



Survey on treatment of dengue, malaria and jaundice by *Tinospora cordifolia* (Giloy)

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ABSTRACT

A survey of “Giloy” was conducted for medical uses for different diseases that are dengue, jaundice and malaria. Giloy is a ayurvedic medicine that has been used in India since ages. Giloy is also known by various local names in different regions. Consumption pattern of Giloy was collected by carrying out survey in India and Srilanka. In India the places which were included in survey ; Delhi, Ludhiana, Jalandhar, Malerkotla, Doraha, Patiala, Balachaur, Srinagar, Bageshwar, Almora, Haldwani, Kapkote, Malad, Mumbai, Yamuna nagar, Bhiwani, Patna, Nalanda, Vishakha Patnam. Different parts of Giloy is used for medicinal consumption.

Key Words – Giloy, Traditional Uses, different pattern of consumption.

INTRODUCTION

Mainly plants are used for the preparation of ayurvedic medicines(Patwardhan et.al,2000).As compared to food or spices , ayurvedic plants have much stronger action on the body(Algara et.al,2019).In Sanskrit the preparation of classical ayurvedic made from the combination of different parts of plant to get optimal effect are known as yoga(Frawley et.al,2000).

It has been proven that the combination of different herbs have been much effective than single herb.3 to 30 plants are used in polyherbal combination in ayurveda. To get the effective result components are combined in a balanced form, in these combinations only 1 or 2 herb will be functional and others will be performing as supporting herb.The supporting herb will perform different function like reducing toxicity, absorption and transportation. If the combination is accurate then the results can be effective(Kumar et.al,2017).

Since ages parts of plant and plant extract have been traditionally used for medicinal purpose for curing diseases(Panghal et.al,2010; Upadhyay et.al,2007 . As Giloy is one of the medicine in Ayurveda that is considered as the immortal herb. Giloy is specifically found in India, Myanmar, Sri Lanka and China(Devi et.al,2020; Kumar et.al,2019). Giloy plant is large, climbing shrub and distributed throughout tropical and subtropical of India It belongs to Menispermaceae family (Singh et.al,2017;Dalal et.al,2020). Different parts of giloy plant is used for the medicinal purpose(Chowdhary et.al,2020;Nath et.al,2010).

Stem- used to treat skin diseases, jaundice and fever. Guduchi satva (stem starch) is used as tonic (Gaur et.al,2014;Choudhary et.al,2013;Reddy et.al 2012).Leaves- used for the curing of ulcer, fever jaundice and to control blood sugar level (Tiwari et.al 2018). Roots- used for treatment of diarrhoea and dysentery(Sinha et.al,2004;Singh et.al,2011). Fruits- used for jaundice and Rheumatism (Soham et.al,2012). Bark- used for the treatment of cancer (Upadhyay et.al,2010).

T. cordifolia is rich in phytochemicals like alkaloids, steroids, polysaccharides, terpenoids etc(Sinha et.al,2015). It is being consumed by traditional people as a remedial measure for nourishment in crude form. So keeping in view present survey was conducted for curing of different diseases at different places in traditional remedial form(Tiwari et.al,2018).



MATERIALS AND METHODS

To conduct the survey a questionnaire was prepared. Questions were framed to elicit information regarding the importance and consumption of Giloy. The online survey was conducted in Punjab (Ludhiana, Jalandhar, Malerkotla, Doraha, Patiala, Balachaur), Jammu and Kashmir(Srinagar), Himachal Pradesh, Rajasthan, Gujarat, Uttar Pradesh(Agra, Aligarh, Gorakhpur, Kanpur, Banaras), Delhi, Kolkata, Uttrakhand(Bageshwar, Almora, Haldwani, Kapkote), Maharashtra (Malad, Mumbai), Haryana(Yamuna nagar, Bhiwani), Sri Lanka, Bihar (Patna, Nalanda) and Andhra Pradesh (Vishakha Patnam). They were also asked about the inoculum and method of consumption of Giloy in different places. The information about the raw material used in the preparation of remedy was obtained. The data on the consumption pattern obtained by questionnaire was similarly compiled.

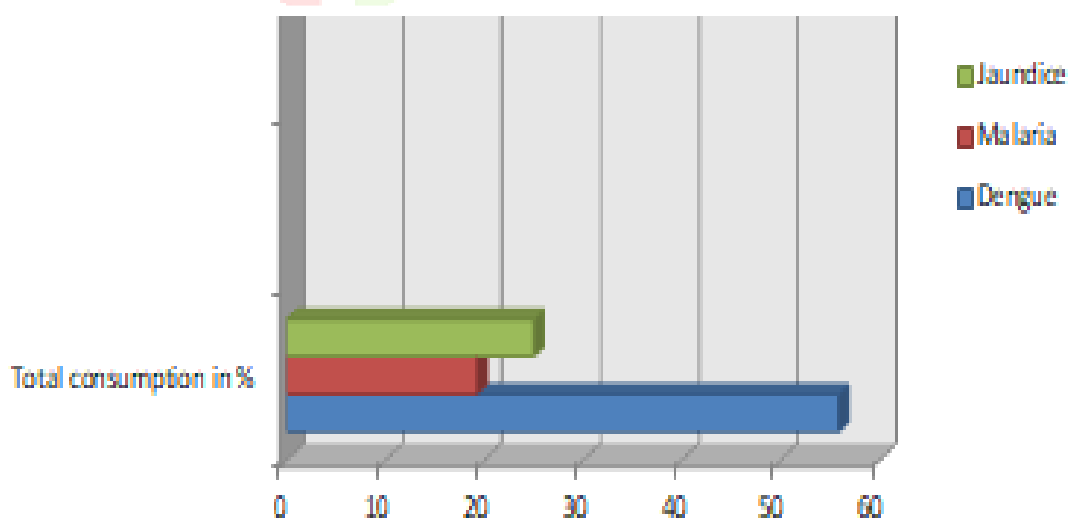
SURVEY TABLE

Place	Correspondent	Medicinal use cure/ prevention for which disease	Which part of Giloy is used for medicinal use	In which form do you intake Giloy	Additive you use	Time of consumption
Punjab	10	Dengue	Stem(8)	Juice(3), Paste(4), Powder(2), Capsule(1)	Water(9), Milk(1)	Morning(9), Afternoon(1)
			Leaves(1)			
			All of above(1)			
	2	Jaundice	Stem(1)	Paste(1), Juice(1)	Water(2)	Morning(1), Night(1)
			All of above(1)			
	2	Malaria	Stem (1)	Powder(1), Paste(1)	Milk(1), Honey(1)	Evening(2)
Leave(1)						
Jammu And Kashmir	2	Jaundice	All of the above(1), Stem(1)	Powder Paste	Honey Water	Evening Night
Rajasthan	2	Malaria	All of the above	Capsule	Water	Evening
Gujarat	4	Jaundice	Leaves	Paste	Water	Morning
Uttar Pradesh	3	Dengue	Stem(2)	Juice(2), Powder(1)	Water(3)	Morning(5)
			All of the above(1)			
	1	Jaundice	Stem(1)	Tablet	Water	
1	Malaria	Root(1)	Honey			
Himachal Pradesh	1	Dengue	Leaves	Juice	Milk	Morning
West Bengal	1	Dengue	Stem(1)	Tablet(1), Juice(1)	Water(1), Milk(1)	Morning
	1	Jaundice	Leaves(1)			Afternoon
Uttrakhand	3	Dengue	Stem,	Powder, Paste, Juice	Water	Morning(1), Evening(2)
			Roots			
			All of the above			
	2	Malaria	All of the above Stem	Juice	Water(1)	Night
1	Jaundice	Leaves	Juice	Water	Morning	
Maharashtra	1	Dengue	Root	Tablet	Water	Night

	1	Malaria	Stem	Powder	Milk	Afternoon
Haryana	3	Dengue	Stem(2)	Juice	Water(2), Juice(1)	Night(1), Morning(1)
			All of the above(1)			
	2	Jaundice	Leaves	Juice	Honey	Morning
			Stem	Tablet	water	
1	Malaria	Leaves	Juice	Water	Afternoon	
Sri Lanka	1	Jaundice	All of the above	Powder	Powder	Evening
	1	Dengue			Water	Morning
Bihar	1	Dengue	Stem	Juice	Water	Night
	1	Jaundice			Honey	Morning
Andhra Pradesh	4	Jaundice	Stem	Powder	Water	Morning

Results and Discussion

- The survey was conducted among 52 individuals (aging between 15 – 35 years). It was observed that remedy prepared from Giloy is mostly consumed for Dengue, jaundice and malaria. Among these three 55.8% individual consume Giloy for Dengue, 25% consume Giloy for jaundice and 19.2% consume Giloy for malaria.
- It was observed that the remedy were mainly prepared from root, stem and leaves .Among these 48.1% individual use stem , 17.3% use leaves ,5.85% use roots and 28.8% consumed all of these.
- Water, Honey and Milk were mainly used as additives for the remedy.73.1% % individual consume with water, 11.5% consume with Honey, 9.6% consume with Milk and 5.8% consume with ayurvedic drink.
- According to the survey 48.1% individual consume of juice, 17.3% consume in the form of paste and powder, 9.6% consume in the form of tablet and 7.7% consume in the form of capsule.
- 61.5% individual consume it in morning, 15.4% consume in evening and night and 7.7% in afternoon.



Conclusion

Giloy has been used as a traditional medicine since ancient times. In our survey we concluded that giloy is used for the treatment of dengue, malaria and jaundice. We conducted survey throughout 12 state and 1 country; Punjab (Ludhiana, Jalandhar, Malerkotla, Doraha, Patiala, Balachaur), Jammu and Kashmir (Srinagar), Himachal Pradesh, Rajasthan, Gujarat, Uttar Pradesh (Agra, Aligarh, Gorakhpur, Kanpur, Banaras), Delhi, Kolkata, Uttarakhand (Bageshwar, Almora, Haldwani, Kapkote), Maharashtra (Malad, Mumbai), Haryana (Yamuna nagar, Bhiwani), Sri Lanka, Bihar (Patna, Nalanda) and Andhra Pradesh (Vishakha Patnam). According to information that we gathered, Giloy is mainly consumed as a remedy for Dengue with water in the morning.

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