patha,vyosh,ghradhuma37.Danta aasya galaamya (diseases of throat/oral cavity)Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,manashila, haratal, pitak churna38.Galaamya (diseases of throat)Dvikshar, vara, panchapatu, vyosha, takshrya39.Mukha paka (stomatitis)Saptachdadi kwath40.Mukha gada shaishanPatol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia)41.MukhasthDarvi,(Berberis aristata) gairik,kshodra	32.	e i i	Triphala ,kiratiktadi,katutrikadi,mustha,haridra,khadirsara
cavity)Prapunat,rodhra,darvi34.Mukhadushika (acne), vyanga (blemishes)Prapunat,rodhra,darvi35.Dansamansa,arti,kandu,pakaPatha ,darvi,twak,kusth,musta,tikta,rodhra36.Mukha danta gala vikaraTakshrya,patha,vyosh,ghradhuma37.Danta aasya galaamya (diseases of throat/oral cavity)Darvi,(Berberis aristata) ,twak (Cinnamomum cassia), sindu ,manashila, haratal, pitak churna38.Galaamya (diseases of throat)Dvikshar, vara, panchapatu, vyosha, takshrya39.Mukha paka (stomatitis)Saptachdadi kwath40.Mukha gada shaishanPatol(Trichosanthes dioica) ,shunthi (zingiber officinalis) , triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia)41.MukhasthDarvi,(Berberis aristata) gairik,kshodra	33		Khadir jambu madhuyasthi nilotnala jatipatra
34.Mukhadushika (acne), vyanga (blemishes)Prapunat,rodhra,darvi35.Dansamansa,arti,kandu,pakaPatha ,darvi,twak,kusth,musta,tikta,rodhra36.Mukha danta gala vikaraTakshrya,patha,vyosh,ghradhuma37.Danta aasya galaamya (diseases of throat/oral cavity)Darvi,(Berberis aristata), twak (Cinnamomum cassia), sindu ,manashila, haratal, pitak churna38.Galaamya (diseases of throat)Dvikshar, vara, panchapatu, vyosha, takshrya39.Mukha gada shaishanPatol(Trichosanthes dioica), shunthi (zingiber officinalis), triphala, vishala (Citrullus colocynthis), nisha, (Emblica Officinalis) amrita (Tinospora Cordifolia)41.MukhasthDarvi,(Berberis aristata) gairik,kshodra	55.		Knaar ,jamba,maanayasmi,miorpara,janpara
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		Nadivrana (oral cavity sinuses)	

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Preventive measures for maintaining oral health

Dinacharya (Daily regimen) described in Ayurveda includes some preventive measures for maintenance of oral health as well as prevention of oral diseases. These procedures include like Dant Dhavana (Brushing), Jivha Lekhana (Tongue scrapping) and Gandoosha (gargling) or oil pulling and inclusion of certain rasayana drugs in diet. For dantha dhavana specific drugs with respect to their rasa are mentioned. Nimba (Azadiracta Indica) twigs are considered best among bitter trees, Khadira (Acacia catechu) twigs best among astringent, Madhuka (Madhuka Indica) is best among sweet ones and Karanja (Pongamia pinnata) twigs are best among pungent rasa²⁰. For *jihva nirlekhana* tongue scrapers made of gold, silver etc are mentioned²¹. Ideal size and qualities of tongue scraper is also mentioned in the texts. Gandusha (oil pulling) and Kavala (gargling) are certain procedures described in Ayurveda which involves swishing of certain oils, herbal decoctions etc in mouth for maintenance of oral health as well as prevention of diseases.

Treatment modalities using single and multidrug formulations

Ayurveda always have holistic approach in treating different conditions. For oral disease also treatment according to *dosha* with suitable medicinal formulations explained for general diseases can be used. Apart from that specific formulations for oral diseases are also mentioned in different *samhithas*. **Some single drug remediesuseful in oral diseases**

1. *Yashti Madhu*(<u>Glycyrrhiza glabra</u>) :-Liquorice roots are widely used in Ayurveda medicines. It is even told as a tooth stick for brushing in *dinacharya*. It contains a lot of secondary metabolites for health benefits. It mainly pacifies *pita dosha* and *vata dosha*²² It is also said to be *rakta dosha hara* too²³. Thus, its *vranahara* (wound healer) and *sotha hara* (anti-inflammatory) properties makes it more useful in oral diseases²⁴. Recent studies also revealed its action in dental caries, periodontal diseases, aphthous ulcers, oral cancers, gingivitis, Candidiasis²⁵. It can be used in 2. *Madhu* (Honey):- Honey has been beneficial to mankind since ancient times in different ways. The *kashaya* (astringent) *madhura* (and *ruksha* properties of honey makes it useful for *vrana ropana* (wound healing) and *vrana sodhana(wound cleaner)*²⁶. this wound healing property helps in case of aphthous ulcers and other oral diseases. The anti-bacterial effects of honey have been proven against gram - positive and negative rods and cocci, yeast and fungi²⁷. Studies also revealed that topical application of honey could help in preventing gingivitis and dental caries²⁸.

3. *Nimba* (*Azadirachta indica*):- As mentioned earlier *Nimba* twigs are considered as a best among *tikta rasa* (bitter) drug for brushing in Ayurveda²⁹. It helps to pacify *kapha*, *rakta* and *pitha dosha³⁰*. Thus it is useful in curing *vrana* (wound), *kushta* (*Saussurea lappa*) and *sopha* (inflammation) etc³¹. All parts of *nimba* tree is said to be useful for *niyamana*³². Studies have proven the effect of Neem tree in prevention of plaque, dental caries, gingival problems and even halitosis³³.

4. Jambu (Syzygium cumini) :- It mainly pacifies kapha and pitha dosha but increases vata dosha³⁴. It is useful for *kapha,pitta,rakta,daha hara*³⁵. Jamun helps to strengthen the teeth and gum tissues and even reduces the bleeding issues³⁶. Antibacterial properties of *jamun* are studied and found useful in strengthening oral tissues³⁷. Essential oils form jamun leaves are reported to have antibacterial effects against Bacillus sphaericus, *Staphylococcus* aureus, Escherichia coli, Pseudomonas aeruginosa and Samonella *typhimurium*³⁸.It can be used internally as well as externally using different preparations.

5. *Dadima* (*Punica granatum*): - Pomegranate fruits are used as both food as well as medicinal purposes. Therapeutically it is found to be useful in a lot of conditions. But they are specifically useful in oral diseases. It is useful in controlling the common oral pathogens which leads to dental caries and periodontal diseases³⁹. Mouth rinses

prepared from this showed reduction in saliva total protein content which is usually found higher in people with gingivitis⁴⁰. The anti-inflammatory effect of pomegranate extract is also useful in reducing the irritation of inflamed gums⁴¹.

Some multi drug formulation useful in oral diseases

- 1. *Sapthachadadi kwatha*⁴²:- It is a composition of ten herbal drugs which is made in to decoction . It is mainly mentioned for internal use in *mukhapaka* (stomatitis). It can also be used for *gandhusha* (oil pulling) in *mukha paka* (stomatitis). It is *kapha pitha hara* and *rakta prasadana* (blood purifier). It is useful in mouth ulcers of various aetiology.⁴³
- 2. **Triphala kwatha**⁴⁴:- its a composition of three herbal drugs mentioned most of the Samhitas. for oral diseases its mainly *ropana* (healer), *kleda hara* (remove exudation) and *tridosha hara*.
- 3. *Ksheeri vriksha kwatha* :- A composition of bark of five trees. It is having *sheeta guna* (cold) and *vrna roapana* (healing) action. *Gandhusha* (oil pulling) with this is helpful for many *paithika mukha rogas*, *danta rogas* etc⁴⁵.
- Guduchyadi kwatha :- A combination of 5 drugs which is mainly *pithakaphara* in action. It is useful both internally and for *gandhusha* (oil pulling) as well as *kavala graha* (gargling).⁴⁶
- 5. *Guggulutikthaka kwatha*:- It's the decoction made from from the reference of *gugguluthikthaka ghrtha*⁴⁷. it is *vatha kapha hara*, *medo hara* (hypolipidemic drugs) and *kleda hara* (remove exudation) in action. It is useful in *danta nadi rogas* and other penetrative diseases.
- 6. **Dasana sankar churna**⁴⁸:- It's a combination of powder of 8 herbal drugs with *bhasma* (metallic preparation) of areca nut and *khadiya mitty*. It's used for cleaning the teeth. It helps to cure *danta roga* (teeth diseases) and *asya roga* (disease of oral cavity).

- 7. *Pithaka churna:* It's a combination of both herbal and mineral drugs with *kapha pitha hara*, *ropana* (healing) and *asya vishodhana* (oral cavity cleaner) property. It is used to apply externally with honey and ghee in mouth ulcers of various aetiology⁴⁹.
- 8. *Pathaadi churna*:- A combination of nine herbal drug powder. Mainly useful in inflammatory diseases , infectious diseases of mouth and bleeding gums etc. It is *kapha pitha hara*, *srava hara*, *paka hara*. It is used for smearing over the gums, *kabala*, *danta dhavana* (brushing) etc⁵⁰.
- 9. *Khadiradi gutika*:-one of the common remedies for many *mukharogas* (oral diseases). *Khadira* (*cutch tree*) and *arimeda* (sweet acatia tree) are the main contents. It is mainly *kapha pitha samana*, useful in painful conditions affecting teeth and gums. It is also useful in infectious conditions of mouth⁵¹.
- 10. Arimedadi taila or irimedadi taila:- Arimeda twak (Acacia farnesina) and khadira sara (Acacia catechu) are the main ingredients. Its commonly used for Kavala (Gargling)-Gandusha (Oil Pulling) as well as abhyanga (massage) in dental and other oral issues. It can also be used for nasya (nasal medication) in particular conditions⁵².
- 11. *Tiktahaka ghrta*:- a ghee formulation useful for many diseases of *paithika* origin. Also, it is useful in conditions affecting bone and teeth⁵³.
- Guggulutikthakam ghrtha:- ghee formulation useful in many *jathrurdhwagata* (head and neck) conditions⁵⁴.
- **13.** *Tila rasayana* :- black sesame seeds are rich in calcium ,iron, copper, magnesium and phosphorus which helps in nourishment of bone and teeth⁵⁵. Use of *tila* (sesame) seeds with *guda (jaggery)* is a traditional practice for maintaining healthy oral tissues⁵⁶.

DISCUSSION

Acharyas have classified diseases affecting lips, neck, teeth, gums, palate and those affecting the whole mouth specifically and treatment for these are also given accordingly. Dosha specific and roga (diseases) specific treatment are mentioned as well. Many times formulations mentioned for general diseases are also given for mukha rogas(oral diseases) depending on their dosha haratwa (ability to pacify vitiated doshas). Single drug remedies as well as multi drug formulations are found in this context. There are some differences in opinion about the doshsavastha (stages) regarding some conditions among acharyas. Also, some diseases are specifically highlighted only by certain authors. But the basic concepts of treatment principles are similar among all. Most of the diseases affecting mouth, gums, throat etc are due to vitiation of kapha and rakta. So, treatments and procedures that mitigates kapha and *rakta* are beneficial in their treatment. Hence katu and tiktha rasa pradhana (bitter-pungent) medicines will be more useful in these conditions 57 .

CONCLUSION

Oral diseases are causing a major health burden especially in the developing countries. Ayurveda remedies for oral diseases are being practiced by generations. The present review showed that knowledge regarding oral diseases is extensively dealt in Ayurveda and numerous single herbs and formulations are utilized for the prevention and management of oral diseases. Many herbal remedies mentioned in Ayurveda like Yashti madhu (Glycyrrhiza glabra), Triphala etc possess antimicrobial and anti-inflammatory properties. Many are yet to be screened for their efficacy. After proper screening and efficacy studies Ayurvedic remedies can be incorporated in to public health which can provide an affordable and safer oral health care to the public.

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REFERENCES

- Marco A Peres and Al. Oral diseases: a global public health challenge. Lancet. 2019 https://doi.org/10.1016/S0140-6736(19)31146-8
- United Nations General Assembly. Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Noncommunicable Diseases. Resolution A/66/L1. 2011
- GBD 2017 Oral Disorders Collaborators, Bernabe E, Marcenes W, et al. Global, Regional, and National Levels and Trends in
- Burden of Oral Conditions from 1990 to 2017: A Systematic Analysis for the Global Burden of Disease 2017 Study. *J Dent Res.* 2020;99(4):362-373. doi:10.1177/0022034520908533
- 4. Marco A Peres and Al. Oral diseases: a global public health challenge. Lancet. 2019 https://doi.org/10.1016/S0140-6736(19)31146-8
- 5. Niazi, Fayez et al. "Role of Salvadora persica chewing stick (miswak): A natural toothbrush for holistic oral health." *European journal of dentistry* vol. 10,2 (2016): 301-308.
- Dr. Ram Karan Sharma and Vaidya Bhagwan Dash ,*charak samhita* English commentary , *chikitsha sthana*,chapter 26, verse no.122,chowkhamba Sanskrit studies,2004, pp-456
- Dr. Ram Karan Sharma and Vaidya Bhagwan Dash ,*charak samhita* English commentary , *chikitsha sthana*, chapter 26, verse no.119-,121, chowkhamba Sanskrit studies.2004, pp-897
- Dr. Ram Karan Sharma and Vaidya Bhagwan Dash ,*charak samhita* English commentary , *chikitsha sthana*chapter 26, verse no.123,chowkhamba Sanskrit studies.2004,pp-456
- 9. Dr. Ram Karan Sharma and Vaidya Bhagwan Dash ,*charak samhita* English commentary ,

chikitsha sthana, chapter 26, verse no.119-121, chowkhamba Sanskrit studies. 2004, pp-459

- 10. Dr. Ram Karan Sharma and Vaidya Bhagwan Dash ,*charak samhita* English commentary , *chikitsha sthana*,,chapter 26, verse no.187-214 ,chowkhamba Sanskrit studies, 2004,pp-345
- Prof .K.R.Srikantha Murthy, SusrutaSamhita ,Nidana Sthana ,chapter no. 16 ,chaukhambha orientalia varanasi. 2005, pp-234
- 12. Prof .K.R.Srikantha Murthy, SusrutaSamhita ,chikitsha sthana ,chapter no. 22 ,chaukhambha orientalia varanasi.2005,pp-223
- Prof .K.R.Srikantha Murthy, SusrutaSamhita ,nidana sthana ,chapter no. 16,verse no.3,chaukhambha orientalia varanasi. 2005,pp-234
- 14. Prof .K.R.Srikantha Murthy,SusrutaSamhita ,nidana sthana ,chapter no. 16,verse no.3 ,chaukhambha orientalia varanasi. 2005,pp-234
- 15. Late dr. anna moreswara kunte and krshna ramchandra shastri navare ,Astang hrdayam,uttar stan , Chapter 21,verse no. 64,65,chaukhambha orientalia. 2005,pp-213
- 16. Dr. Ram Karan Sharma and Vaidya Bhagwan Dash ,*charak samhita English commentary*, *chikitsha sthan*, chapter 26, verse no.187-214 ,chowkhamba Sanskrit studies. 2004,pp-223
- 17. Prof .K.R.srikantha murthy,susruta samhita ,chikitsha sthana ,chapter no. 22 ,chaukhambha orientalia varanasi. 2005,pp-231
- 18. <u>Ashtanga Samgraha</u>,Uttar sthana ,mukha roga chikitshachapter no.26, chaukhambha orientalia Varanasi.
- 19. Dr. Bramhanand Tripathi Acharya Vagbhata, Ashtanga Hridaya , Sarvagasundara and Ayurveda rasayana Sanskrit commentary,uttara sthna , Chapter 22,Varanasi: Chowkhambha orientalia; 2017.
- 20. Prof .K.R.srikantha murthy,susruta samhita ,chikitsa sthana ,chapter no. 24,verse no.6-7,chaukhambha orientalia varanasi. 2005,pp-223
- 21. Brahanand Tripathi Charaka samhitha vidyotini hindi commentary , sutrasthana

chapter 05, verse no. 74-75, chaukamba Bharati academy, Varanasi 2005, pp-223

- 22. Dr. K.C.Chunekar and Dr.G.S.Pandey, Bhavaprakasa Nighantu , chapter 01 ,verse no 145-146,Chaukhambha Bharati Academy, Varanasi,1995pp-900
- 23. Dr. K.C.Chunekar and Dr.G.S.Pandey, Bhavaprakasa Nighantu , chapter 01 ,verse no 145-146,Chaukhambha Bharati Academy, Varanasi,1995pp675
- 24. Dr. K.C.Chunekar and Dr.G.S.Pandey, Bhavaprakasa Nighantu , chapter 01 ,verse no 145-146,Chaukhambha Bharati Academy, Varanasi,1995pp-788
- 25. Gupta Sudesh, Prasher Aarushi, Upshot Of And Open Lateral Internal Sphincterotomy And Arkaksharsutra In The Treatment Of Fissure-In-Ano W.S.R To Fissure in ano: One Centre Experience IRJAY, January: 2021 Vol- 4, Issue-1; 68-82.
- 26. P.V Sharma Acharya Vagbhata, Ashtanga Hridaya , Sarvagasundara and Ayurveda rasayana Sanskrit commentary, sutrasthana ,Chapter 05, Verse 56-57. Varanasi: Chowkhambha orientalia; 2017.pp-234
- 27. Duailibe, S.A., Goncalves, A.G., Ahid, F.J., 2007. Effect of a propolis extract onStreptococcus mutans counts in vivo. J. Appl. Oral Sci. 15, 420–423.
- 28. AL-Dany A. Atwa, Ramadan Y. AbuShahba, Marwa Mostafa, Mohamed I. Hashem., 2014, Effect of honey in preventing gingivitis and dental caries in patients undergoing orthodontic treatment, Saudi Dent J. 26(3):108-114
- 29. Prof .K.R.srikantha murthy,susruta samhita ,chikitsa sthana ,chapter no. 24,verse no.6-7,chaukhambha orientalia varanasi.1999 pp-565
- 30. Prof. Priyavrat sharma ,Dhanwantari nighantu,guduchyadi varga,page no.-21,chaukhambha orientalia ,bhu,2003,pp-453
- 31. Prof. Priyavrat sharma, Dhannwanthiri nighantu,guduchyadi varga,page no.-21,chaukhambha orientalia ,bhu,2003,pp-435

- Prof. Priyavrat Sharma, Shodala nighantu, guduchyadi varga,page no. 11,oriental institute Baroda 1978pp-675
- 33. <u>T. Lakshmi</u>, <u>Vidya Krishnan</u>, <u>R</u> <u>Rajendran</u>, and <u>N. Madhusudhanan.,2015</u>. *Azadirachta indica*: A herbal panacea in dentistry – An update,PharmacognRev. 2015, Jan-Jun; 9(17): 41–44
- 34. ¹Brahanand Tripathi , Charaka samhitha vidyotini hindi commentary , sutrasthana chapter 05, verse no. 74-75, chaukamba Bharati academy, Varanasi 2005, pp-223
- 35. Dr.G.S.Pandey Shree Bhava Mishra , Bhavprakash nighantu, aamradi phala varga ,page no. 571,chaukamba Bharati academy, 2003,pp-234
- 36. Bhowmik D, Gopinath H, Pragati Kumar B, Duraivel S., Aravind. G, Sampath Kumar K.P. Traditional and Medicinal Uses of Indian Black Berry. Journal of Pharmacognosy and Phytochemistry.2013; 1(5): 36-41.
- 37. Damasceno, DC, Volpato GT, Calderon ID, Rudge CVC.Studyof Averrhoacarambola and Eugenia jambolana extracts purchased from manipulation drug store on the experimental diabetes. Rev Brasil de Toxicol 2002; 15(1):9– 14.
- Patel PR, Rao TVR. Antibacterial activity of underutilized fruits of Jamun (*Syzygium cumini* L. Skeels). Int J Curr Pharm Res, 2011; 4(1):36–39.
- 39. Abdollahzadeh SH,Mashouf R
 Y,Mogahaddam M H , Roozbahani N,Vahedi M., antibacterial and anti fungal activities of punica granatum extract against oral pathogens , J Dent Tehran University Med Sci 2011 ; 8 (1): 1-6.
- 40. Bhadhade s J, Acharya A B, Rodrigues S V,Thakur S L., The antiplaque efficacy of pomogranate mouth rinse .Quintessence international 2011;42(1);29-36

- 41. Bhavana J K, Vidya D, herbal mouth wash es a gift of nature. Int J Pharma Bio Sci 2012;3(2):47-52
- 42. Kaviraj Shri Govind das sen , Bhaisajya ratnavali, Sanskrit text with English translation, chapter 61,mukharoga chikitsa prakranan, ,chaukhamba orientalia,Varanasi,2001 page no.970
- 43. Dr. Bramhanand Tripathi Acharya Vagbhata, Ashtanga Hridaya , Sarvagasundara and Ayurveda rasayana Sanskrit commentary, sutrasthana ,Chapter 22, Verse 103, Varanasi: Chowkhambha orientalia; 2017.pp-564
- 44. Kaviraj shri Govind Das Sen, Bhaisajya Ratnavali,Sanskrit text with English translation,chapter 61,mukharoga chikitsa prakranan,chaukhamba orientalia,Varanasi.2003,pp-453
- 45. Kaviraj shri Govind Das Sen, Bhaisajya Ratnavali , Sanskrit text with English translation,chapter 61,mukharoga chikitsa prakranan,chaukhamba

orientalia, Varanasi. 2003. pp-456

- 46. Dr. Bramhanand Tripathi Acharya Vagbhata,
 Ashtanga Hridaya , Sarvagasundara and
 Ayurveda rasayana Sanskrit commentary,
 Suthrasthana, Chapter 15, Verse 16. Varanasi:
 Chowkhambha orientalia; 2017
- 47. Dr. Bramhanand Tripathi Acharya Vagbhata,
 Ashtanga Hridaya , Sarvagasundara and
 Ayurveda rasayana Sanskrit commentary,
 Chikitsa ,Chapter 21, Verse 58. Varanasi:
 Chowkhambha orientalia; 2017 pp-456
- 48. Kaviraj shri Govind Das Sen, Bhaisajya Ratnavali,Sanskrit text with English translation,chapter 61,mukharoga chikitsa prakranan,chaukhamba orientalia,Varanasi. 2017 pp-456
- 49. Dr. Bramhanand Tripathi Acharya Vagbhata, Ashtanga Hridaya , Sarvagasundara and Ayurveda rasayana Sanskrit commentary, Uttarasthana,Chapter 22, Verse-100. Varanasi: Chowkhambha orientalia; 2017pp-900
- 50. Dr. Bramhanand Tripathi Acharya Vagbhata, Ashtanga Hridaya , Sarvagasundara and

Ayurveda rasayana Sanskrit commentary, Uttarasthana,Chapter 22, Verse-98. Varanasi: Chowkhambha orientalia; 2017pp-675

- 51. Dr. Bramhanand Tripathi Acharya Vagbhata, Ashtanga Hridaya , Sarvagasundara and Ayurveda rasayana Sanskrit commentary, Uttarasthana,Chapter 22, Verse-90-94. Varanasi: Chowkhambha orientalia; 2017pp-453
- 52. Dr. Bramhanand Tripathi Acharya Vagbhata, Ashtanga Hridaya , Sarvagasundara and Ayurveda rasayana Sanskrit commentary, Uttarasthana,Chapter 22, Verse-95. Varanasi: Chowkhambha orientalia; 2017pp-453
- 53. A Dr. Bramhanand Tripathi charya Vagbhata, Ashtanga Hridaya , Sarvagasundara and Ayurveda rasayana Sanskrit commentary,Chikitsa sthana,Chapter 19, Verse-2. Varanasi: Chowkhambha orientalia; 2017pp-432
- 54. Dr. Bramhanand Tripathi Acharya Vagbhata, Ashtanga Hridaya , Sarvagasundara and

Ayurveda rasayana Sanskrit commentary, Chikitsa ,Chapter 21, Verse 58. Varanasi: Chowkhambha orientalia; 2017pp-564

- 55. Krishna Tila (Sesamum indicum Linn.): A Rasayana Dravya , by Kumar Rajesh, Vats Anurag and Pradhan Shailendra,The Pharma Innovation Journal 2019; 8(5): 24-28.
- 56. Krishna Tila (Sesamum indicum Linn.): A Rasayana Dravya ., by Kumar Rajesh, Vats Anurag and Pradhan Shailendra, The Pharma Innovation Journal 2019; 8(5): 24-28.
- 57. Dr. Bramhanand Tripathi Acharya Vagbhata, Ashtanga Hridaya , Sarvagasundara and Ayurveda rasayana Sanskrit commentary,
- Uttarasthana, Chapter 22, Verse 108-109. Varanasi: Chowkhambha orientalia; 2017.pp-564