



Research Article

**KNOWLEDGE AND PRACTICES IN VIRAL HEPATITIS MANAGEMENT AND ITS CHALLENGES:
A SURVEY AMONG AYURVEDA PHYSICIANS OF KERALA**

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ABSTRACT

Ayurveda physicians provide treatment for viral hepatitis patients in Kerala. A survey was conducted to assess the knowledge and practices in viral hepatitis management among Ayurveda physicians (APs) of Kerala.

Materials & Methods: An in depth telephonic interview and a questionnaire were administered among APs in Kerala for assessing knowledge about viral hepatitis and its treatment.

Results: All the 150 participants were aware about different types of viral hepatitis. Around 90% Aps know about complications of viral hepatitis and mode of transmission. Only 20% screen their patients before performing Panchakarma therapy and para-surgical procedures in their clinic. All physicians depends liver function test for diagnosing and assessing different types of Hepatitis; only 6.6% physicians additionally prescribe Ultrasonogram of abdomen and viral load. Majority physicians reported chronicity for HBV and HCV infections and good outcome/ curable for hepatitis A. Only a few physicians were documenting the cases in their clinics. The lack of structured case proforma for documentation and guidelines for management, research, patient education and time constraints was reported as challenges in the treatment of viral hepatitis by the majority of AP in the current survey.

Conclusion: The majority of doctors had a good knowledge of the different types of viral hepatitis and they depended on laboratory examinations for diagnosis and evaluation. The treatment strategies were based on the treatment principles of *Kamala* and *Panduroga* in Ayurveda.

INTRODUCTION

Ayurveda physicians play an important role in health care delivery in the Kerala. A patient perspective study by Chandrakumar et al found that 73% of viral hepatitis A patients rely on the Ayurvedic treatment regimen^[1]. Hepatitis can be caused by several very different viruses.. Symptoms of acute hepatitis are fatigue, anorexia, abdominal pain, fever, diarrhoea, vomiting, jaundice, dark urine, and pale clay-colored stools.

The mode of transmission, communicability and incubation period differs significantly depending on the type of virus. Viral hepatitis is increasingly recognized as a public health problem in India ^[2]. Hepatitis A Virus (HAV) and Hepatitis E Virus (HEV) are important causes of acute viral hepatitis and acute liver failure (ALF¹). The literature suggests that HAV is responsible for 10-30% of acute hepatitis cases and 5-15% of acute liver failure cases in India. The positivity of hepatitis B surface antigen (HBsAg) in the general population ranges from 1.1% to 12.2%, with an average prevalence of 3-4%. Anti-Hepatitis C virus (HCV) antibody prevalence in the general population is estimated to be between 0.09-15%^[3].

In a Kerala-based study by Sandesh et al., in voluntary blood donors to fight HIV/HCV was positive in 0.33% and job seekers to Middle East Asia, the representation of the general population was 0.12% HIV prevalence. HBsAg prevalence of 0.5% in the

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normal population has been reported in northern Kerala and an HBsAg prevalence of 1.5% was detected among voluntary blood donors from Trivandrum, South Kerala reference.^[4] Stigma has been determined to have a major negative impact on the screening, diagnosis and treatment of patients with hepatitis B^[5]. Stigma has been pragmatically defined as a mark of disgrace associated with hepatitis B infection. While previous studies have tried to understand the barriers to viral hepatitis treatment from the perspective of primary care providers and patients; the current study assessed the knowledge and practices in viral hepatitis management among Ayurveda doctors (APs).

METHODOLOGY

Study Design

This descriptive qualitative study was conducted in the period of March 20th and 16th May 2020. This study was performed to document the knowledge and practice among Ayurveda physicians about different types of viral Hepatitis and its management in Ayurveda. APs were interviewed through a questionnaire. Data collection involved conducting semi-structured and in-depth interviews and data were collected on protocols, work environment, opinions and beliefs about viral hepatitis.

Study Participants

We included Ayurveda physicians (APs) working in Kerala, India. We aimed at enrolling participants highly likely to encounter patients with viral hepatitis. Among the doctors there were participants from the Indian Medical System (ISM) department, the Kerala government and registered private practitioners. No specific inclusion or exclusion conditions were used. No monetary or other incentives

or refunds were made to participate in any form. Participants were reached by phone.

Data Collection

We used intentional sampling and snowball effects in our study. In the absence of previous studies in this area, our approach was exploratory research, as we could not determine in advance the sample size sufficient to achieve thematic saturation. To this end, we have created a structured questionnaire by taking the guidance of previous literature and incorporating changes according to research objectives.

The questionnaire consisted of two main areas: participants' knowledge and practice for different types of viral hepatitis and management in Ayurveda. A pilot test was performed on 20 participants to evaluate the efficacy of the questionnaire. After the rehearsal, this resulted in a total of 150 telephone interviews. All interviews lasted between 15 and 35 minutes. The interviews continued until the theoretical saturation reached and new information emerged. No repeat interviews were conducted. No contact was kept with participants after the interview and no files were returned.

Data Analysis

A descriptive analysis of the results was conducted and presented as percentages.

RESULTS

A total of 150 Ayurveda physicians completed the survey. In our study, 95% of the participants were ISM doctors and 5% were from private sector. Whole participants completed the questionnaire with a response rate of 100%. Among participants; 132 (88%) were female, and 18 (12%) were male. Details of the participants are shown in Table. no. 1

Table 1: Demographic characteristics of the participants

Demographic characteristics	Number	%
Male	18	12
Female	132	88
Age		
25-35	60	40
35-45	50	33.33
45-60	40	26.66
Educational qualification		
BAMS	60	40
MD/MS	90	60

Knowledge About Different Types of Viral Hepatitis

The knowledge about different types of viral Hepatitis and its complications were assessed and the summarized in Table no. 2

Table 2: The knowledge about different types of viral Hepatitis among APs

	Knowledge about viral hepatitis among APs	Yes %	No %
1	Do you aware about the different types of viral Hepatitis	100	-
2	Do you aware about its symptoms of different types of viral Hepatitis	100	-
3	Do you screen the patients for different types of viral Hepatitis while doing <i>Panchakarma</i> therapy, surgical and para-surgical procedures?	20	80
4	Do you aware of complications of different types of viral Hepatitis such as cirrhosis, cancer and advice the patient for the necessary investigations	90	10

Practices About Different Types of Viral Hepatitis

The practices about different types of viral Hepatitis and its complications by APs were assessed and the summarized in Table no.3.

Table 3.:The practices about different types of viral Hepatitis among APs

Practices among APs in different types of viral Hepatitis		Yes (%)	No (%)
1	How do you diagnose the about the different types of viral Hepatitis patients in your clinic		
	a. Lab investigations		
	b. Clinical symptoms		
	c. Both	100	
2	How do you assess the different types of viral Hepatitis patients in your clinic before treatment		
	a. Viral load assessment- HBV and HBC	6.6	93.4
	b. Liver function test	100	0
	c. Ultra sonogram of abdomen	6.6	93.4
3	Do you have regular patients with the different types of viral Hepatitis patients in your clinic		
	Hepatitis A	39	61
	Hepatitis B	15	85
	Hepatitis C	5	95
4	Do you get regular follow up for patients with the different types of viral Hepatitis in your clinic	52.5	47.5
5	How do you feel about prognosis about the different types of viral Hepatitis patients in your clinic whether curable or not getting cured		
	Hepatitis A	100	-
	Hepatitis B	2.66	97.34
	Hepatitis C	2.66	97.66
6	Do you document the cases of patients with the different types of viral Hepatitis in your clinic	5	95

Only few doctors are documenting the cases of patients with the different types of viral Hepatitis in clinics and the barriers in documentation were reported as overload of patients in OPD of government hospitals (67%), time constrains and lack of interest (77%), frequent transfer from clinic and lack of follow up schemes (57%) and many do not know the importance of documentation (85%) and lack of proforma or protocols for documentation was their major problem.

Management Protocols in Different Types of Viral Hepatitis

Fifty-four percent of the doctors interviewed had experience in treating different types of viral hepatitis cases at the clinic and were managed using internal drugs and certain *Panchakarma* procedures. APs reported that majority of their patients were chronic types of viral Hepatitis and were asymptomatic; only diagnosed after blood tests. The

social stigma and lack of awareness among patients form the barriers in effective clinical outcomes.

Currently Using Medicine List for Treating Viral Hepatitis

Doctors from Ayurveda chose the drugs, considering the condition of the patient's *Dosha* and the stage of the disease. The treatment strategies were based on the medical principles of *Kamala* and *Panduroga* in Ayurveda. *Drakhadikasyam*, *Patoladi kashayam*, *Nimbatwagadikadi kashayam*, *Vasaguluchyadi kasayam*, *Guducyadikasayam* are regularly used tincture preparations for various types of viral hepatitis. Other dosage form like tablets, *Lehya* such as *Koutajaleham*, *Sudarshana choornam*, *Sivagulika*, *Avipathi choornam*, Liv-52 tablets, *Ardhavlwam choornam*, *Thrivruthlehyam*, *Arogya vardhinivati*, *Dooshivishari gulika*, *Vilwadigulika* etc were also prescribed by APs. There was no definite management in Ayurveda, and also no structured guideline or protocol for different types of Viral Hepatitis.

DISCUSSION

Acute and chronic HAV, HCV and HBV infection are the most common cause of cirrhosis, HCC, liver transplantation in India and developing countries. The doctors identified multiple difficulties in engaging patients in discussions regarding viral hepatitis treatment. More than half of the participants were not aware about viral hepatitis B treatment in Ayurveda.

Unfortunately, only a minority of Hepatitis virus infected individuals receive Ayurveda treatment as a result of several barriers to care. 90% doctors told that majority of patients take local treatment, i.e. *Nattumarunnu* first time for all type hepatitis and only a few patients approach Ayurveda physicians directly.

A third of the APs considered that the patients were offended when they spoke of their hepatitis status. Therefore, it is critical to assess the knowledge and perceptions of healthcare providers to overcome these gaps in care.

A patient perspective study conducted by Chandrakumar et al reported that a significant proportion of hepatitis patients were unaware of the available treatments in Ayurveda hospitals in the setting of varies co morbidities. This was true despite the fact that more than two-thirds of the APs believed they had correct or excellent knowledge of current recommendations in different types of viral hepatitis.

Around 90% of the APs were demanding for a treatment guideline/proforma for different types of viral hepatitis. Nearly two-thirds of the APs knew that there are treatment modalities available for fatty liver, and decompensate liver disease can be treated with Ayurveda.

Interestingly, 20% participants believed that patients with chronic hepatitis B and chronic hepatitis

can be treated with Ayurveda medicines. With respect to practice, 80% of the participants reported similar to all questions. Only few case studies are available about Ayurveda management of viral hepatitis.

Other prior surveys have shown that the patient-level factors which is viewed as the greatest obstacles to treatment were poor patient awareness, misguided and exaggerated fears, relative contraindications, and insufficient funding all contribute to low treatment rates in case of HCV.^[6]

This is consistent with our study also where nearly three quarters of the APs felt that the patients did not know the fate of untreated viral hepatitis, and one-third of the participants felt that the patients were not even aware that it could be cured. Furthermore, fear of treatment related restrictions in food and lifestyle (*Pathyam*) was the most frequently cited barrier to initiate therapy, in our study. Though fear of treatment-related restrictions in food and lifestyle (*Pathyam*) are common, appropriate pretreatment counseling along with a structured plan for monitoring and management may help in alleviating such reluctance and help with compliance.

From the perspective of the APs, several steps like proper patient education and research can be carried out to engage patients in treatment. Our study provides a big insight into viral hepatitis management and its challenges from the perspective of APs.

CONCLUSION

Ayurveda physicians are in the forefront of patient care and assessing their knowledge and practices will improve understanding and mitigating the different challenges associated with viral hepatitis management. Lack of a structured case form for documentation and guidelines for management, research, patient education, and time constraints reported most of the APs in this study on the challenges in dealing with viral hepatitis. Future guidelines and policies should be evolved to tackle these constrains in the battle against viral hepatitis with Ayurveda.

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